

APPENDIX V4B: COMMUNITY BUILDING ANALYSIS

Introduction

Purpose

This appendix summarizes the background information that informs consideration of alternative strategies in the CDP Chapter IV2: Preserve and Strengthen Community Character. This is the second of three substantive analyses (‘Āina, Community, Economy).

Importantly, **this appendix is NOT the Hāmākua CDP**; instead, for each of Hāmākua’s resource management priorities, this appendix does four things:

- Outlines existing policy, especially County policy established in the General Plan;
- Summarizes related, past planning and studies;
- Introduces alternative strategies available to achieve Hāmākua’s community objectives;
- Preliminarily identify feasible strategy directions.

In other words, this appendix sets the context for identifying preferred CDP strategies. Existing policy provides the framework in which the CDP is operating, related plans identify complementary initiatives, and alternative strategies introduce the “tool box” from which the CDP can choose the best tools for the CDP Planning Area.

Overview

The focus of this appendix is on the Planning Area’s towns, villages and settlement areas, including Wainaku/Kaiwiki, Pauka’a, Pāpa’ikou, Pepe’ekeo, Honomū, Wailea/Hakalau, Nīnole, Pāpa’aloa/Laupāhoehoe, ‘O’ōkala, Pa’auilo, Honoka’a, Kukuihaele, and homestead areas and the regulations, infrastructure, and strategies that impact their future.

This appendix complements Appendices V4A and V4C, which focus on natural and cultural resource management and local economic development, respectively. In those appendices, issues related to but distinct from strengthening Hāmākua’s villages, towns, and settlement areas are discussed in greater detail, including historic preservation, coastal development, access and trails, commercial development, tourism, and community-based, collaborative action.

The first two sections of this appendix outline the “core” strategies available to build community. The first section, “**Overview of Alternative Strategies**,” introduces many of the basic strategies available for strengthening communities, including land use regulation, capital improvements, retaining design character, and redevelopment tools used by local municipalities, state government, and communities.

The second section, “**Regional Infrastructure, Facilities, and Services**,” introduces the Planning Area’s assets and challenges, current policy, previous planning, and alternative strategies related to infrastructure, facilities, and services. It begins with a summary Hāmākua’s related values, priorities, and objectives and then focuses on specific areas of community interest, including affordable housing, transportation, water, solid waste, emergency services, health and elder care, social services, education, libraries, and parks and recreation.

The third section, “**Regional Settlement Patterns & Directing Future Growth**” focuses on the Planning Area’s populated spaces, including villages, towns, and homestead settlement areas. The section begins with an overview of historical settlement patterns, population growth, assets and challenges of the



1 existing settlement pattern, and then provides a more in depth analysis of the Planning Area’s towns,
2 villages, and homestead settlements.

3 The section goes on to provide an assessment of the current settlement pattern including related values,
4 priorities, and objectives, General Plan Policies, community identified preferred future growth patterns,
5 benefits of traditional village development, and previous town level planning.

6 **CDP Outline**

7 Currently, the CDP is structured as follows. This Appendix is highlighted in **green**. It will inform the CDP
8 strategy chapter highlighted in **blue**.

I. EXECUTIVE SUMMARY

II. HĀMĀKUA TODAY – BRIEF SUMMARY OF VALUES, ASSETS, CHALLENGES

III. HĀMĀKUA TOMORROW – BRIEF SUMMARY OF VISION, OBJECTIVES, STRATEGIES

IV. THE PLAN – STRATEGIES: POLICIES, ADVOCACY, AND ACTIONS

1. ‘ĀINA: MANAGE NATURAL AND CULTURAL RESOURCES

2. PRESERVE AND STRENGTHEN COMMUNITY CHARACTER

3. BUILD A ROBUST LOCAL ECONOMY

4. BUILD AND STRENGTHEN COMMUNITY CAPACITY

V. APPENDIX

1. HCDP ORDINANCE AND ENABLING LANGUAGE (INCLUDING CDP PURPOSE & SCOPE)

2. PLANNING PROCESS

3. COMMUNITY PROFILE

4. BACKGROUND ANALYSIS & RATIONALE

A. Natural and Cultural Resource Management Analysis

B. Building Community Analysis

C. Local Economy Analysis

5. SUPPORTING MATERIALS

6. IMPLEMENTATION METHODS AND TOOLS

A. Required Regulatory Actions

B. Implementation Action Matrix

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10

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1 **Notes on this December 2013 Draft**

2 This draft is a work-in-progress. It is largely complete, but some information is still pending, and it is
 3 expected that the document will be updated as conditions change and new information is brought to
 4 light. Known gaps in information are typically highlighted in **yellow**.

5 Note also that some of the formatting is required to keep the document compliant with the American
 6 with Disabilities Act (ADA). For example, complete hyperlinks have to be inserted so that reading
 7 machines for the visually impaired can correctly interpret Internet addresses.

8 **Feedback Wanted**

9 Because this an incomplete draft, and because we know that there are plans and strategies that can
 10 inform CDP strategies that may not be included, constructive feedback is welcome and encouraged. We
 11 ask that you use the feedback form available in the “Draft Analysis Documents” folder at
 12 www.hamakuacdp.info. You may also mail or email comments to the Planning Department.

13 **Navigating the Document**

14 This appendix is not designed to be read from start to finish. Consider reading this introductory section
 15 and then using the tables of contents, figures, and tables to find material of greatest interest. Internal
 16 hyperlinks have been inserted to simplify navigation within the document.

17 The appendix also has “Bookmarks,” which can be seen by opening the Bookmark navigation pane in
 18 Adobe Acrobat Reader: View/ Navigation Panels/ Bookmarks. After following an internal link, it is easy
 19 to return to the previous point in the document by using either the Bookmark navigation pane or the
 20 “Previous View” button, which can be added to the “Page Navigation” toolbar in Acrobat Reader.

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22 **Planning Context**

23 **Hāmākua’s Community Building Values, Vision, and Objectives**

24 The people of Hāmākua have a deep appreciation for the historical heritage of their small towns and
 25 highly value preserving an ‘ohana-centered community that emphasizes quality of life, neighborhood
 26 cooperation, and the aloha spirit.

27 Extensive community input into core values strongly reflected these elements of Hāmākua’s community
 28 character. The Hāmākua CDP Steering Committee summarized these core values as follows:

- 29 ▪ **‘ĀINA OR NATURAL RESOURCES:** natural beauty, view planes, natural resources, shoreline,
 30 weather, open space, environmental quality
- 31 ▪ **COMMUNITY/‘OHANA:** community, aloha, education, ‘ohana , heritage, cultural and ethnic
 32 diversity)

- 1 ▪ **COUNTRY/RURAL LIFESTYLE:** rural/small town, agriculture, peace and quiet, lifestyle, no traffic,
2 controlled development, sports and outdoor recreation)

3 Like many rural communities, Hāmākua also has its challenges and associated aspirations. Residents
4 perceive that their communities do not always get their fair share of public investment, and the local
5 economy and many families have struggled since the sugar plantations closed in the early 1990's. As a
6 result, community priorities emphasize:

- 7 ▪ **Local Economy:** economically and environmental sustainable agriculture, local business, jobs, retail,
8 services, dining, renewable energy, housing
- 9 ▪ **Recreation:** parks and gathering spaces, facilities, programs, youth recreation, outdoor recreation
- 10 ▪ **Education:** improved schools, quality education adult/vocational/higher education
- 11 ▪ **Health Care:** hospital/clinic, elderly care, more medical professionals, more services
- 12 ▪ **Public Services:** transportation, roadways, mass transit, public utilities, protective services

13 **Hāmākua’s Community Values and Vision**

14 Building on those values and priorities, the community’s Values and Vision Statement captures
15 community sentiment:

16 ***Hāmākua is a rural community of distinctive small towns and villages thriving on sustainable***
17 ***agriculture and ranching to provide ourselves and the rest of Hawai’i with healthy food and locally***
18 ***grown products.***

19 ***Our vibrant economy is based on local businesses that are able to provide living wage jobs and***
20 ***ensure access to goods and services so that our families can work and shop close to home. We***
21 ***produce and rely on clean, renewable energy to power our communities and businesses.***

22 ***Our high quality of life is rooted in our strong sense of ‘ohana and community. We support lifetime***
23 ***learning through the expansion of educational opportunities for all residents. Access to quality***
24 ***healthcare, elderly care, and affordable housing is provided. We host festivals for music, culture,***
25 ***arts, and agriculture, and are known for our parks, gathering places, and recreation programs.***

26 ***Our communities are connected by a network of safe, well-maintained roadways and we enjoy***
27 ***multiple transportation choices. Our community prides itself on its heritage roads as alternative,***
28 ***slower routes between our popular destinations and our historic plantation villages.***

29 ***Hāmākua is a place where change is thoughtful & deliberate. Our deep aloha for the ‘āina compels***
30 ***and ensures smart, sustainable development, and the protection and perpetuation of Hāmākua’s***
31 ***uniqueness now and into the future.***

32 **Hāmākua’s Community Assets and Challenges**

33 **Assets**

- 34 ▪ Historic settlements, agricultural and ranch lands, mauka forests, and shorelines that exemplify rural
35 character and lifestyle

- 1 ▪ Agricultural tradition
- 2 ▪ 'ohana traditions that encourage extended-family support for schools, churches, and community
- 3 organizations
- 4 ▪ Elementary and intermediate schools in Wainaku, Pāpa'ikou, Laupāhoehoe, Pa'auilo and Honoka'a
- 5 and high schools in Laupāhoehoe and Honoka'a.
- 6 ▪ The thirteen small towns in the planning area have remained small enough that residents know each
- 7 other; The towns maintain a spirit of neighborliness and aloha
- 8 ▪ The area's towns were built in the plantation era and are comprised of densely populated,
- 9 somewhat walkable neighborhoods
- 10 ▪ Several towns/villages have town cores with the potential for revitalization
- 11 ▪ Many of the existing town cores have historic buildings with attractive architectural character
- 12 ▪ Most towns have community centers and park facilities
- 13 ▪ The region's population is aging, which provides a resource of experienced residents (*kupuna*) who
- 14 may be able to share their wisdom and devote more time to community-capacity during their
- 15 retirement
- 16 ▪ There is previously developed community capacity for organizing from training performed when the
- 17 Plantations closed
- 18 ▪ The rural lifestyle lends itself to food resource sharing, and a general emphasis on neighbors helping
- 19 neighbors

20 **Challenges**

- 21 ▪ Insufficient infrastructure, particularly water availability is a severe constraint to directing growth
- 22 and greater density in towns and villages.
- 23 ▪ Many town core areas are dilapidated with vacant buildings and few businesses
- 24 ▪ Older buildings can be cost prohibitive to repair; some may not be salvageable
- 25 ▪ Town populations have shrunk to
- 26 levels where they may be unable to
- 27 support previous, or expanded
- 28 commercial levels
- 29 ▪ The lack of jobs in the planning area
- 30 has led many to seek employment
- 31 farther from home, which lengthens
- 32 commuting time and has other
- 33 unintended negative effects on
- 34 community cohesion
- 35 ▪ The planning area suffers from
- 36 inadequate access to various
- 37 communication services such as
- 38 broadband internet, cell phone
- 39 service, and cable television



- 1 ▪ Availability of numerous homestead lots (primarily located on agricultural land) has increased
- 2 residential use of agriculture land which leads to rural sprawl, loss of open space, loss of agricultural
- 3 production, and loss of agricultural character
- 4 ▪ Agricultural lands vulnerable to inappropriate development
- 5 ▪ Potential for existing and new developments to build out in ways that undermine Hadaka’s rural
- 6 character and lifestyle
- 7 ▪ Potential for smaller, disconnected communities to be isolated in the event of major natural
- 8 catastrophe
- 9 ▪ Undefined strategies for rural road networks; water, sewer, and energy infrastructure; and schools,
- 10 clinics, and public facilities to accommodate healthy growth and a sustainable local economy
- 11 ▪ Undefined strategies for funding the repair and maintenance of Hāmākua’s parks and other public
- 12 facilities.

13 **Hāmākua’s Community Building Objectives**

14 Based on the community’s values, vision, assets, and challenges, the Steering Committee adopted clear

15 Community/’Ohana objectives:

- 16 ▪ Protect and nurture Hāmākua’s social and cultural diversity and heritage assets, including sacred
- 17 places, historic sites and buildings, and distinctive plantation towns.
- 18 ▪ Direct future settlement patterns that are sustainable and connected. Honor Hāmākua’s historic
- 19 and cultural assets by concentrating new development in existing, walkable, mixed-use town centers
- 20 while limiting rural sprawl.
- 21 ▪ Develop and improve critical community infrastructure, including utilities, healthcare, emergency
- 22 services, affordable housing, educational opportunities and recreational facilities to keep our ’ohana
- 23 safe, strong, and healthy.
- 24 ▪ Establish a rural transportation network that includes improving roadway alternatives to Highway
- 25 19, expanding and improving the existing transit system, and encouraging multiple transportation
- 26 options.

27 **Hāmākua Through a Planners’ Eyes**

28 Each community is unique, and, as is clear in its residents’ articulation of values, priorities, and

29 objectives, The Planning Area’s communities includes a number of complex and contradictory qualities.

30 However, characterizing these qualities helps to identify common challenges and opportunities with the

31 purpose of learning from successful responses in other places. There are many ways to describe rural

32 communities based on their economic, geographic, or design characteristics. Though each may fall into

33 more than one category, here is how Hāmākua’s rural communities might be classified under categories

34 developed by National Association of Counties, the National Main Street Center, and the U.S. Forest

35 Service:

36 **Traditional Main Street Communities:** Pepe’ekeo, Honomū, Laupāhoehoe and Honoka’a enjoy a

37 compact street design as well as historically significant architecture and public spaces. Still, they

38 struggle to compete for tenants and customers with Kona and Hilo’s office parks, strip commercial, and

39 big box stores.

1 **Resource-Dependent Communities:** Historically, Hāmākua’s economy has been dependent on natural
2 resource industries, particularly agriculture, so its fortunes rise and fall with the market value of that
3 resource. A key challenge facing resource-dependent communities is diversifying the economy while
4 maintaining the rural quality of life and character.

5 **Gateway Communities:** Honomū, Honoka’a and Kukuihaele could be considered gateway communities
6 (Honomū as a gateway to ‘Akaka Falls and Honoka’a/Kukuihaele as a gateway for Waipi’o Valley).
7 Moreover, all towns villages, and settlements in Hāmākua are neighbors to the Planning Area’s other
8 wealth of natural and cultural resources, including the shoreli ne, the mauka forests, and other historic
9 and architectural features. Gateway communities often struggle with balancing the provision of services
10 to visitors with strains on infrastructure and the natural environment when growth is unplanned, but
11 successful gateway communities are increasingly popular places to live, work, and play.

12 **Second Home and Retirement Communities:** Like gateway communities, second home and retirement
13 communities struggle to keep pace with new growth while maintaining the quality of life that drew in
14 residents in the first place. In addition, communities with large populations of elderly must
15 accommodate their unique housing, transportation, recreation, accessibility, and health care needs¹.

16 **Rural Communities:** While some areas on Hawai’i Island strain to keep up with growth, Hāmākua have
17 the opposite problem. The need for economic opportunity to accommodate the existing residential
18 development is a constant, along with sporadic but intense growth pressure. Typically, communities
19 with low populations or a contracting economy face a combination of problems: unemployment and
20 poverty, increasing demands for social services with fewer dollars to pay for them, an aging workforce,
21 vacant properties, and loss of historic places and structures. Moreover, commutes to distant
22 employment centers require a greater percentage of the family budget to be spent on transportation
23 and reduce take-home pay and leisure and family time. However, attempts to compete with other
24 jurisdictions for large economic development projects, such as resorts, new manufacturing plants, office
25 parks, or regional big box retailers, may come at the expense of local businesses and the community ties
26 they aim to support.

27 **Types of Strategies for Strengthening and Building Community**

28 To achieve Hāmākua’s community objectives, the CDP will employ four complimentary and sometimes
29 overlapping types of core strategies:

- 30 ▪ **Establish Policy** with policy maps and policy statements related to land use, watersheds and natural
31 features, public improvement
32 priorities, government services,
33 and public development/ re-
34 development;
- 35 ▪ **Recommend Advocacy** with
36 federal and state policy makers
37 and agencies for policies,
38 regulations, incentives,
39 programs, and action;
- 40 ▪ **Detail Community-based,**
41 **Collaborative Actions,** including
42 research, place-based planning
43 and program design, and
44 program implementation; and



1 ▪ **Identify Easement and Acquisition Priorities**, either by fee simple ownership or through 36
2 conservation easements.

3 In preparation for identifying the mix of strategies best suited for the Hāmākua CDP Planning Area, the
4 next section in this appendix summarizes existing policy related to land use, capital improvements, and
5 housing and introduces community-based, collaborative actions for financing infrastructure, preserving
6 affordable housing, retaining design character, and advancing redevelopment.

7 The following section focuses on the current status of Hāmākua’s infrastructure, facilities, and services
8 as well as potential policies and courses of action for making improvements. The last sections
9 complement those more general overviews by highlighting policies and community-based, collaboration
10 actions specific to Hāmākua’s historic towns and villages, residential settlements, and extensive
11 homestead areas.

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OVERVIEW OF ALTERNATIVE STRATEGIES

This section of the appendix introduces many of the basic strategies available for strengthening communities, including land use regulation, capital improvements, retaining design character, and redevelopment tools used by local municipalities, state government, and communities.

State Land Use Regulations

State Land Use (SLU) Districts

Urban: Hawai'i Revised Statutes (HRS) chapter 205 establishes Urban and Rural districts as the location of residential, commercial, and industrial land uses. It defines Urban districts as "those lands that are now in urban use and a sufficient reserve area for foreseeable urban growth" and empowers the counties to regulate activities in the Urban district.

In the Planning Area, the Urban District generally coincides with the locations of existing communities, typically surrounded by Agricultural District lands, including Kukuihaele, Honoka'a, Pa'auilo, 'O'okala, Pāpa'aloa/Laupāhoehoe, Wailea/Hakalau, Honomū, Pepe'ekeo, and Pāpa'ikou. Additionally, the settlements of Pauka'a, Wainaku, and Kaiwiki are located in the SLU Urban Districts.

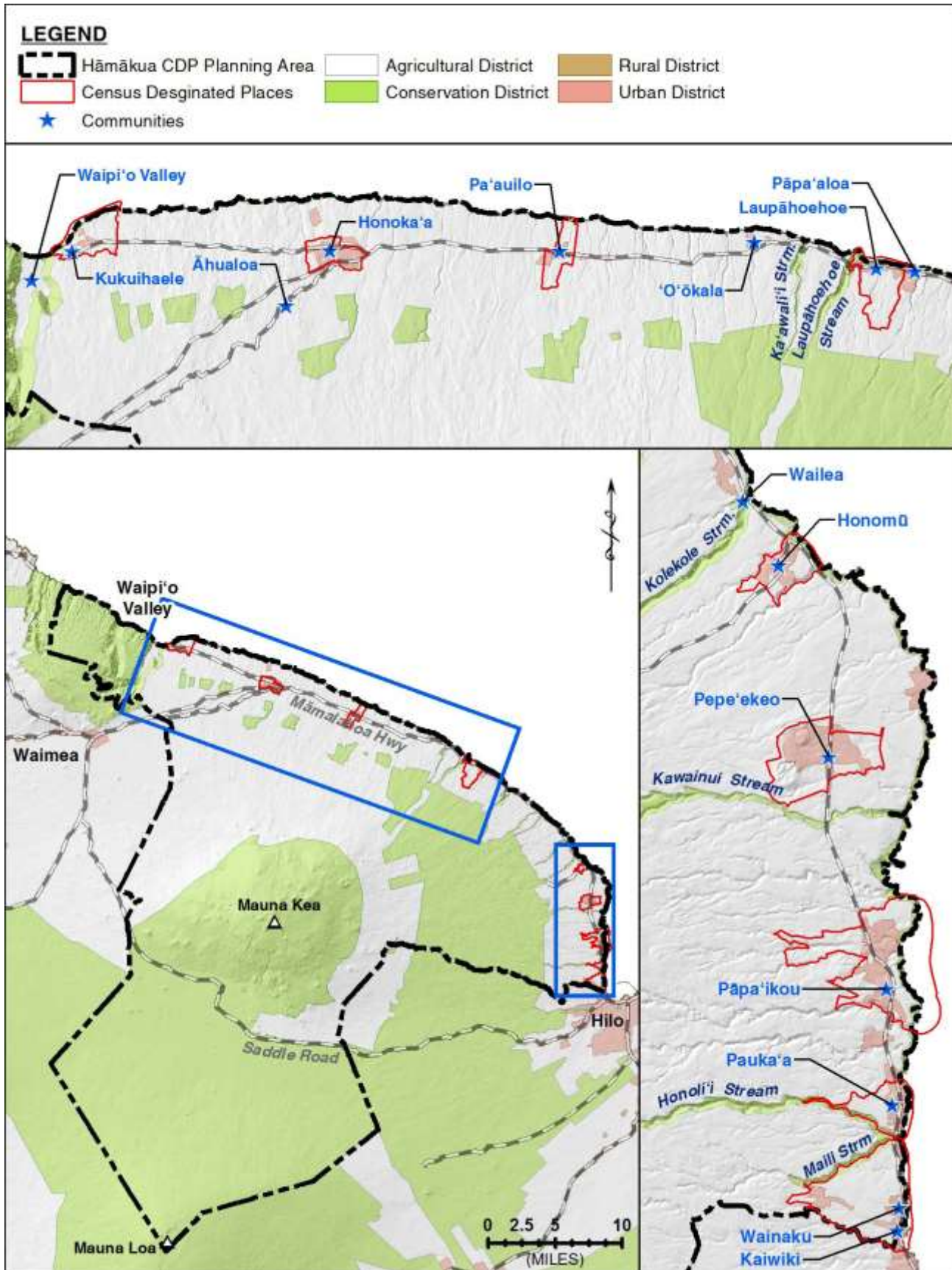
There are exceptions of existing communities with parcel sizes less than one acre, many of which were created as plantation camps that are in the Agricultural District instead of the Urban District. Examples of these clusters include: portion of Haina Camp, Pā'auhau Village, Nakalei Camp, Ka'ohe Tract Subdivision, Milo Subdivision and Niu Camp in 'O'okala, periphery portions of Wailea and Honomū, portions of Andrade Camp and Kula'imano Homesteads in Pepe'ekeo, and periphery portions of Pāpa'ikou, Pauka'a, and Kaiwiki. Since one acre is the minimum lot size in the Agricultural District, parcels less than an acre are nonconforming (i.e., legally "grandfathered" but may have other restrictions such as not being able to qualify for 'ohana or additional farm dwellings). [County Land Use Law](#) is discussed in more detail below.

Rural: HRS 205-2 and 5 define rural districts as "areas of land composed primarily of small farms mixed with very low density residential lots." There are 34 acres classified in the Rural District within the Planning Area located in the vicinities of Kaiwiki, Nīnole, Laupāhoehoe, and Honoka'a. There are no restrictions on the type of residential use in the Rural District as there is for the Agricultural District where the residential use must meet the requirements of a "farm dwelling" as defined by the State Land Use Law (i.e., "'farm dwelling' means a single-family dwelling located on and used in connection with a farm, including clusters of single-family farm dwellings permitted within agricultural parks developed by the State, or where agricultural activity provides income to the family occupying the dwelling," HRS §205-4.5). HRS 205-2 specifies the following permitted densities and uses in the Rural District:

- Low density residential lots of not more than one dwelling house per one-half acre in areas where "city-like" concentration of people, structures, streets, and urban level of services are absent, and where small farms are intermixed with low density residential lots;
 - Two single-family dwelling units on any lot where a residential dwelling unit is permitted if the County has adopted reasonable standards;
 - Agricultural uses;
- Contiguous areas which are not suited to low density residential lots or small farms by reason of topography, soils, and other related characteristics;



Figure 1. State Land Use Districts



- 1 ▪ Golf courses, golf driving ranges, and golf-related facilities;
- 2 ▪ Public, quasi-public, and public utility facilities.
- 3 ▪ Within a subdivision and by Special Permit, the State Land Use Commission for good cause may
- 4 allow one lot of less than one-half acre, but not less than 18,500 square feet, or an equivalent
- 5 residential density, within a rural subdivision and permit the construction of one dwelling on such
- 6 lot, provided that all other dwellings in the subdivision shall have a minimum lot size of one-half
- 7 acre or 21,780 square feet.

8 **Agricultural and Conservation:** A discussion of the State Conservation and Agricultural districts and

9 permitted uses is included in the discussion of natural and cultural resource management in Appendix

10 V4A¹.

11 **Boundary Amendments:** SLU district boundaries may be amended by the State Land Use Commission,

12 or, if the property is 15 acres or less in size, by the County Council. More information about SLU district

13 boundary amendments is included in Appendix V4A.

14 **Special Permits:** Rather than amend district boundaries, landowners often apply for a special permit, as

15 permitted by HRS section 205-6. For parcels 15 acres in size or smaller, the County Planning

16 Commissions may permit certain unusual and reasonable uses within agricultural district other than

17 those for which the district is classified. The LUC considers special permit applications for parcels larger

18 than 15 acres. The Planning Commission or LUC may impose restrictions as may be necessary or

19 appropriate in granting the approval, including the adherence to representations made by the applicant.

20 Special Permits are explained in more detail in the discussion of County Land Use Law below.

21 **Historic Preservation Review and Public Notice**

22 Pursuant HRS section 6E-42, prior to approval of any project involving a permit, license, certificate, land

23 use change, subdivision, or other entitlement for use that may affect historic property, SHPD is to be

24 advised by Hawai'i County of the project and allowed an opportunity for review and comment on the

25 effect of the proposed project on historic properties. Moreover, SHPD is to inform the public of any

26 project proposals that are not otherwise subject to the requirement of a public hearing or other public

27 notification.

28 **County Land Use Law**

29 **Zoning Code**

30 Chapter 25 of the Hawai'i County Code (HCC) regulates land use within the SLU Urban, Rural, and

31 Agricultural districts. Several elements of the Zoning Code are discussed in detail in Appendix V4A and

32 are referenced below. Other elements of the Zoning Code are not referenced below but apply as

33 described in Appendix V4A, including Variances and Planned Unit Development.

34 Hāmākua's towns and villages include the County zones introduced below and depicted in more detail in

35 the [Town Level Analysis](#) later in this document.

1 <http://www.hawaii-county-cdp.info/hamakua-cdp/draft-hamakua-cdp-documents/draft-analysis-documents/Natural%20Cultural%20Resource%20Analysis-Online.pdf/view>

1 A table summarizing permitted uses in each zone is available on the County of Hawai'i Planning
2 Department's web site at: [http://www.cohplanningdept.com/wp-content/uploads/2013/05/Permitted-](http://www.cohplanningdept.com/wp-content/uploads/2013/05/Permitted-Uses-Table-040913.pdf)
3 [Uses-Table-040913.pdf](http://www.cohplanningdept.com/wp-content/uploads/2013/05/Permitted-Uses-Table-040913.pdf).

4 **Single-Family Residential (RS)**

5 The RS district provides for lower or low and medium density residential use, for urban and suburban
6 family life. Each RS district is designated on the zoning map by the symbol "RS" followed by a number
7 which specifies the required minimum building site area in thousands of square feet (e.g., RS-10). The
8 minimum building site area in the RS district is 7,500 square feet, and the height limit is 35 feet. There
9 may be more than one single-family dwelling on each building site in a an RS district provided there is
10 not less than the required minimum building site area for each dwelling.

11 Of note are the following uses permitted in the RS district:

12 One guest house, in addition to a single-family dwelling, may be located on any building site in the RS
13 district.

- 14 ▪ An 'ohana dwelling may be located on any building site in the RS district, as permitted under Article
15 6, Division 3 of the Zoning Code.
- 16 ▪ Home occupations, as permitted under HCC section 25-4-13
- 17 ▪ Family child care and adult day care homes
- 18 ▪ Group living facilities
- 19 ▪ Meeting facilities
- 20 ▪ Cemeteries and mausoleums, as permitted under Chapter 6, Article 1 of the County Code
- 21 ▪ Crop production.

22 In addition, the following uses may be permitted in the RS district, provided that a use permit is issued
23 for each use:

- 24 ▪ Bed and breakfast establishments as permitted under HCC section 25-4-7
- 25 ▪ Crematoriums, funeral homes, funeral services, and mortuaries
- 26 ▪ Golf courses and related golf course uses, including golf driving ranges, golf maintenance buildings
27 and golf club houses
- 28 ▪ Major outdoor amusement and recreation facilities
- 29 ▪ Telecommunication antennas and towers.

30 **Multi-Family Residential (RM)**

31 The RM district provides for medium and high-density residential use in areas with full community
32 facilities and services. It may occupy transition areas between commercial or industrial areas and other
33 districts of less intense land use. Each RM district shall be designated on the zoning map by the symbol
34 "RM" followed by a number that indicates the required land area, in thousands of square feet, for each
35 dwelling unit or for each separate rentable unit. The maximum density designation in the RM district is
36 .75 or 750 square feet of land area per dwelling unit or separate rentable unit, and the minimum
37 building site in the RM district shall be 7,500 square feet. The height limit in the RM district is 45 feet,
38 and landscaping must be provided on a minimum of twenty percent of the total land area.

1 Of note are the following uses permitted in the RM district:

- 2 ▪ Commercial or personal service uses, on a small scale, as approved by the director, provided that
- 3 the total gross floor area does not exceed one thousand two hundred square feet and a maximum
- 4 of five employees
- 5 ▪ Bed and breakfast establishments, as permitted under HCC section 25-4-7
- 6 ▪ Crop production.

7 In addition, the following uses may be permitted in the RM district, provided that a use permit is issued
8 for each use:

- 9 ▪ Crematoriums, funeral homes, funeral services, and mortuaries
- 10 ▪ Golf courses and related golf course uses, including golf driving ranges, golf maintenance buildings
- 11 and golf club houses
- 12 ▪ Major outdoor amusement and recreation facilities
- 13 ▪ Telecommunication antennas and towers.

14 **Neighborhood Commercial (CN)**

15 The CN district applies to strategically located centers suitable for commercial activities of such size and
16 shape as will accommodate a compact shopping center that supplies goods and services to a residential
17 or working population on a frequent need or convenience basis. Each CN district shall be designated by
18 the symbol “CN” followed by a number that indicates the minimum land area, in thousands of square
19 feet, required for each building site. The height limit in the CN district is 40 feet, and the minimum
20 building site area is 7,500 square feet. All front yards in the CN district must be landscaped, and, in
21 conjunction with plan approval, the Planning Director may require the construction of a continuous eave
22 overhanging the front property line.

23 Of note are the following uses permitted in the CN district:

- 24 ▪ Automobile service stations
- 25 ▪ Convenience stores
- 26 ▪ Crop production
- 27 ▪ Farmers markets
- 28 ▪ Repair establishments, minor.

29 **Village Commercial Districts (CV)**

30 The CV district provides for a broad range or variety of commercial and light industrial uses that are
31 necessary to serve the population in rural areas where the supplementary support of the general
32 business uses and activities of a central commercial district is not readily available. Each CV district is
33 designated by the symbol “CV” followed by a number that indicates the minimum land area, in number
34 of thousands of square feet, required for each building site. The height limit in the CV district is 30 feet,
35 and the minimum building site area in the CV district shall be 7,500 square feet. All front yards in the CV
36 district must be landscaped.

37 Of note are the following uses permitted in the CV district:

- 1 ▪ Hotels, when the design and use conform to the character of the area, as approved by the director
- 2 ▪ Lodges
- 3 ▪ Bars
- 4 ▪ Theaters
- 5 ▪ Crop production
- 6 ▪ Farmers markets
- 7 ▪ Automobile service stations
- 8 ▪ Commercial parking lots and garages
- 9 ▪ Repair establishments, major, when there are not more than five employees, as approved by the
- 10 director
- 11 ▪ Publishing plants for newspapers, books and magazines, printing shops, cartographing, and
- 12 duplicating processes such as blueprinting or photostating shops, which are designed to primarily
- 13 serve the local area
- 14 ▪ Manufacturing, processing and packaging light and general, except for concrete or asphalt products,
- 15 where the products are distributed to retail establishments located in the immediate community, as
- 16 approved by the director.

17 In addition to those permitted uses permitted, the following uses may be permitted in the CV district,

18 provided that a use permit is issued for each use:

- 19 ▪ Golf courses and related golf course uses, including golf driving ranges, golf maintenance buildings
- 20 and golf club houses
- 21 ▪ Major outdoor amusement and recreation facilities

22 **Industrial-Commercial Mixed Districts (MCX)**

23 The purpose of the MCX district is to allow mixing of some industrial uses with commercial uses. The

24 intent is to provide for areas of diversified businesses and employment opportunities by permitting a

25 broad range of uses, without exposing nonindustrial uses to unsafe and unhealthy environments. Each

26 MCX district shall be designated by the symbol “MCX” followed by a number which indicates the

27 minimum land area, in number of thousands of square feet, required for each building site. The

28 minimum building site area in the MCX district is 20,000 square feet, and the height limit is 45 feet. All

29 front yards in the MCX district must be landscaped.

30 Of note are the following uses permitted in the MCX district:

- 31 ▪ Agricultural products processing, minor
- 32 ▪ Automobile sales and rentals
- 33 ▪ Automobile service stations
- 34 ▪ Bars, nightclubs and cabarets
- 35 ▪ Cleaning plants
- 36 ▪ Commercial parking lots and garages

- 1 ▪ Equipment sales and rental yards
- 2 ▪ Farmers markets
- 3 ▪ Food manufacturing and processing
- 4 ▪ Laundries
- 5 ▪ Manufacturing, processing and packaging establishments, light
- 6 ▪ Publishing plants for newspapers, books and magazines, printing shops, cartographing, and
- 7 duplicating processes such as blueprinting or photostating shops
- 8 ▪ Repair establishments, minor
- 9 ▪ Self-storage facilities
- 10 ▪ Veterinary establishments in sound-attenuated buildings.

11 In addition, the following uses may be permitted in the MCX district with a use permit: Major outdoor
 12 amusement and recreation facilities.

13 **Limited Industrial (ML)**

14 The ML district applies to areas for business and industrial uses which are generally in support of but not
 15 necessarily compatible with those permissible activities and uses in other commercial districts. Each ML
 16 district shall be designated by the symbol “ML” followed by a number that indicates the minimum land
 17 area, in thousands of square feet, required for each building site. The minimum building site area in the
 18 ML district is 10,000 square feet, the height limit is 45 feet, and landscaping is required in all front yards.

19 Of note are the following uses permitted in the ML district:

- 20 ▪ Airfields, heliports and private landing strips
- 21 ▪ Animal hospitals
- 22 ▪ Automobile and truck sales and rentals
- 23 ▪ Automobile service stations
- 24 ▪ Cleaning and dyeing plants
- 25 ▪ Contractors’ yards for equipment, material, and vehicle storage, repair, or maintenance
- 26 ▪ Heavy equipment sales, service and rental
- 27 ▪ Junkyards, provided that the building site is not less than one acre in area
- 28 ▪ Lumberyards and building material yards, but not including concrete or asphalt mixing and the
- 29 fabrication by riveting or welding of steel building frames
- 30 ▪ Manufacturing, processing and packaging establishments, light
- 31 ▪ Recycling centers, which do not involve the processing of recyclable materials
- 32 ▪ Truck, freight and draying terminals.

1 In addition to those permitted uses, the following uses may be permitted in the ML district, provided
2 that a use permit is issued for each use: Major outdoor amusement and recreation facilities.

3 **General Industrial (MG)**

4 The MG district applies to areas for uses that are generally considered to be offensive or have some
5 element of danger. Each MG district shall be designated by the symbol “MG” followed by a number that
6 indicates the minimum land area, in number of thousands of square feet, required for each building site,
7 or if the number is followed by the symbol “a,” by the minimum number of acres required for each
8 building site. The height limit in the MG district is 45 feet, and all front yards in the MG district must be
9 landscaped.

10 Of note are the following uses permitted in the MG district:

- 11 ▪ Agricultural products processing, major and minor
- 12 ▪ Airfields, heliports and private landing strips
- 13 ▪ Animal sales, stock, and feed yards
- 14 ▪ Automobile body and fender establishments
- 15 ▪ Breweries, distilleries, and alcohol manufacturing facilities
- 16 ▪ Bulk storage of flammable products and bulk storage of explosive products
- 17 ▪ Cleaning and dyeing plants
- 18 ▪ Concrete or asphalt batching and mixing plants and yards
- 19 ▪ Dumping, disposal, incineration, or reduction of refuse or waste matter
- 20 ▪ Fertilizer manufacturing plants
- 21 ▪ Junkyards
- 22 ▪ Lava rock or stone cutting or shaping facilities
- 23 ▪ Machine, welding, sheet metal, and metal plating and treating establishments
- 24 ▪ Manufacturing, processing and packaging establishments, light and general
- 25 ▪ Public dumps
- 26 ▪ Reduction, refining, smelting, or alloying of metals, petroleum products or ores
- 27 ▪ Saw mills
- 28 ▪ Slaughterhouses.

29 In addition to those permitted uses, the following uses may be permitted in the MG district, provided
30 that a use permit is issued for each use:

- 31 ▪ Commercial excavation
- 32 ▪ Major outdoor amusement and recreation facilities.

33 **Resort-Hotel (V)**

1 The V district applies to areas to accommodate the needs and desires of visitors, tourists and transient
2 guests. It applies to specific areas where public roads and public utilities are available or where suitable
3 alternate private facilities are assured. Each V district shall be designated on the zoning map by the
4 symbol “V” followed by a number that indicates the required land area, in thousands of square feet, for
5 each dwelling unit or for each separate rentable unit in the case of hotels, resorts, inns, lodges, motels,
6 motor hotels, motor lodges, or other similar rentable units. Maximum density designation in the V
7 district is .75 or 750 square feet of land area for each dwelling unit or separate rentable unit, and the
8 minimum building site in the V district shall be 15,000 square feet. The height limit in the V district is 45
9 feet.

10 **Agricultural (A)**

11 In the agriculture zone, one single-family dwelling per lot is permitted, though more intensive uses are
12 allowed with a Special Permit (pursuant HCC section 25-5-70). Appendix V4A² Kula Section details
13 permitted uses in the Agricultural zone.

14 **Open (O)**

15 Pursuant HCC section 25-5-160, the Open zone “applies to areas that contribute to the general welfare,
16 the full enjoyment, or the economic well-being of open land.” Uses are limited to activities like
17 aquaculture, cemeteries, community buildings, forestry, historical areas, natural features, and public
18 parks and uses. With a use permit, mortuaries, golf courses, yacht harbors, wind energy facilities, and
19 telecommunication antennas are allowed.

20 **Change of Zone**

21 Pursuant HCC section 25-2-42, a property owner or any other person with the property owner’s consent
22 may apply for a change of zoning district (i.e., change of zone or rezoning). More information about
23 rezones is included in Appendix V4A.

24 **Concurrency Requirements**

25 Pursuant HCC section 25-2-46, any application for change of zone must meet County concurrency
26 requirements for roads, water supply, and civil defense sirens to ensure the basic infrastructure will be
27 sufficient for the new intensity of use.

28 In most areas, a change of zone cannot not be granted unless (1) the Department of Water Supply has
29 determined that it can meet the water requirements of the project and issue water commitments using
30 its existing system; or (2) specific improvements to the existing public water system, or a private water
31 system equivalent to the requirements of the Department of Water Supply will be provided to meet the
32 water needs of the project.

33 **However, to facilitate the development of village centers in rural areas that are not currently served**
34 **by a public water system, the County Council may waive the water supply requirements for zoning**
35 **amendments for commercial or light industrial uses in areas that do not currently have a public water**
36 **system, and where the department of water supply has no plans to build a public water system, and**
37 **which are (1) designated as an “urban and rural center” or “industrial area” on table 14-5 of the general**
38 **plan and (2) designated for urban use on the land use pattern allocation guide map of the general plan;**

2 <http://www.hawaii-county-cdp.info/hamakua-cdp/draft-hamakua-cdp-documents/draft-analysis-documents/Natural%20Cultural%20Resource%20Analysis-Online.pdf/view>

1 provided that conditions of zoning shall require water supply consistent with public health and safety
2 needs such as sanitation and fire-fighting.

3 **Special Permits**

4 Pursuant Planning Commission Rules 6-7 and 6-3(a)(5)(G), the County Planning Commissions consider
5 applications for special permits for uses that are unusual and reasonable use of land in the State
6 Agricultural and Rural district. Special Permits are discussed in more detail in Appendix V4A.

7 **Special Management Area (SMA) and Shoreline Setback**

8 The SMA permitting system regulates development within SMAs extending from the shoreline inland, as
9 designated on maps filed with the County Planning Commission. Within the Planning Area, the SMA
10 boundary is generally defined by the Hawai'i Belt Road (Hwy 19) up to Ka'awali'i Gulch. North of
11 Ka'awali'i Gulch, the SMA is makai of the Hawai'i Belt Road extending as a band averaging approximately
12 500-700 feet wide from the shoreline until Waipi'o Valley. At Waipi'o Valley, the SMA extends inland
13 encompassing most of the valley floor to the extent of the Agricultural District.

14 Any proposed use that meets the statutory definition of "development" requires a SMA Major or Minor
15 Permit (HRS §205A-22). The Planning Commission approves a SMA Major Permit, while the Planning
16 Director approves a SMA Minor Permit (Hawaii County Planning Commission Rule 9).

17 Within 40' of the shoreline, there is an additional shoreline setback regulation pursuant to the Coastal
18 Zone Management Act (HRS chapter 205A, Part III) that restricts most activities except those permitted
19 or determined to be "minor" (Planning Department Rule 11-7 identifies the permitted activities and §11-
20 8 sets forth the procedures for determination of a "minor activity" or "minor structure"). The Planning
21 Commission must approve a shoreline setback variance to permit any other structures or activities
22 (Hawai'i County Planning Commission Rule 8), which also triggers environmental review under the
23 Environmental Impact Statements law (HRS chapter 343).

24 A determination of the "shoreline" is necessary in order to determine the inland extent of the 40'
25 setback area. Usually, the Planning Department requires a certified shoreline conducted by a licensed
26 surveyor pursuant to specified procedures (HRS §205A-42). However, the Planning Department also has
27 the authority to waive the requirements for a certified survey "where there may be special or unusual
28 physical circumstances or conditions of the land or where a structure or activity is proposed at a
29 considerable distance inland" (Hawaii County Planning Department Rule 11-4(c)). Within the Planning
30 Area, the sea cliffs often present a special condition where the Planning Department has generally
31 allowed the applicant to avoid the time and cost of a certified shoreline by defining the shoreline as the
32 "top of cliff," which usually sets the boundary further inland than a certified shoreline survey along the
33 toe of the cliff.

34 Within the Planning Area, portions of Pauka'a, Pāpa'ikou, Pepe'ekeo, Hakalau, Nīnole,
35 Pāpa'aloa/Laupāhoehoe, and 'O'ōkala makai of the highway are located in the SMA.

36 **Project District (PD)**

37 Pursuant HCC section 25-6-40, a PD development is intended to provide for a flexible and creative
38 planning approach rather than specific land use designations, for quality developments. It also allows for
39 flexibility in location of specific uses and mixes of structural alternatives. The planning approach would
40 establish continuity in land uses and designs while providing for a comprehensive network of
41 infrastructural facilities and systems. A variety of uses as well as open space, parks, and other project
42 uses are intended to be in accord with each individual project district objective. The minimum land area
43 required for a project district is fifty acres.

1 Any uses permitted either directly or conditionally in the RS, RD, RM, RCX, CN, CG, CV or V districts is
2 permitted in a project district, provided that each of the proposed uses and the overall densities for
3 residential and hotel uses shall be contained in a master plan for the project district and in the project
4 district enabling ordinance.

5 A project district is an amendment to the Zoning Code, which changes the district boundaries in
6 accordance with the individual project district. The application for a PD is similar to that for a change in
7 zone, including an environmental report. At least one hearing must be held by the Planning Commission
8 in the district in which the proposed PD is located. The commission may recommend approval in whole
9 or in part, with or without modifications, or rejection of a proposal.

10 **A project district may only be established if the proposed district is consistent with the intent and**
11 **purpose of the Zoning Code and the County general plan and will not result in a substantial adverse**
12 **impact upon the surrounding area, community or region. The Council may impose conditions** on the
13 use of the property subject to the project district, provided the council finds that the conditions are:

- 14 ▪ Necessary to prevent circumstances which may be adverse to the public health, safety and welfare;
15 or
- 16 ▪ Reasonably conceived to fulfill needs directly emanating from the land uses proposed with respect
17 to protection of the public from the potentially deleterious effects of the proposed uses, or
18 fulfillment of the need for public service demands created by the proposed uses.

19 In addition, the Council shall include the following conditions in any project district ordinance:

- 20 ▪ A description of each of the uses proposed in the project district
- 21 ▪ The overall densities for the residential and hotel uses established in the project district
- 22 ▪ Any infrastructure requirements for the project district, and
- 23 ▪ Any open space requirements for the project district.

24 **Use Permits**

25 Pursuant HCC section 25-2-60, use permits are permits for certain permitted uses in zoning districts
26 which require special attention to insure that the uses will neither unduly burden public agencies to
27 provide public services nor cause substantial adverse impacts upon the surrounding community. Use

28 Use Permits are discussed in more detail in Appendix V4A.

29 **Plan Approval**

30 Pursuant HCC section 25-2-70, plan approval allows closer inspection of development in order to ensure
31 conformance with the General Plan, the Zoning Code, and conditions of previous approvals related to
32 the development. Plan approval is required prior to the construction or installation of any new structure
33 or development or any addition to an existing structure or development in all districts except in the RS,
34 RA, FA, A and IA districts, and except for the construction of one single-family dwelling and any
35 accessory buildings per lot. In addition, plan approval is required in all districts prior to the change of the
36 following uses in existing buildings: residential to commercial use and warehouse and manufacturing to
37 retail use. Moreover, plan approval is required prior to the construction or establishment of the
38 following improvements and uses: public uses, structures and buildings and community buildings;
39 telecommunication antennas and towers; temporary real estate offices and model homes; utility
40 substations.

1 Plan approval may also be required as a condition of approval of any use permit, variance, or other
2 action relating to a specific use, in which case the use or development so conditioned may not be
3 established until plan approval has been secured.

4 Upon receipt of a detailed site plan, the Planning Director may issue plan approval subject to conditions
5 or changes in the proposal that, in the director's opinion, are necessary to carry out and further the
6 purposes of the Zoning Code. In addition, the Director considers the proposed structure, development
7 or use in relation to the surrounding property, improvements, streets, traffic, community characteristics,
8 and natural features and may require conditions or changes to assure:

- 9 ▪ Adequate light and air, and proper siting and arrangements are provided for
- 10 ▪ Existing and prospective traffic movements will not be hindered
- 11 ▪ Proper landscaping is provided that is commensurate with the structure, development or use and its
12 surroundings
- 13 ▪ Unsightly areas are properly screened or eliminated
- 14 ▪ Adequate off-street parking is provided
- 15 ▪ Within reasonable limits, any natural and man-made features of community value are preserved
- 16 ▪ Dust, noise, and odor impacts are mitigated.

17 **Clustered Plan Development (CPD)**

18 Pursuant HCC section 25-6-20, the purpose of a CPD is to provide exceptions to the density
19 requirements of the RS district so that permitted density of dwelling units contemplated by the
20 minimum building site requirements is maintained on an overall basis and desirable open space, tree
21 cover, recreational areas, or scenic vistas are preserved. The minimum land area required for a CPD is
22 two acres. Building sites in a CPD may be reduced in area below the minimum area required in the
23 district in which the CPD is located, provided that the average building site of the area created in the
24 CPD is not below the minimum building site area required in the district for CPD, as prescribed in the
25 Zoning Code. The procedure for processing an application for a CPD permit shall be the same as that
26 prescribed for a subdivision application.

27 **'Ohana Dwellings**

28 Pursuant HCC section 25-6-30, 'ohana dwellings are permitted on a building site within the RS district,
29 provided that the following public facilities are adequate to serve the 'ohana dwelling unit: a public or
30 private sewage disposal system, an approved public or private water system, adequate fire protection
31 measures, and access to a public or private street. 'ohana dwellings are not permitted in PUDs, CPDs, or
32 on any building site where more than one dwelling unit is permitted.

33 **Subdivision Code**

34 Pursuant HCC section 23-6, **the Subdivision Code shall be applied and administered within the**
35 **framework of the County General Plan, including comprehensive or general plans for sections of the**
36 **County** which may be adopted as amendments to or portions of the County general plan.

37 Pursuant HCC section 23-84 and following, subdivision of large parcels into smaller parcels requires the
38 following improvements:

- 39 ▪ A **water system** meeting the minimum requirements of the County Department of Water Supply.
40 Prior to subdivision approval, the Department of Water Supply must confirm water availability,
41 considering the capacity of its system's sources, storage, transmission, and pressure service zone. If

1 the DWS system cannot accommodate the proposed number of lots and units, the landowner is
2 responsible for the improvements.

- 3 ▪ Meet the minimum requirements of the State Department of Health relating to **sewage disposal**.
- 4 ▪ **Streets** constructed in accordance with the subdivision code specifications and those on file with the
5 Department of Public Works.
- 6 ▪ Land surface **drainage**.
- 7 ▪ Street **lights**.

8 Moreover, pursuant HCC section 23-26, the subdivider of a parcel of land capable of supporting two
9 hundred dwelling units shall reserve suitable areas for parks, playgrounds, schools, and other public
10 building sites that will be required for the use of its residents.

11 In addition, **outstanding natural or cultural features** such as scenic spots, water courses, fine groves of
12 trees, heiau, historical sites and structures **shall be preserved** as provided by the director.

13 Where a subdivision is traversed by a natural water course, drainage way, channel, or stream, there
14 shall be provided a drainage easement or drainage right-of-way conforming substantially to the lines of
15 the water course and of such further width as will be adequate. **Streets or parkways parallel to water
16 courses may be required.**

17 **Code Enforcement**

18 HCC section 5-48, Substandard Buildings, specifies that any building or portion thereof in which there
19 exists any of the following listed conditions to an extent that it endangers the life, limb, health, property,
20 safety or welfare of the public or the occupants shall be deemed and hereby is declared to be a
21 “substandard building:”

- 22 ▪ Inadequate sanitation, including but not limited to general dilapidation or improper maintenance or
23 lack of a bathroom, kitchen sink, hot and cold water, or minimum amounts of light and ventilation
- 24 ▪ Structural hazards
- 25 ▪ Presence of a nuisance, including any dangers to human life and overcrowding
- 26 ▪ Faulty weather protection
- 27 ▪ Inadequate maintenance
- 28 ▪ Inadequate exits
- 29 ▪ Any building or portion thereof that is not being occupied or used as intended or permitted.

30 HCC section 5-59 goes on to explain that whenever the Department of Public Works determines that
31 there exists a violation of any provision of the Building Code, it shall serve a notice of violation upon the
32 parties responsible for the violation, which may include, but shall not be limited to the owner and any
33 lessee of the property where the violation is located, to make the building or portion thereof comply
34 with the code. Any member of the public may file a complaint with the Administrative Division of the
35 Department of Public Works.

36 **Land Use Policy Map**

1 **Urban Growth Boundaries** identify areas to be protected for agriculture and areas where growth will be
2 encouraged. Urban Growth Boundaries (UGBs) are intended to accommodate anticipated growth and to
3 separate areas appropriate for future growth from areas intended for agricultural use. This is sometimes
4 referred to as “Town and Country” zoning, which requires that development occur only in densely
5 populated hamlets and villages, with the surrounding rural areas remaining undeveloped and available
6 for farming, forestry, natural area preservation, and recreation.

7 Most comprehensive plans include an open space element and resource protection overlay districts,
8 which can incorporate agricultural land. The County of Hawai‘i’s LUPAG map effectively establishes an
9 UGB between the agricultural designations (orchard, agricultural, and intensive agricultural) and the
10 urban designations (low, medium, and high density urban). The Planning Area’s town and village LUPAG
11 Maps can be found later in the [Town Level Analysis](#) section of this document.

12 **General Plan Land Use Pattern Allocation Guide (LUPAG):** The land use pattern in the General Plan is a
13 broad, flexible design intended to guide the direction and quality of future developments in a
14 coordinated and rational manner. The General Plan Land Use Pattern Allocation Guide (LUPAG) Map
15 indicates the general location of various land uses in relation to each other. Any changes in zone have to
16 be consistent with the General Plan.

17 Land uses are designated generally on the map in reference to the following categories:

18 **Urban Designations**

19 The urban centers include high, medium and low-density designations. These centers and clusters
20 provide physical, social, governmental and economic concentrations so that the total activities of the
21 community can be more readily and easily conducted. The future improvement and development
22 objectives are directed toward making urban and rural centers more efficient, livable, and safe. **Growth**
23 **should be encouraged in terms of renewing older areas or extending existing areas.** The creation of
24 new urban and rural centers should be initiated only when it is in the public interest and must be
25 accompanied by commitments from both government and the private sector for the development of
26 basic community and public facilities and services. Infrastructure costs less when new residential areas
27 are located near existing highways, water and sewer lines, and employment centers.

- 28 ▪ **High Density:** General commercial, multiple family residential and related services (multiple family
29 residential – up to 87 units per acre).
- 30 ▪ **Medium Density:** Village and neighborhood commercial and single family and multiple family
31 residential and related functions (multiple family residential – up to 35 units per acre).
- 32 ▪ **Low Density:** Residential, with ancillary community and public uses, and neighborhood and
33 convenience-type commercial uses; overall residential density may be up to six units per acre.
- 34 ▪ **Resort Node:** These areas include a mix of visitor-related uses such as hotels, condominium-hotels
35 (condominiums developed and/or operated as hotels), single family and multiple family residential
36 units, golf courses and other typical resort recreational facilities, resort commercial complexes and
37 other support services. Only Major Resort Areas are identified as Resort Nodes on the LUPAG Map.
- 38 ▪ **Resort Area:** These areas include a mix of uses such as hotels, condominium-hotels (condominiums
39 developed and/or operated as hotels), and support services. Intermediate Resort, Minor Resort, and
40 Retreat Resort Areas are identified as Resort Areas on the LUPAG Map.
- 41 ▪ **Urban Expansion Area:** Allows for a mix of high density, medium density, low density, industrial,
42 industrial-commercial and/or open designations in areas where new settlements may be desirable,
43 but where the specific settlement pattern and mix of uses have not yet been determined.

- 1 ▪ **Industrial Area:** These areas include uses such as manufacturing and processing, wholesaling, large 2
- 2 storage and transportation facilities, light industrial and industrial-commercial uses.

3 **Rural Designation**

- 4 ▪ **Rural:** This category includes existing subdivisions in the State Land Use Agricultural and Rural
- 5 districts that have a significant residential component. Typical lot sizes vary from 9,000-square feet
- 6 to two acres. These subdivisions may contain small farms, wooded areas, and open fields as well as
- 7 residences. Allowable uses within these areas, with appropriate zoning, may include commercial
- 8 facilities that serve the residential and agricultural uses in the area, and community and public
- 9 facilities. The Rural designation does not necessarily mean that these areas should be further
- 10 subdivided to smaller lots. Most lack the infrastructure necessary to allow further subdivision.

11 **Agriculture Designations**

- 12 ▪ Agriculture designations are described in Appendix V4A³.

13 **Open and Conservation Designations**

- 14 ▪ **Open:** Parks and other recreational areas, historic sites, and open shoreline areas.
- 15 ▪ **Conservation Area:** Forest and water reserves, natural and scientific preserves, areas in active
- 16 management for conservation purposes, areas to be kept in a largely natural state, with minimal
- 17 facilities consistent with open space uses, such as picnic pavilions and comfort stations, and lands
- 18 within the State Land Use Conservation District.

19 Table 14-5 lists urban and rural centers, industrial areas, and resort areas of the County by district. The

20 following are identified for the CDP Planning Area:

- 21 ▪ South Hilo
 - 22 ○ Urban and Rural Centers - Pāpa’ikou, Pepe’ekeo-Kula’imano, & Honomū
 - 23 ○ Industrial Areas – Pāpa’ikou & Pepe’ekeo
- 24 ▪ North Hilo
 - 25 ○ Urban and Rural Centers - Laupāhoehoe-Pāpa’aloha, ‘O’ōkala
 - 26 ○ Industrial Areas - Laupāhoehoe-Pāpa’aloha, ‘O’ōkala
- 27 ▪ Hāmākua
 - 28 ○ Urban and Rural Centers - Honoka’a, Pa’auilo
 - 29 ○ Industrial Areas - Haina, Honoka’a, Pa’auilo

30 **General Plan Policies, Standards, and Courses of Action**

3 <http://www.hawaii-countycdp.info/hamakua-cdp/draft-hamakua-cdp-documents/draft-analysis-documents/Natural%20Cultural%20Resource%20Analysis-Online.pdf/view>

1 **Policies**

2 In addition to the LUPAG, the General Plan establishes the following policies related to land use in the
3 Hāmākua CDP Planning Area:

- 4 ▪ 9.3(x): Vacant lands in urban areas and urban expansion areas should be made available for
5 residential uses before additional agricultural lands are converted into residential uses.
- 6 ▪ 11.1.3(e): Encourage the clustering of development in order to reduce the cost of providing utilities.
- 7 ▪ 14.1.3(b): Promote and encourage the rehabilitation and use of urban areas that are serviced by
8 basic community facilities and utilities.
- 9 ▪ 14.1.3(j): Encourage urban development within existing zoned areas already served by basic
10 infrastructure, or close to such areas, instead of scattered development.
- 11 ▪ 14.1.3(b): Promote and encourage the rehabilitation and use of urban areas that are serviced by
12 basic community facilities and utilities.
- 13 ▪ 14.2.3(i) Designate, protect and maintain important agricultural lands from urban encroachment.
- 14 ▪ 14.2.3(j) Ensure that development of important agricultural land be primarily for agricultural use.
- 15 ▪ 14.2.3(s): Important agricultural lands shall not be rezoned to parcels too small to support
16 economically viable farming units.
- 17 ▪ 14.2.3(t) Discourage speculative residential development on agricultural lands.
- 18 ▪ 14.3.3(b): Commercial facilities shall be developed in areas adequately served by necessary services,
19 such as water, utilities, sewers, and transportation systems. Should such services not be available,
20 the development of more intensive uses should be in concert with a localized program of public and
21 private capital improvements to meet the expected increased needs.
- 22 ▪ 14.3.3(d): Convert existing strip development to more appropriate uses when and where it is
23 feasible.
- 24 ▪ 14.3.3(e): Encourage the concentration of commercial uses within and surrounding a central core
25 area.
- 26 ▪ 14.4.3(e): Industrial development shall be located in areas adequately served by transportation,
27 utilities, and other essential infrastructure.

28 **Shopping Centers**

29 14.3.4 Standards: There are three basic types of shopping centers:

30 (a) Neighborhood Centers

- 31 ▪ Provide: Convenience goods, e.g., foods, drugs, and personal services.
- 32 ▪ Major Shops: Supermarket and/or drug store.
- 33 ▪ Number of Shops: 5 to 15.
- 34 ▪ Acreage: 5 to 10 acres.
- 35 ▪ Approximate Market: 3,000 people.

1 (b) Community Centers

- 2 ▪ Provide: Convenience goods, plus "soft line" items, such as clothing, and "hard line" items, such as
- 3 hardware and small appliances.
- 4 ▪ Major Shops: Variety or junior department store.
- 5 ▪ Number of Shops: 20 to 40.
- 6 ▪ Acreage: 10 to 30 acres.
- 7 ▪ Approximate Market: 15,000 people.

8 (c) Regional Centers 18

- 9 ▪ Provide: Full range of merchandise and services. 19
- 10 ▪ Major Shops: Full size department store.
- 11 ▪ Number of Shops: 40.
- 12 ▪ Approximate Market: 50,000 people.

13 **Courses of Action**

14 **Rural South Hilo**

- 15 ▪ The General Plan does not make specific recommendation related to land use and development in
- 16 the "Rural" South Hilo Area.

17 **North Hilo**

- 18 ▪ Commercial
 - 19 ○ 14.3.5.4.2(a) Centralization of commercial activities in the Laupāhoehoe-Pāpa‘aloa area shall
 - 20 be encouraged.
 - 21 ○ 14.3.5.4.2(b) Appropriately zoned lands shall be allocated as the need arises.
 - 22 ○ 14.3.5.4.2(c) Do not allow strip or spot commercial development on the highway outside of
 - 23 the primary commercial area.

24 ▪ Industrial

- 25 ○ 14.4.5.4.2(a) Identify sites suitable for future industrial activities as the need arises
- 26 ○ 14.4.5.4.2(b) Encourage the rehabilitation of existing service-oriented industrial areas

27 **Hāmākua**

- 28 ▪ Commercial
 - 29 ○ 14.3.5.4.2(a) Centralization of commercial activities in the Honokaa area shall be
 - 30 encouraged. Urban renewal of the area should be undertaken.
 - 31 ○ 14.3.5.4.2(b) Suitable commercially zoned lands shall be provided as the need arises.

- 1 ○ 14.3.5.4.2(c) Encourage commercial activities within Honokaa town to promote and
- 2 enhance the history and culture of the paniolo and former sugar plantation.
- 3 ▪ Industrial
- 4 ○ 14.4.5.3.2(a) Identify sites suitable for future industrial activities as the need arises
- 5 ○ 14.4.5.3.2(b) Service oriented Limited Industrial and/or Industrial-Commercial uses may be
- 6 permitted in the Laupāhoehoe-Pāpa‘aloha area although the area is not currently identified
- 7 on the LUPAG map.

8 **Capital Improvements**

9 **County Capital Improvements Program (CIP)**

10 Capital improvements are major, nonrecurring expenditure like those listed below:

- 11 ▪ Land acquisition
- 12 ▪ Infrastructure improvement that adds value to the land or improves utility (e.g., roads, drainage,
- 13 sewer lines, parking, landscape or similar construction)
- 14 ▪ New buildings or structures or addition to a building, including related equipment and
- 15 appurtenances that are integral to the new structure
- 16 ▪ Nonrecurring rehabilitation or deferred maintenance of infrastructure and buildings, provided that
- 17 the cost is \$25,000 or more and the improvement will have a useful life of 10 years or more
- 18 ▪ Planning, feasibility, engineering, or design studies related to individual capital improvement
- 19 projects or to a program that is implemented through individual capital improvement projects
- 20 ▪ Information and communications technology provided that the cost is \$25,000 or more.

21 The County Charter outlines the process for adopting a Capital Improvements Program (CIP) budget:

- 22 ▪ The head of each county agency furnishes the mayor estimates of any capital improvements
- 23 pending or proposed to be undertaken within the ensuing fiscal year and within the five fiscal years
- 24 thereafter. Typically, seven county agencies submit CIP projects – Environmental Management,
- 25 Public Works, Fire, Housing and Community Development, Parks and Recreation, Police, and Mass
- 26 Transit. Environmental Management, Public Works, and Parks and Recreation submit the bulk of
- 27 the projects.
- 28 ▪ The Planning Director reviews the list of proposed capital improvements contemplated by agencies
- 29 of the county and recommends the order of their priority.
- 30 ▪ The Managing Director recommends to the mayor the annual capital improvement budget.
- 31 ▪ The Finance Department assists the mayor in the preparation of the capital budget.
- 32 ▪ The Mayor submits an annual capital budget, six-year capital program, and budget message to the
- 33 Council.

34 When proposing CIP projects, agencies prepare Financial Impact Statements (FIS), which include

35 information about the lead agency, location, project description, Council benefit districts, project

36 consistency with long range plans, impact on operating budget, sustainability focus, project readiness,

37 and funding sources and phasing.

1 County capital projects are typically funded by

- 2 ▪ Debt (bonds, State Revolving Fund loans)
- 3 ▪ Revenue sources (fuel tax, other special revenues)
- 4 ▪ State grants
- 5 ▪ Federal grants or loans, and/or
- 6 ▪ Other financing options (fair share contributions or special financing districts).

7 Adoption of the CIP budget is the first of four steps in securing funds to make a capital improvement:

- 8 1. **Appropriation by Council** via the annual/6-year CIP budget and subsequent amendments
- 9 2. **Bond Authorization by Council**, sometimes specifying projects that the funding can be used for
- 10 3. **Allotment by the Finance Department**, releasing the funds for use
- 11 4. **Encumbrance by departments and the Mayor** via executed contracts.

12 Communities have several options for advancing capital improvements:

- 13 ▪ Be clear about community capital improvement priorities. The CDP is the ideal place to identify
- 14 those priorities.
- 15 ▪ Prepare FIS forms for high priority projects in collaboration with the responsible agency.
- 16 ▪ When the annual budgeting process begins at the end of each calendar year, meet with agency
- 17 heads and project managers to discuss the status of high priority projects and their inclusion in the
- 18 CIP budget.
- 19 ▪ Via the Planning Director, recommend the order of priority of projects. Once the CDP is adopted,
- 20 this can be done formally through the CDP Action Committee. HCC 16-6(4) empowers the CDP
- 21 Action Committees to “Provide timely recommendations to the County on priorities relating to
- 22 the...CIP budget and program....”
- 23 ▪ While the annual CIP submittal is being finalized, meet with the Mayor to discuss the status of high
- 24 priority projects and their inclusion in the CIP budget.
- 25 ▪ Before the Council deliberates on the proposed CIP budget, meet with County Council members to
- 26 discuss the status of high priority projects and their inclusion in the CIP budget.
- 27 ▪ Once high priority projects are appropriated, work with County Council members to secure any
- 28 bond authorization needed to finance the projects.
- 29 ▪ Once necessary bonds are authorized for high priority projects, work with the Mayor to secure
- 30 necessary project allotments.
- 31 ▪ Once allotments are secured for high priority projects, work with the responsible agencies to
- 32 prepare and execute contracts to encumber funds and initiate the projects.

33 Recent and current CIP projects in Hāmākua Planning Area are detailed in the [Regional Infrastructure](#)

34 section below.

35 **Other Infrastructure Financing**

1 Because there are limits on the size of the capital improvement debt burden that the County and State
2 can carry, bond financing can be complemented with other forms of infrastructure financing. For a
3 given project, these financing tools are often used in conjunction.

4 For example, in the case of the Kona Coast View/Wonder View Community Improvement district project
5 for water system improvements, the County was able to obtain a USDA grant and USDA loans at very
6 favorable rates and terms.

7 Because circumstances for each project are unique and the tools and their coordination are complex, it
8 is impossible to describe their potential use in the Planning Area in great detail. However, they are
9 useable tools that the community should consider to address high priority infrastructure needs.

10 **Grants and Loans**

11 DOH Drinking Water State Revolving Fund (DWSRF): The Safe Drinking Water Act, as amended in 1996,
12 established the Drinking Water State Revolving Fund (DWSRF) to make funds available to drinking water
13 systems to finance infrastructure improvements. The program also emphasizes providing funds to small
14 and disadvantaged communities and to programs that encourage pollution prevention as a tool for
15 ensuring safe drinking water.

16 State DOH receives approximately \$7 to 8 million of Federal funds from the EPA each year. About 70
17 percent of this funding is available to applicants through low interest loans from the DWSRF Loan Fund.

18 The intent of the DWSRF is to assist water systems in constructing the infrastructure needed to address
19 current and future compliance problems. The County of Hawai'i DWS has applied for these funds on
20 many occasions for well projects. Most of DWS well projects are at least partially funded by the
21 revolving fund.

22 **USDA Rural Development:** This federal agency makes grants and low interest loans in rural communities
23 like Hawai'i County. Examples of specific programs include:

- 24 ▪ Community Facilities Programs⁴: Loans and grants for essential community facilities are available
25 through programs like the following:
 - 26 ○ Community Facilities Direct Loan Program: USDA makes direct loans to applicants who are
27 unable to obtain commercial credit in order to develop essential community facilities in
28 rural areas and towns of up to 20,000 in population. Loans are available to public entities
29 such as municipalities, counties, and special-purpose districts, as well as to non-profit
30 corporations and tribal governments. Loan funds may be used to construct, enlarge, or
31 improve community facilities for health care, public safety, and public services. This can
32 include costs to acquire land needed for a facility, pay necessary professional fees, and
33 purchase equipment required for its operation.
 - 34 ○ Community Facilities Guarantee Loan Program: Loans are made for the same type of
35 community facilities by private lenders but guaranteed for up to 90% of the eligible loss.
 - 36 ○ First Responder Initiative: This initiative provides financing of a variety of community
37 facilities, such as: fire and rescue facilities and equipment, police and emergency vehicles
38 and services, and other community focused facilities and services. The initiative prioritizes

4 http://www.rurdev.usda.gov/HCF_CF.html

- 1 funding of at least \$100 million to specifically strengthen the ability of rural communities to
 2 respond to local emergencies and situations affecting public safety.

3 **Table 1. Infrastructure Financing Districts**

| | Community Improvement Districts (CID) | Community Facilities District (CFD) | Tax Increment Financing (TIF) |
|-----------------------------|---|---|---|
| Enabling Legislation | HCC 12 | HRS 46-80.1 and HCC 32 | HRS 46-101 thru 113 and HCC 33 |
| Eligible Projects | Benefit must be specific to the assessed district | Local/regional public benefit infrastructure like roads, park facilities, open space, schools, cultural facilities, utilities, water, wastewater, public safety, transit, environmental remediation, etc. | Improvements, new construction, demolition, reconstruction, and acquisition (not necessarily in the TIF district) |
| Use of Funds | | Project costs (new or already built) Debt service on bonds Administrative costs (of County) | Project costs Debt service on CFD or CID Start-up and administrative costs (e.g., professional services, county staff costs) |
| Nature of Assessment | Special assessment on property within a geographically-defined district, with a lien on the property | Special tax on property within a geographically-defined district, usually collected as part of property tax bill after a defined event (e.g., subdivision, plan approval, building permit), with a lien on the property | For property within a geographically-defined district, future increases in property tax revenue (from increased assessed value – not increased tax rates) are deposited in a TIF fund |
| Basic Steps | Council orders study by Resolution Can be blocked with a protest of landowners with a majority of the assessment Council establishes the district by Ordinance Bonds floated | 25% of landowners petition Council Council orders study by Resolution Can be blocked by owners of more than 55% of land, or more than 55% of landowners Council establishes the | Council orders studies by Resolution Council establishes the district by Ordinance Property tax on incremental increase in value deposited in TIF fund |



| | | | |
|-----------------|---|---|--|
| | Assessments collected | district by Ordinance Bonds floated Assessments collected | |
| Examples | Water distribution improvements at Kona Coast View and Wonder View subdivisions in North Kona | No CFD bonds have been issued by the County | Not yet used in Hawai'i |
| Notes | | | Per the Kona Public Facilities Financing Plan, current law severely limits the applicability of this financing tool. To make it more useful, HCC 33 would need to be amended to eliminate the following two requirements: That the area to be included within a tax increment district be a targeted area; and That the area to be included within a tax increment district be designated as an improvement district or community facilities district with identical boundaries. |

1

2 USDA Rural Development also provides technical and advisory assistance to applicants through all stages
3 of project development.

4 ▪ **Rural Utilities Water and Waste Disposal Loan and Grant Program⁵**: This program can provide
5 funding for as much as 40 to 75% of the capital costs. This funding source cannot be used for test
6 well drilling but can be used in development of the production well. The program has several types
7 of grants and loans including:

8 ○ Water and Waste Disposal Direct Loans for water, wastewater, solid waste, and storm
9 drainage projects in rural areas and cities and towns with a population of 10,000 or less.

10 ○ Water and Waste Disposal Guaranteed Loans for the same types of projects. The loans are
11 made by private lenders but guaranteed for up to 90% of the eligible loss.

5 http://www.rurdev.usda.gov/HCF_CF.html

- 1 ○ Water and Waste Disposal Grants to reduce water and waste disposal costs to a reasonable
- 2 level for users of the systems. Grants may cover up to 75%t of eligible facility development
- 3 costs.

- 4 ○ Technical Assistance and Training Grants to identify and evaluate solutions to water and
- 5 waste disposal problems in rural areas, assist applicants in preparing applications for water
- 6 and waste disposal grants, and improve operation and maintenance of existing water and
- 7 waste disposal facilities in rural areas.

- 8 ○ Rural Broadband Access Loan and Loan Guarantee Programs provide loans and loan
- 9 guarantees for the construction, improvement, and acquisition of facilities and equipment
- 10 for broadband service in eligible rural communities. Priority is given to applications that are
- 11 proposing to serve areas where no residential broadband service currently exists.

- 12 ○ Distance Learning and Telemedicine Program provides loans, grants, and loan/grant
- 13 combinations for computers and Internet hookups in schools and libraries as well as rural
- 14 clinics and health care centers.

15 **Technical and Labor Assistance**

16 **Rural Community Assistance Corporation:** In addition to technical assistance directly from the USDA,

17 nonprofit intermediary organizations like the Rural Community Assistance Corporation (RCAC)⁶ help

18 rural communities plan for, secure, and manage infrastructure improvements. In Hawai’i and other

19 western states, the RCAC helps develop partnerships, advocate for financing, and develop community

20 capacity in pursuit of projects to upgrade water, wastewater, or solid waste operations and

21 management.

22 **Retaining Community Character**

23 **Hāmākua’s Architectural Character⁷:** The Hāmākua community has a strong architectural sensibility that

24 is multi-cultural and rooted in historic, plantation traditions. While it is not possible to guess what

25 architectural trends might be like in the future, it is possible to build things that incorporate patterns

26 that reflect timeless aspects of the region’s architectural heritage. There is a range of options for

27 retaining the character of a town’s or village’s buildings:

28 **Historic Preservation**

29 Appendix V4A⁸ summarizes the historic sites, structures, and districts in the Planning Area; related

30 federal and state programs; the County’s Cultural Resources Commission; tax incentives for historic

31 preservation; and related academic programs.

- 32
- 33 In addition to the tax benefits, historic preservation has many advantages, including⁹:
- 34 ▪ Culturally, a community is richer for having the tangible presence of past eras and historic styles

6 www.rcac.org

7 Adapted from Stephen A. Mouzon, *The Original Green: Unlocking the Mystery of True Sustainability*. The Guild Foundation Press, 2010.

8 <http://www.hawaiicountycdp.info/hamakua-cdp/draft-hamakua-cdp-documents/draft-analysis-documents/Natural%20Cultural%20Resource%20Analysis-Online.pdf/view>

9 http://www.historichawaii.org/n_04_why.html

- 1 ▪ Socially, a community benefits when citizens take pride in its history and mutual concern for the
2 protection of the historic building fabric
- 3 ▪ Educationally, a community benefits through teaching local heritage and the understanding of the
4 past and the resultant cultural respect by its citizens
- 5 ▪ Developmentally, a community benefits from having a concerted and well-defined planning
6 approach for the protection of historic buildings while accommodating healthy growth
- 7 ▪ Environmentally, a community benefits when historic buildings are restored or rehabilitated rather
8 than demolished and disposed of in the community landfill
- 9 ▪ Economically, a community benefits when historic buildings are protected and made the focal point
10 of revitalization and when the community is attractive to visitors seeking heritage tourism
11 opportunities.

12 There are limited disadvantages to establishing historic districts and sites¹⁰. Federal, state, or local
13 governments do not assume any property rights in a building that is listed on a historic register.
14 Moreover, being listed on the register does not restrict the rights of private property owners in the use,
15 development, or sale of private historic property. Likewise, owners of private residences listed on the
16 Hawai'i Register have no obligation to open their properties to the public. If they take a County property
17 tax exemption for a listed residence, however, one of the conditions they agree to is that the public be
18 assured a reasonable view of the property.

19 In addition, private property owners are not required to maintain, repair, or restore properties listed on
20 the Hawai'i Register. They may make changes to their historic homes, but must allow the SHPD an
21 opportunity to review and comment. This is to ensure the appropriateness of the alteration. It is
22 possible that inappropriate alterations could cause a historic residence to be removed from the register,
23 and an owner risks losing property tax benefits previously claimed.

24 **Previous Planning**

25 **Honoka'a Hawai'i: Guidelines and Recommendations for a Māmane Street Historic District (1976)** ¹¹:
26 This was the second spin-off project from the Humanities Project that provides a highly professional
27 evaluation of Honoka'a as a candidate for Historic District Registry. Many volunteers assisted in
28 researching the status of old buildings along Māmane Street. There was some community opposition to
29 seeking the Historic District designation but the issue is still being discussed as an option.

30 **Honoka'a Urban Design Plan (1979)** ¹²: Prepared for the County of Hawai'i with the help of a local
31 advisory committee, this plan is an outgrowth of the General Plan of 1971 and the Northeast Hawai'i
32 Community Development Plan of 1979. This plan's recommendations sought to redefine segments of
33 the descriptors for the Māmane Street Historic District designation and provided for adopting the
34 Honoka'a Urban Design Plan into Ordinance.

35 **Funding**

10 http://www.historichawaii.org/n_04_facts.html

11 Preservation Press (1976); Tomich: Hawai'i Perspectives on Hāmākua History (2008), pg. 186.

12 <http://www.hawaiicountycdp.info/hamakua-cdp/about-the-hamakua-cdp-planning-area/past-and-current-planning-activities-in-the-hamakua-cdp-planning-area/Honokaa%20Urban%20Design%20Plan%201979.pdf/view>

1 Limited funding is available to nonprofits and municipalities¹³:

- 2 ▪ The **National Trust Preservation Fund** includes funds that provide two types of assistance to
3 nonprofit organizations and public agencies: 1) matching grants from \$500 to \$5,000 for
4 preservation planning and educational efforts, and 2) intervention funds for preservation
5 emergencies. Matching grant funds may be used to obtain professional expertise in areas such as
6 architecture, archeology, engineering, preservation planning, land-use planning, fund raising,
7 organizational development and law as well as to provide preservation education activities to
8 educate the public.
- 9 ▪ Grants from the **Hart Family Fund** for Small Towns are intended to encourage preservation at the
10 local level by providing seed money for preservation projects in small towns. These grants help
11 stimulate public discussion, enable local groups to gain the technical expertise needed for particular
12 projects, introduce the public to preservation concepts and techniques, and encourage financial
13 participation by the private sector. Grants generally range from \$2,500 to \$10,000.
- 14 ▪ The **Johanna Favrot Fund for Historic Preservation** provides nonprofit organizations and public
15 agencies grants ranging from \$2,500 to \$10,000 for projects that contribute to the preservation or
16 the recapture of an authentic sense of place. Individuals and for-profit businesses may apply only if
17 the project for which funding is requested involves a National Historic Landmark. Funds may be used
18 for professional advice, conferences, workshops and education programs.
- 19 ▪ The **Cynthia Woods Mitchell Fund for Historic Interiors** provides nonprofit organizations and public
20 agencies grants ranging from \$2,500 to \$10,000 to assist in the preservation, restoration, and
21 interpretation of historic interiors. Individuals and for-profit businesses may apply only if the project
22 for which funding is requested involves a National Historic Landmark. Funds may be used for
23 professional expertise, print and video communications materials, and education programs.
- 24 ▪ The **Peter H. Brink Leadership Fund** helps to build the capacity of existing preservation
25 organizations and encourages collaboration among these organizations by providing grants for
26 mentoring and other peer-to-peer and direct organizational development and learning
27 opportunities. The purpose of these grants is to support the leadership and effectiveness of staff
28 and board members of preservation organizations to fulfill their mission and to create a stronger,
29 more effective preservation movement. Grants from the Peter H. Brink Leadership Fund pay for
30 travel costs and honoraria and generally range up to \$1,500.

31 **Technical and Financial Assistance**

32 **Historic Hawai'i Foundation (HHF)**¹⁴: HHF is a statewide non-profit organization that encourages the
33 preservation of historic buildings, sites and communities relating to the history of Hawai'i. HHF
34 programs include:

- 35 ▪ Preservation Resource Center, including FAQs and "Ask an Expert"
- 36 ▪ The Guide to the Hawai'i Historic Register
- 37 ▪ Hawai'i's Most Endangered Sites list

13 <http://www.preservationnation.org/resources/find-funding/>

14 <http://www.historichawaii.org/>



- 1 ▪ The Heritage House Workshop Series to assist homeowners gain practical and in-depth knowledge
- 2 on how to repair, maintain, and preserve older homes
- 3 ▪ The Circuit Rider program, through which the Director of Field Services conducts regular visits to all
- 4 of the Hawaiian islands to work with local communities and host classes, seminars and in-person
- 5 visits to answer preservation questions
- 6 ▪ The Preservation Professionals Directory
- 7 ▪ An extensive online Resource Directory for historic preservation.

8 **National Trust for Historic Preservation (NTHP)**¹⁵: The NTHP is focused on saving America’s historic
 9 places. It leads campaigns, to save national treasures¹⁶, advocates for historic preservation, and
 10 maintains resource libraries on sustainable communities, place-saving, law and policy, and the
 11 economics of revitalization.

12 **Your Town: The Citizens’ Institute on Rural Design**¹⁷: Your Town assists rural Americans in identifying,
 13 protecting, and enhancing their main streets, built heritage, cultural landscapes, and open spaces. It
 14 introduces design strategies, techniques, and best practices based on the specific needs of the
 15 communities. The program provides access to design professionals that work with community members
 16 and leaders. Participatory workshops are tailored to different regions of the country and involve
 17 lectures, case study presentations and interactive group problem solving.

18 **Design Guidelines**

19 Design guidelines retain character by identifying the existing architectural patterns that define a town
 20 and summarizing them as guidelines for use by planners and architects.

21 **Kailua Village**: HCC 25-7 establishes the Kailua Village Design District and Design Commission (KVDC),
 22 whose role is to advise the planning director in matters concerning the design of buildings and
 23 structures and all public and private improvements within Kona’s Kailua Village. To make its
 24 recommendations, the KVDC uses the Kailua Village Design Guidelines, which were developed as part of
 25 the 1994 Kailua-Kona Plan and adopted by the Council by resolution in 1996.

26 **Kona Village Design Guidelines**: The Kona CDP also incorporates Village Design Guidelines, an earlier
 27 draft of which included Architectural Standards for building façades, streetscreens, openings, roof pitch,
 28 finish material, porches, and fences.

29 **Pāhoa**: A community group in Pāhoa is also in the process of developing Pāhoa Village design guidelines.

30 **Maui**: Chapter 2.26 of the Maui County Code (MCC) establishes the advisory Urban Design Review
 31 Board¹⁸ to ensure that the architectural qualities prevalent in a community are preserved by ensuring
 32 that new construction, reconstruction, and renovation enhance and complement the existing built
 33 environment. Included in the Board’s Rules of Practice and Procedure is a “Checklist of Standard
 34 Concerns”, including visual impacts, landscaping, architectural and building design, lighting, and signage.

35 Likewise, Chapter 19.15 of the MCC establishes Country Town Business Districts¹⁹ to establish
 36 development standards for businesses in rural communities. MCC 19.15.060 establishes design

15 www.preservationnation.org

16 <http://savingplaces.org/>

17 <http://www.yourtowndesign.org/>

18 <http://www.mauicounty.gov/index.aspx?NID=200>

19 <http://www.co.maui.hi.us/index.aspx?NID=1300>

1 guidelines and standards and encourages the adoption of community-specific guidelines. The following
2 guidelines have been developed:

- 3 ▪ The Architectural Style Book for Lahaina
- 4 ▪ Lahaina Historic District: Sign Design Guidelines
- 5 ▪ Wailuku Redevelopment Area Development Area Design Guidelines
- 6 ▪ Paia – Haiku: Country Town Design Guidelines
- 7 ▪ Makawao – Pukalani – Kula: Country Town Design Guidelines
- 8 ▪ Hana Community Design Guidelines
- 9 ▪ Lanai City Community Design Guidelines
- 10 ▪ Molokai: Design Guidelines: Country Town Business Districts.

11 **Kaua’i:** In March 2010, Kaua’i County adopted the Lihue Town Core Urban Design Plan²⁰. The Plan
12 guides the revitalization of Lihue by establishing special planning areas that provide recommendations
13 for mixed-use zoning, historic preservation, building design, and streetscaping. The Plan includes both
14 General Design

15 Guidelines for All Town Core Neighborhoods and Neighborhood-Specific Design Guidelines, including
16 sections on Architecture and Building Design, Signage, Walls and Fences, and Outdoor Lighting.

17 **Form-based Codes²¹**

18 Form-based zoning is a tool that regulates land-use development by focusing primarily on physical form.
19 Building on the core characteristics of vibrant neighborhoods and towns, the intent is to retain or create
20 community vitality based on aesthetics, walkability, mixed-use, housing choices, and higher densities. By
21 de-emphasizing use and allowing demographic shifts and market forces to drive development, form
22 based codes can also support economic development.

23 Form-based codes differ from traditional Euclidean zoning, which is based on the segregation of land
24 uses according to their intensity. If rigidly focused on segregating land uses, traditional zoning can make
25 mixed-use development difficult, if not impossible. “Figure 4: Zoning, Design-Guidelines, and Form-
26 Based Code” visually contrasts the regulatory scope of conventional zoning with design guidelines and
27 form-based codes.

28 Form-based codes can operate at three levels:

- 29 1. Sector Plan: Like a land use policy map or the County’s LUPAG map, sector plans distinguish “open”
30 and “growth” areas and specify the type of development permitted in each sector. Only certain
31 “community types” are permitted in each sector. Community types might be CLD (clustered
32 development), TND (traditional neighborhood development), or TOD (transit-oriented

20 <http://www.kauai.gov/Government/Departments/PlanningDepartment/Projects/LihueTownCoreUrbanDesignPlan/tabid/546/Default.aspx>

21 American Planning Association. “How do form-based codes differ from traditional zoning?” You Asked. We Answered. April 2007; American Planning Association. “Form-Based Zoning.” Planning Advisory Service (PAS) QuickNotes No. 1., 2004; <http://formbasedcodes.org/>

- 1 development). Sector plans and community types are based on landscape transects²², from
2 wilderness, to farmland, to rural residential, to low density urban, to high density urban, and finally
3 to the dense urban core. “Figure 3: Hawaiian Ahupua’a as Transects” overlays transects on major
4 sections of a prototypical Hawaiian ahupua’a, and “Figure 4: A Prototypical Rural-to-Urban Transect”
5 is a schematic drawing contrasting the form of typical transects between natural areas and the
6 urban core.
- 7 2. Regulating Plan: A regulating plan provides developers and planners a unified design that illustrates
8 where form-based codes apply and guides developers to implement them properly. Based on the
9 appropriate community type and “calibrated” with community input, it classifies sites according to
10 street, block, lot, and district characteristics and includes illustrations of build-to lines, projected
11 building footprints, location of public spaces, and allowable building types specific for each site. A
12 regulating Plan may also include building envelope standards (i.e., placement, height, orientation),
13 architectural standards (e.g., facades, window dimensions, building materials), signage and
14 landscaping standards, and street standards (e.g., width, paving, tree types, lighting). “Figure 5:
15 Honokohau Village Regulating Plan” is a regulating plan developed for the area around the West
16 Hawai’i Civic Center.
- 17 3. Community Plan: For infill, town expansion, or new communities, site-specific community plans are
18 developed in conformance with the sector and regulating plans. These are equivalent to master site
19 plans, subdivision applications, or Planned Unit Developments that specify roadways, civic space,
20 and building footprints.
- 21 Often, form-based regulating plans are adopted as site-specific overlays (for, for example, town centers
22 or transit-oriented development districts), but some municipalities have replaced comprehensive use-
23 based codes with form based codes²³. Other communities have adopted hybrids of the two types of
24 codes. In 2011, Maui approved the Pulelehua²⁴ plan for West Maui, which is a form-based code.
- 25 The Kona CDP included Village Design Guidelines for both existing town centers and new communities²⁵.
26 The Guidelines were based on the SmartCode²⁶, which is one application of form-based coding, and
27 calibrated during the 2009 Honokohau charrette²⁷.
- 28 The County is considering making form-based coding available island-wide as an optional planning tool.

22 <http://www.transect.org/index.html>

23 American Planning Association. “Update on Form Based Codes.” www.planning.org. October 2006.

24 <http://pulelehua.com/>

25 <http://www.hawaiicountycdp.info/north-and-south-kona-cdp/working-on-village-design-guidelines>

26 <http://www.smartcodecentral.org/>

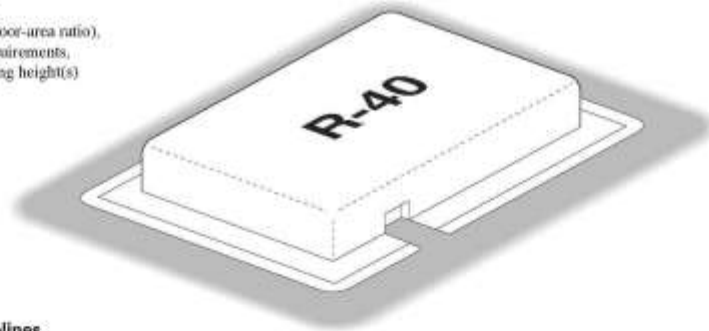
27 <http://honokohauvillage.com/>

1

Figure 2. Zoning, Design-Guidelines, and Form-Based Code

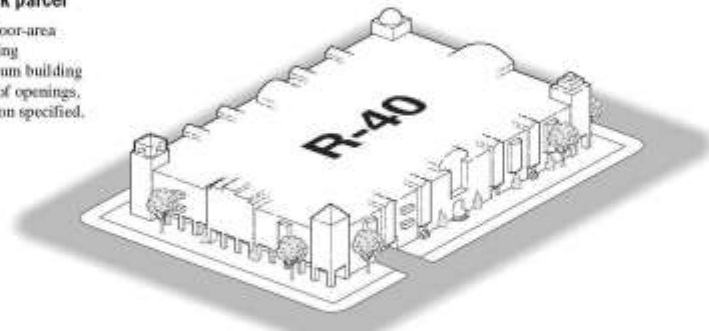
How zoning defines a one-block parcel

Density, use, FAR (floor-area ratio), setbacks, parking requirements, and maximum building height(s) specified.



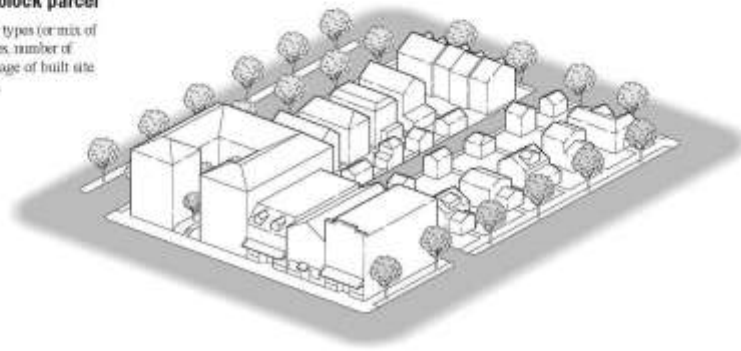
How design guidelines define a one-block parcel

Density, use, FAR (floor-area ratio), setbacks, parking requirements, maximum building height(s), frequency of openings, and surface articulation specified.



How form-based codes define a one-block parcel

Street and building types (or mix of types), build-to-lines, number of floors, and percentage of built site footage specified.



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2

3



1

Figure 3. Hawaiian Ahupua'a as Transects



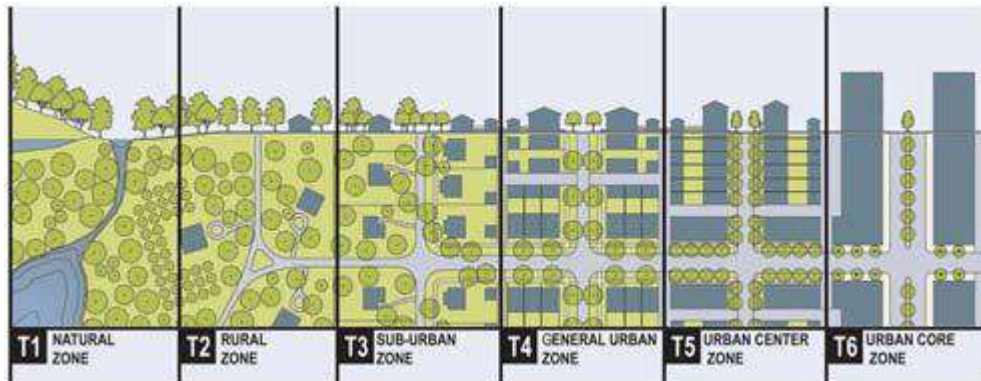
2

3

4

5

Figure 4. A Prototypical Rural-to-Urban Transect²⁸



6

7

8

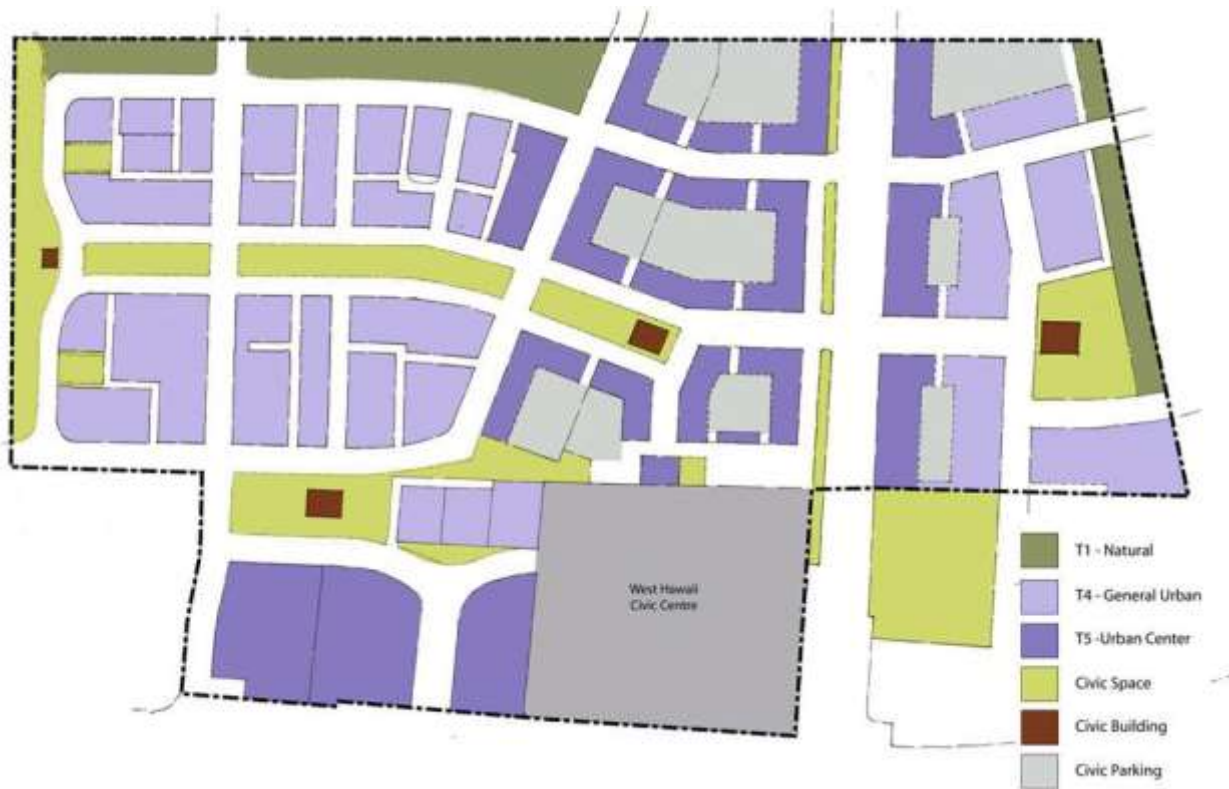
9

10

28 <http://www.transect.org/transect.html>

1
2

Figure 5. Honokohau Village Regulating Plan



3
4

Local Redevelopment Strategies

6

Infill Incentives²⁹

7 Local governments use infill incentives to promote the development of vacant land – or rehabilitation of
8 existing structures – in already urbanized areas where infrastructure and services are in place. Local
9 governments offer infill incentives for a number of reasons:

- 10 ▪ Infill development reuses properties that may have been underutilized or blighted, helping to
- 11 catalyze revitalization and preserving open space and agricultural land.
- 12 ▪ Infill development capitalizes on existing community assets like parks and other infrastructure.
- 13 ▪ Infill has the potential to boost jobs, purchasing power, and public amenities and generate tax
- 14 dollars for local government.
- 15 ▪ Infill housing is dense in comparison with housing in suburban areas and represents an effective way
- 16 to meet a jurisdiction's affordable housing or population growth needs.

29 www.policylink.org/site/c.lkIXLbMNjRE/b.5137445/k.A34D/Infill_Incentives.htm;
<http://www.mrsc.org/subjects/planning/infilldev.aspx>



- 1 ▪ Located in proximity to existing transit routes or within walking distance of services and
2 entertainment, infill development can reduce auto use and accompanying congestion and pollution.
- 3 Infill development is not necessarily a developer’s first choice. Challenges associated with infill include
4 the small, scattered nature of many infill parcels, complex title issues, outdated infrastructure serving
5 the infill site, and environmental contamination. For these reasons, urban infill is often bypassed by
6 developers for cheap, readily available suburban, or agricultural land.
- 7 To address the infill challenges, jurisdictions often offer incentives to make infill development attractive
8 and feasible. Examples include:
- 9 ▪ Mixed-use zoning
- 10 ▪ Upgraded infrastructure and amenities like parks and streetscapes
- 11 ▪ Greater density allowances
- 12 ▪ Modifying building site, setback, and parking requirements
- 13 ▪ Expedited permit approval
- 14 ▪ Fee waivers for infrastructure hook-up
- 15 ▪ Lower or waiver of impact fees
- 16 ▪ Property tax abatements.
- 17 To finance incentives, some jurisdictions use [brownfield funding](#) or alternative [infrastructure financing](#)
18 like Community Improvement Districts (CID), Community Facilities District (CFD), and Tax Increment
19 Financing (TIF).
- 20 **Town Revitalization Plans/Toolkit:**
- 21 Significant community input through the CDP process has demonstrated that a keen interest in
22 revitalizing Hāmākua’s small towns & villages while maintaining their unique historic character. It
23 was clear, given the number of towns, villages, and communities in the Planning Area, that it would
24 be impossible to develop revitalization/master plans as part of the CDP project. With this in mind,
25 in June 2011, the Planning Team field tested a Town Revitalization planning process using Honomū
26 as the pilot location.
- 27 The purpose of this workshop pilot was to incorporate planning tools and strategies successful in
28 other rural towns and to test a process for local communities to actively participate in the
29 development of rural village/town revitalization plans.
- 30 This exercise was meant to engage community residents and businesses, County planners, and
31 agency representatives in a meaningful, collaborative setting. The Planning Team invited a variety
32 of stakeholders to convene and discuss Honomū’s challenges and growth alternatives and to test
33 scenarios against the community’s objectives and develop recommendations related to Honomū’s
34 future growth.
- 35 In addition, the Planning Team began developing a “Town Revitalization Toolkit” that details the
36 process to create a town plan, revitalization principles, and a list of tools, many of which are
37 discussed in this analysis document.

1 There is a precedent for this type of master planning as several communities in Puna are working with
 2 the Planning Department to develop specific town level plans as called for in the Puna CDP. These
 3 include:

- 4 ▪ Pāhoa Regional Town Center Master Plan
- 5 ▪ Volcano Community Village Center Master Plan
- 6 ▪ Mountain View Neighborhood Center Master Plan

7 **Accessory Dwelling Units³⁰**

8 Accessory dwelling units (ADUs) are small, self-contained living units that typically have their own
 9 kitchen, bedroom(s), and bathroom space. Often called granny flats, elder cottage housing
 10 opportunities (ECHO), mother-daughter residences, secondary dwelling units, or, in Hawai‘i, ‘ohana
 11 units, ADUs are apartments that can be located within the walls of an existing or newly constructed
 12 single-family home or can be an addition to an existing home. They can also be freestanding cottages on
 13 the same lot as the principal dwelling unit or a conversion of a garage or barn.

14 The benefits to the homeowner and the ADU occupant are many. For the homeowner, ADUs provide
 15 the opportunity to offer an affordable and independent housing option to family who might need a
 16 helping hand nearby. The unit could also be leased to unrelated individuals or newly established
 17 families, which would provide the dual benefit of providing affordable housing to the ADU occupant and
 18 supplemental rental income to the owner.

19 Despite the benefits, some communities resist allowing ADUs, or allow them only after time-consuming
 20 and costly review procedures and requirements. Public resistance to ADUs usually takes the form of a
 21 perceived concern that they might transform the character of the neighborhood, increase density, add
 22 to traffic, make parking on the street more difficult, increase school enrollment, and put additional
 23 pressure on fire and police service, parks, or water and wastewater. However, communities that have
 24 allowed ADUs find that these perceived fears are mostly unfounded or overstated when ADUs are
 25 actually built.
 26

27 **Brownfields³¹**

28 Brownfield is the term used for all abandoned or underused sites where redevelopment or reuse is
 29 complicated by the presence or perceived presence of contamination. Brownfields come in all shapes
 30 and sizes – from an abandoned mining operation covering several square miles to a vacant single family
 31 home with lead paint or asbestos insulation. Aside from the health and environmental risks posed by
 32 polluted soil and water resources, brownfields can be an economic drain on a community. They
 33 represent lost jobs and a diminished tax base, and their presence often leads to decreased property
 34 values, vandalism, and criminal activity. Brownfields are also opportunities – they often occupy prime
 35 locations with existing infrastructure.

36 **Stages of Brownfield Redevelopment:** There are four basic stages to brownfield redevelopment³²:

30 APA. PAS Quicknotes No 19. “Accessory Dwelling Units.”; <http://www.mrsc.org/publications/textadu.aspx>

31 APA PAS Memo. “Community-Based Brownfield Redevelopment.” January/February 2008; APA. Reuse: Creating community-based brownfield redevelopment strategies.

32 http://www.policylink.org/site/c.IkIXLbMNjRE/b.5140173/k.8735/How_to_Use_It.htm

- 1 1. **Testing and Pre-Development:** This involves organizing residents, prioritizing sites within a
2 community, securing predevelopment funding, getting site access, and beginning reuse planning.
3 The environmental assessment process can also be started during this stage. That process
4 determines what, if anything, is contaminating the site, and where and how much so that an
5 appropriate clean-up plan can be determined. This process has three phases:
6
 - 7 a. **Phase I:** Determine if there is potential for contamination based on previous uses.
8
 - 9 b. **Phase II:** Take samples from air, water, and soil in order to determine the location, type, and
10 amount of environmental contamination.
11
 - 12 c. **Phase III:** Examine potential risks of the contamination and identify remediation options.
13
- 14 2. **Complete Development Planning:** This involves securing title and any required land use
15 entitlements, determining regulatory requirements for remediation, packaging the financing, and
16 developing a formal site plan.
17
 - 18 a. **Clean-up and Site Design**
19
 - 20 b. **Construction and Final Use:** Like any infill project, this involves construction, marketing, and
21 lease/sale.

22 **Keys to Success:** Brownfield redevelopment is challenging. Here are several keys to successful
23 projects³³:

- 24 ▪ Communities will succeed in brownfields revitalization when they consider these properties as
25 community and economic opportunities that happen to have an environmental challenge, and
26 **connect brownfields initiatives to their broader community vision and revitalization priorities.**
- 27 ▪ If a site does not have **high redevelopment potential**, chances are it will remain contaminated and
28 underused.
- 29 ▪ Even with an advantageous site, brownfield redevelopment is unlikely to occur without a
30 **community-supported vision.** Brownfields projects have much greater success when the local
31 community first identifies the potential reuse of the idled, contaminated property.
- 32 ▪ **Community involvement and consensus** are two of the most important ingredients for a successful
33 brownfield project.
- 34 ▪ Brownfields success is about people. Localities most successful in brownfields revitalization have set
35 up **brownfields teams** that include prominent local leaders, a brownfields staff champion, a cross-
36 sector team of public and private supporters, and a citizens stakeholder advisory group.

³³ APA PAS Memo. "Community-Based Brownfield Redevelopment." January/February 2008; APA. *Reuse: Creating community-based brownfield redevelopment strategies.*

- 1 ▪ Most brownfield properties will be revitalized by the private sector with the support of private
2 finance. Thus, local communities must understand private sector needs, help reduce private sector
3 risk, and **facilitate private sector strategies**.
- 4 ▪ Liability issues make brownfield redevelopments riskier than greenfield projects. Because
5 **community development corporations (CDCs)** have a commitment to neighborhood revitalization,
6 they are often more willing than private developers to engage in risky projects, making them ideal
7 partners for brownfield redevelopment.
- 8 ▪ Brownfields successes ultimately involve overcoming environmental cleanup challenges at
9 contaminated sites. Communities and brownfields redevelopers are **using new strategies and new**
10 **technologies** to avoid making environmental costs the brownfields “deal-breaker.”
- 11 ▪ The most basic component of a successful brownfield project is **adequate funding**. CDCs working on
12 brownfield redevelopments often tap multiple funding sources to cover costs associated with
13 cleanup and construction.
- 14 ▪ **Familiarity with federal, state, and local brownfield programs and guidelines** can save much time
15 and trouble once a project is underway. Site investigation and cleanup require expertise and
16 sophisticated project management.
- 17 ▪ Now more than ever, the success of local brownfields initiatives will depend upon the strength and
18 capacity of state brownfields programs, and the ability of localities to partner with their states.
19 Brownfields revitalization is enhanced by the **strong partnership that emerged between local**
20 **communities, state brownfields programs, and the “federal family” of key agencies** that targeted
21 resources to the brownfields problem.
- 22 **Funding:** There is a wide range of funding sources to support the brownfield planning and
23 redevelopment process, and several organizations maintain directories of those sources³⁴.
- 24 **Resources:** There are also a number of resources available to help communities with brownfield
25 redevelopment³⁵.
- 26 **Brownfields in Hāmākua:** The County Department of Environmental Management (DEM) has identified
27 the following types of brownfield sites throughout the Hāmākua Planning Area:
- 28 ▪ Former mill sites
- 29 ▪ Base yards
- 30 ▪ Truck or ship fueling depots
- 31 ▪ Old gas stations or repair shops
- 32 ▪ Agricultural lands with pesticide contamination

34 <http://www.policylink.org/site/c.lkIXLbMNJrE/b.5136799/k.EBF3/Financing.htm>;
<http://www.nemw.org/images/stories/documents/BFFinancingredev.pdf>;
<http://www.nemw.org/images/stories/documents/brownfield%20rural%20financing.pdf> ;
http://www.epa.gov/brownfields/grant_info/index.htm ; <http://www.epa.gov/brownfields/tax/index.htm>
35 <http://www.policylink.org/site/c.lkIXLbMNJrE/b.5136805/k.EE18/Resources.htm>;
<http://www.epa.gov/brownfields/tools/index.htm>

- 1 ▪ Dump & Mining sites

2 **Transfer of Development Rights**

3 Transfer of Development Rights (TDR) programs are introduced in Appendix V4A. TDR, Density Transfer
4 Charge (DTC), or Residential Density Transfer (RDT) programs could be used to “send” development
5 rights from agricultural areas and subdivisions to designated growth zones with municipal services.

6 The County would have to adopt enabling legislation for the option to be available locally. Maui County
7 has a draft TDR ordinance based on the findings of an implementation study. The study identified the
8 following “success factors”:

- 9 ▪ Pubic and property-owner support for preservation of the sending areas
- 10 ▪ Comprehensive plans for implementation, including consistency with General Plan goals and policies
11 and the identification of sending and receiving areas
- 12 ▪ Send area development disincentives, including physical constraints, density restrictions,
13 development regulations, and off-site requirements for development
- 14 ▪ Adequate, affordable allocations to sending areas, including the appropriate transfer ratios and
15 allocation rates necessary to create a market
- 16 ▪ Optimal receiving areas that are appropriate for development, have community support, and have
17 developer interest
- 18 ▪ Effective density thresholds for receiving areas
- 19 ▪ Extra density in receiving areas only possible via TDR
- 20 ▪ TDR banks that expedite transfers and accommodate changes in the real estate market
- 21 ▪ Legal issues addressed, including enabling authority in the General Plan, enabling legislation in the
22 form of a TDR ordinance, taxation of TDR, and documenting TRD transfers.

23 **LEED for Neighborhood Development³⁶**

24 The LEED for Neighborhood Development Rating System (LEED-ND) integrates the principles of smart
25 growth, urbanism, and green building into the first national system for neighborhood design. As with
26 LEED (Leadership in Energy and Environmental Design) for Green Buildings, which certifies new buildings
27 based on design criteria, LEED-ND certification provides independent, third-party verification that a
28 development's location and design meet accepted high levels of environmentally responsible,
29 sustainable development.

30 The LEED-ND Checklist used to rate neighborhood development is a useful screen through which to
31 assess a community's sustainability:

32 **Smart Location and Linkage**

- 33 ▪ Smart Location
- 34 ▪ Imperiled Species and Ecological Communities
- 35 ▪ Wetland and Water Body Conservation

36 <http://www.usgbc.org/DisplayPage.aspx?CMSPageID=148>

- 1 ▪ Agricultural Land Conservation
- 2 ▪ Floodplain Avoidance
- 3 ▪ Preferred Locations
- 4 ▪ Brownfield Redevelopment
- 5 ▪ Locations with Reduced Automobile Dependence
- 6 ▪ Bicycle Network and Storage
- 7 ▪ Housing and Jobs Proximity
- 8 ▪ Steep Slope Protection
- 9 ▪ Site Design for Habitat/Wetland & Water Body Conservation
- 10 ▪ Restoration of Habitat/Wetlands and Water Bodies
- 11 ▪ Long-Term Conservation Management of Habitat/Wetlands & Water Bodies
- 12 **Neighborhood Pattern & Design**
- 13 ▪ Walkable Streets
- 14 ▪ Compact Development
- 15 ▪ Connected and Open Community
- 16 ▪ Walkable Streets
- 17 ▪ Compact Development
- 18 ▪ Mixed-Use Neighborhood Centers
- 19 ▪ Mixed-Income Diverse Communities
- 20 ▪ Reduced Parking Footprint
- 21 ▪ Street Network
- 22 ▪ Transit Facilities
- 23 ▪ Transportation Demand Management
- 24 ▪ Access to Civic and Public Spaces
- 25 ▪ Access to Recreation Facilities
- 26 ▪ Visitability and Universal Design
- 27 ▪ Community Outreach and Involvement
- 28 ▪ Local Food Production
- 29 ▪ Tree-Lined and Shaded Streets
- 30 ▪ Neighborhood Schools



1 **Green Infrastructure & Buildings**

- 2 ▪ Certified Green Building
- 3 ▪ Minimum Building Energy Efficiency
- 4 ▪ Minimum Building Water Efficiency
- 5 ▪ Construction Activity Pollution Prevention
- 6 ▪ Certified Green Buildings
- 7 ▪ Building Energy Efficiency
- 8 ▪ Building Water Efficiency
- 9 ▪ Water-Efficient Landscaping
- 10 ▪ Existing Building Use
- 11 ▪ Historic Resource Preservation and Adaptive Reuse
- 12 ▪ Minimized Site Disturbance in Design and Construction
- 13 ▪ Stormwater Management
- 14 ▪ Heat Island Reduction
- 15 ▪ Solar Orientation
- 16 ▪ On-Site Renewable Energy Sources
- 17 ▪ District Heating and Cooling
- 18 ▪ Infrastructure Energy Efficiency
- 19 ▪ Wastewater Management
- 20 ▪ Recycled Content in Infrastructure
- 21 ▪ Solid Waste Management Infrastructure
- 22 ▪ Light Pollution Reduction.

23 Against these criteria, Hāmākua’s traditional towns rate high, with the exceptions of housing/jobs
24 proximity, and some of the green building and infrastructure criteria.

25 **State Redevelopment Agencies**

26 **Urban Redevelopment Act**

27 HRS 53, the Urban Redevelopment Act, empowers the County to create a local redevelopment agency to
28 make and implement redevelopment plans for urban renewal and blighted areas. Targeted areas are
29 designated by the Planning Commission and must be in conformity with the master plan for the
30 development of the locality. The Agency includes a five-member board and related management staff.
31 As an alternative to creating a redevelopment agency, the County may also directly exercise the powers
32 conferred on the agency in the Urban Redevelopment Act and explained below.

1 “Blighted area” means an area in which any combination of these factors or conditions predominate,
2 thus making the area an economic or social liability or otherwise detrimental to the public health, safety,
3 and welfare:

- 4 ▪ Improper subdivision or obsolete platting
- 5 ▪ Faulty lot layout in relation to size, adequacy, accessibility, or usefulness
- 6 ▪ Defective or inadequate street layout
- 7 ▪ Diversity of ownership
- 8 ▪ Dilapidation, deterioration, age, or obsolescence of buildings
- 9 ▪ Inadequate ventilation, light, sanitation, or open spaces, or other insanitary or unsafe conditions
- 10 ▪ Existence of conditions that endanger life or property (by fire or other causes) resulting in tax or
11 special assessment delinquency exceeding the fair value of the land.

12 Redevelopment plans are approved by the Council by resolution, after Planning Commission review and
13 associated public hearings. The redevelopment agency must concur with any amendments to the plan.

14 After plan approval, the redevelopment agency may implement the plan. In conformance with the plan,
15 the agency has the power to acquire land (by condemnation if necessary), clear land, rehabilitate
16 structures, sell or lease property, and install infrastructure. These improvements can be made by the
17 agency, in collaboration with other public agencies, or by contract with private contractors.

18 The agency may also create a redevelopment corporation to acquire areas under a redevelopment plan
19 and to construct, own, maintain, operate, sell, and convey projects. If a major portion of the
20 redevelopment project is composed of residential units that are rented at reasonable rates, the land and
21 improvements shall be exempted from real property taxes for 10 years, and the development will be
22 assessed at 50% of the assessed valuation for 15 years thereafter. The redevelopment corporation must
23 be organized to serve a public purpose and shall be subject to the supervision and control of the
24 redevelopment agency.

25 To implement redevelopment plans, the redevelopment agency may borrow, apply for, and accept
26 advances, loans, grants, contributions, and any other form of financial assistance from the federal, state,
27 or county governments or other public body, or from any sources, public or private. The agency may
28 also issue bonds. In addition, the legislature may appropriate funds to support the agency’s
29 administrative costs, but the County must match the State allocation.

30 If it is necessary to relocate displaced families from the redevelopment area, the agency may acquire
31 land outside the redevelopment area and implement a redevelopment project for that new area.}

32 **Hawai’i Community Development Authority³⁷**

33 The Hawai’i Community Development Authority (HCDA) is a State agency that was established in HRS
34 206E to supplement traditional community renewal methods by promoting and coordinating public and
35 private sector community development. The HCDA is to plan for and revitalize areas in the State that
36 lawmakers find to be in need of timely redevelopment. These areas, designated as “Community

37 www.hcdaweb.org

1 Development Districts,” were determined to be underused and deteriorating, but with the potential,
2 once redeveloped, to address the needs of Hawai’i’s people and to provide economic opportunities for
3 the State. The Legislature has created two Community Development Districts – Kaka’ako and Kalaeloa.

4 The HCDA is established as a public corporate entity attached to the Department of Business, Economic
5 Development & Tourism (DBEDT) for administrative purposes. The Authority is composed of 16 voting
6 members from the private and public sectors who oversee HCDA operations and establish policies to
7 implement its legislative objectives. The HCDA Executive Director serves as the chief executive officer
8 and is appointed by the Authority members. The HCDA staff includes personnel from several
9 professional fields including planning, engineering, architecture, development, finance, public
10 information and administrative services.

11 Above and beyond broad powers to develop and implement redevelopment plans and projects – alone
12 or in partnership with private entities – the HCDA can condemn property, levy district-specific taxes, and
13 float bonds.

14 **Public Land Development Corporation (PLDC)³⁸**

15 The PLDC is exempt from all “statutes, ordinances, charter provisions, and rules of any government
16 agency relating to...land use, zoning, and construction standards for subdivisions, development, and
17 improvement of land.” This would include HRS 205 and County zoning, subdivision, and building codes.

18 However, the PLDC is not exempt from the Sunshine Law, HCC 6E (historic preservation), or HCC 343
19 (environmental assessments and impact statements).

20 The PLDC does not have the power of condemnation.

21 **Community-Based, Collaborative Action**

22 Though a CDP can go a long way toward achieving community goals by establishing County policy, many
23 community priorities are outside County jurisdiction and require community-based, collaborative action.
24 For example, strengthening Hāmākua’s villages, towns, and subdivisions will require community
25 leadership to establish or extend water systems, maintain village character, manage proposed
26 development, and guarantee that Hāmākua gets its fair share of health, educational, and social services.

27 Appendix V4A includes a detailed introduction of community-based, collaborative action. Though
28 presented in the context of resource management, the same basic “best practices” apply to any
29 community improvement effort:

- 30 1. Establish a Prioritized Focus in collaboration with the CDP Action Committee and other
31 stakeholders
- 32 2. Get Organized by establishing basic initial organizational structure and supports
- 33 3. Firmly Ground the Effort in the Community
- 34 4. Strengthen Collaboration and Coordination among the diversity of stakeholders that are unique
35 to each initiative
- 36 5. Build a Solid Understanding of Historical and Current Conditions

38 <http://hawaii.gov/dlnr/pldc>

- 1 6. Craft a Strategic, Achievable Plan, including a clear vision, goals, objectives and a work plan
- 2 specifying priority strategies, resources needed, and sources of support
- 3 7. Establish a Structure Tailored to the Partners and the Goals
- 4 8. Build Capacity
- 5 9. Implement the Plan.

6 Likewise, recognizing that a number of such initiatives are already active in and more are likely to be
 7 started a **networked** approach to coordinating and supporting community-based, collaborative projects
 8 may be most effective, possibly with active facilitation by the CDP Action Committee.

9 **Placemaking**

10 Placemaking is a multi-faceted approach to the planning, design, and management of public spaces.
 11 Though it could be applied in many types of public spaces, placemaking is usually focused on creating
 12 squares, plazas, parks, streets, and waterfronts that will attract people because they are pleasurable or
 13 interesting. Landscaping and public art often play an important role in the design process.

14 The Project for Public Spaces (PPS)³⁹ is a nonprofit planning, design, and educational organization
 15 dedicated to helping people create and sustain public spaces that build stronger communities. PPS has
 16 identified four key attributes of great places (sociability, uses and activities, access and linkages, and
 17 comfort and image) as well as eleven principles of placemaking:

- 18 ▪ The Community Is The Expert
- 19 ▪ Create a Place, Not a Design
- 20 ▪ Look for Partners
- 21 ▪ You Can See a Lot Just By Observing
- 22 ▪ Have a Vision
- 23 ▪ Start with the Petunias: Lighter, Quicker, Cheaper
- 24 ▪ Triangulate
- 25 ▪ They Always Say “It Can’t Be Done”
- 26 ▪ Form Supports Function
- 27 ▪ Money Is Not the Issue
- 28 ▪ You Are Never Finished

29 ArtPlace⁴⁰ invests in art and culture at the heart good placemaking. It works to accelerate creative
 30 placemaking in part by making grants and loans, using investments by several large financial institutions
 31 and foundations. ArtSpace Hawai‘i⁴¹ in Honolulu’s Kaka‘ako district is one of ArtPlace’s grantees.

39 <http://www.pps.org/>
 40 <http://www.artplaceamerica.org/>
 41 <http://www.artplaceamerica.org/articles/artspace-hawaii-8/>



1 **Lighter, Quicker, Cheaper**

2 One example of this community-based, networked approach is the “Lighter, Quicker, Cheaper”
3 strategy⁴². The LQC approach taps local ingenuity to turn public spaces into treasured community places
4 through small, low-cost, incremental improvements. Although LQC is not for every situation, it can be a
5 creative, locally-powered alternative to slow, capital-heavy planning. Lighter, quicker, cheaper projects:

- 6 ▪ Transform underused spaces into laboratories that citizens can start using right away and see
7 evidence that change can happen.
- 8 ▪ Represent an “action planning process” that builds a shared understanding of a place that goes far
9 beyond the short-term changes that are made.
- 10 ▪ Leverage local partnerships that have greater involvement by a community and results in more
11 authentic places.
- 12 ▪ Encourage an iterative approach and an opportunity to experiment, assess, and evolve a
13 community’s vision before launching into major construction and a long-term process.
- 14 ▪ Employ a place-by-place strategy that, over time, can transform an entire village, town, or region.

15 The LQC approach has been used to establish public or farmers’ markets, improve streetscapes, and
16 revitalize business and industrial districts.

17 Locally, LQC is the approach embraced by the OurDowntownHilo⁴³ initiative, which is using
18 “crowdsourced placemaking” to brainstorm and initiate manageable, community-based improvements.
19 It has sparked a “guerrilla” gardening and beautification initiative and grassroots path and park
20 improvements.

21 **Main Street⁴⁴**

22 In use for the past 30 years, the four-point Main Street approach has proven effective in revitalizing and
23 managing neighborhood commercial districts and downtowns across the nation:

- 24 1. Organization establishes consensus and cooperation by building partnerships among the various
25 groups that have a stake in the commercial district.
- 26 2. Promotion creates a positive image that will rekindle community pride and improve consumer
27 and investor confidence.
- 28 3. Design means getting the area into top physical shape and creating a safe, inviting environment
29 for shoppers, workers, and visitors.
- 30 4. Economic Restructuring strengthens your community's existing economic assets while
31 diversifying its economic base.

32 The National Trust Main Street Center leads a national network of 1,200 local programs, providing
33 training, research, technical assistance, and national partnerships.

34 **Sustainable Design Assessment Teams⁴⁵**

42 <http://www.pps.org/reference/lighter-quicker-cheaper-a-low-cost-high-impact-approach/>

43 <http://ourdowntownhilo.com/>

44 <http://www.preservationnation.org/main-street/about-main-street/the-center/>

45 <http://www.aia.org/about/initiatives/AIAS075425>

1 The SDAT is a community assistance program run by the American Institute of Architects that focuses on
2 the principles of sustainability. SDATs bring a team of volunteer professionals (e.g., architects, urban
3 designers, planners, hydrologists, economists, attorneys, and others) to work with community decision-
4 makers and stakeholders to help them develop a vision and framework for a sustainable future.

5 Specifically, the SDAT process helps communities:

- 6 ▪ Understand their structure at various scales and contexts;
- 7 ▪ ExPELORe interactions between ecological, sociological, economic, and physical systems;
- 8 ▪ Visualize potential futures;
- 9 ▪ Articulate the qualities of a place;

10 **Community Benefits Agreement⁴⁶**

11 Community-based, collaborative initiatives sometimes utilize community benefits agreements (CBA) to
12 achieve community goals. A CBA is a contract made between community representatives or groups and
13 a prospective developer of a project with significant likely impacts. The CBA specifies benefits provided
14 by the developer in exchange for community support for a proposed project and often involve
15 government subsidies or contribution of public infrastructure or services. Examples of developers' CBA
16 commitments include:

- 17 ▪ Local hiring program for employees
- 18 ▪ Job training of local residents
- 19 ▪ Living wages for employees of service contractors
- 20 ▪ Environmentally-friendly design standards
- 21 ▪ Affordable housing beyond regulatory requirements
- 22 ▪ Funding for community programs and services in the surrounding communities (e.g., youth, culture).

23 CBAs offer the following benefits to the major stakeholders in any large development:

- 24 ▪ Community: reduce negative impacts and maximize benefits; address past and current injustices;
25 reach long-term community vision
- 26 ▪ Developers: save time and money; reduce obstacles and uncertainties; reassure investors
- 27 ▪ Government: reduce political pressures that come with conflict; reduce risk of having to defend
28 permitting decisions; gain political support with a win-win solution.

29 CBAs also come with issues and challenges, including:

- 30 ▪ Facilitation: It can be helpful to involve a third-party facilitator, but funding may be difficult to
31 secure for a systematic, participatory, and democratic process.

46 "An Introduction to Community Benefits Agreements (CBAs)." Karen Umemoto, Pat Onesta and Chris de Venecia. Department of Urban & Regional Planning. University of Hawai'i at Mānoa. Presented at the December 2010 Assets Symposium in Kona.

- 1 ▪ Representation: Different stakeholders need to feel that their perspectives are represented in the
2 community coalition or group and that no members have a conflict of interest.
- 3 ▪ Consensus: It can be difficult to get community agreement on contract terms.
- 4 ▪ Dissent: Not all community members may support the contract, or if some may oppose the project
5 regardless.
- 6 ▪ Monitoring: Mechanisms for reporting and compliance review may not be clear.
- 7 ▪ Enforcement: CBAs have yet to stand the test of legal review, so it is unclear who will have standing
8 to challenge and enforce privately negotiated CBAs that lack government authorization.
9 Government support is key, but involvement in the agreement may be interpreted as an “exaction.”

10 Hawai‘i’s Collaborative Leaders Network introduces “A Community Engagement Strategy for Negotiating
11 a Package of Community Benefits⁴⁷” and provides a detailed description of eight stages of the
12 negotiation strategy.

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47 <http://collaborativeleadersnetwork.org/strategies/a-community-engagement-strategy-for-negotiating-a-package-ofcommunity-benefits/>

REGIONAL INFRASTRUCTURE, FACILITIES, AND SERVICES

This section of the appendix introduces Hāmākua resources and challenges, current policy, previous planning, and alternative strategies related to infrastructure, facilities, and services. It begins with a summary Hāmākua’s related values, priorities, and objectives and then focuses on specific areas of community interest, including housing, transportation, water, solid waste, emergency services, health care, social services, education, libraries, and parks and recreation.

Community Values, Vision, and Objectives

During the initial round of CDP input Hāmākua CDP communities identified two values related to infrastructure, facilities, and services: education and sports/outdoor recreation.

Likewise, the community identified the following related priorities:

- Local economy: housing
- Recreation: parks and gathering spaces, facilities, programs, youth recreation, outdoor recreation
- Education: improved schools, adult/vocational/higher education
- Health care: hospital/clinic, elderly care, social services
- Public services: transportation, roadways, mass transit, public utilities, protective services.

Building on those values and priorities, the community’s Values and Vision Statement captures community sentiment:

Our high quality of life is rooted in our strong sense of ‘ohana and community. We support lifetime learning through the expansion of educational opportunities for all residents. Access to quality healthcare, elderly care, and affordable housing is provided. We host festivals for music, culture, arts, and agriculture, and are known for our parks, gathering places, and recreation programs.

Our communities are connected by a network of safe, well-maintained roadways and we enjoy multiple transportation choices. Our community prides itself on its heritage roads as alternative, slower routes between our popular destinations and our historic plantation villages.

When considering the community’s values and priorities along with resources and challenges summarized in the Community Profile, the Steering Committee adopted two community objectives that speak directly to infrastructure, facilities, and services:

- Develop and improve critical community infrastructure, including utilities, healthcare, emergency services, affordable housing, educational opportunities and recreational facilities to keep our ‘ohana safe, strong, and healthy.
- Establish a rural transportation network that includes improving roadway alternatives to Highway 19, expanding and improving the existing transit system, and encouraging multiple transportation options.

Specific aspects of each of those values, priorities, and objectives are introduced in the remainder of this section by summarizing related resources and challenges, current policy, previous planning, and alternative strategies available to achieve community objectives.

1 Housing

2 Overview, Assets, and Challenges

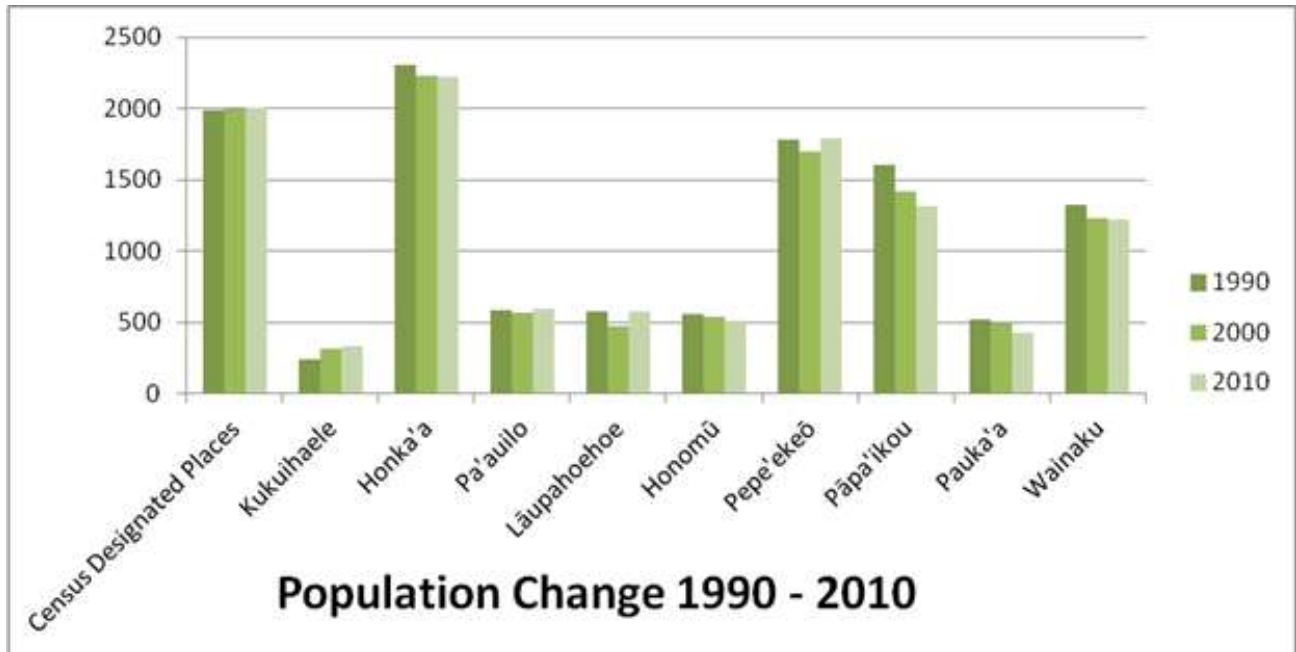
3 Existing Conditions

4 The purpose of the Existing Conditions analysis is to describe housing, economic, and demographic
5 conditions in Planning Area, assess the demand for housing for households at all income-levels, and
6 document the demand for housing to serve various special needs populations. The Existing Conditions
7 Assessment is intended to assist the County and Community in developing housing policies and
8 programs that address local housing needs. The intent of this Housing Section is to enhance the
9 Planning Area residential neighborhoods by maintaining and rehabilitating older housing and conserving
10 the existing stock of owner and rental units that provide affordable housing opportunities for low- and
11 moderate-income households.

12 Population

13 As noted in the Hāmākua 2010 Community Profile for the, "communities within the Planning Area,
14 resident population has generally declined in the last 20 years. The loss in population in the Planning
15 Area is likely attributable to the decline in the sugar industry, closure of sugar mills and resulting loss in
16 employment opportunities. The population decline illustrates Hawai'i County's transition from an
17 economy centered on agriculture to one oriented towards tourism."

18 **Figure 6. Census Designated Place Population Change (1990-2010)**



19

20 Since the release of this document, the results from the 2010 Census have been published. Although
21 the Census data does not completely reflect the Planning Area's population and household trends, since
22 the data is collected on the nine Census Designated Places within the Planning Area and exclude
23 homestead lot communities, some towns (i.e. Pā'auhau, Pāpa'aloa, Wailea/Hakalau, etc.) and smaller
24 neighborhoods, it is the most consistent and reliable source of statistics for the Planning Area's towns.

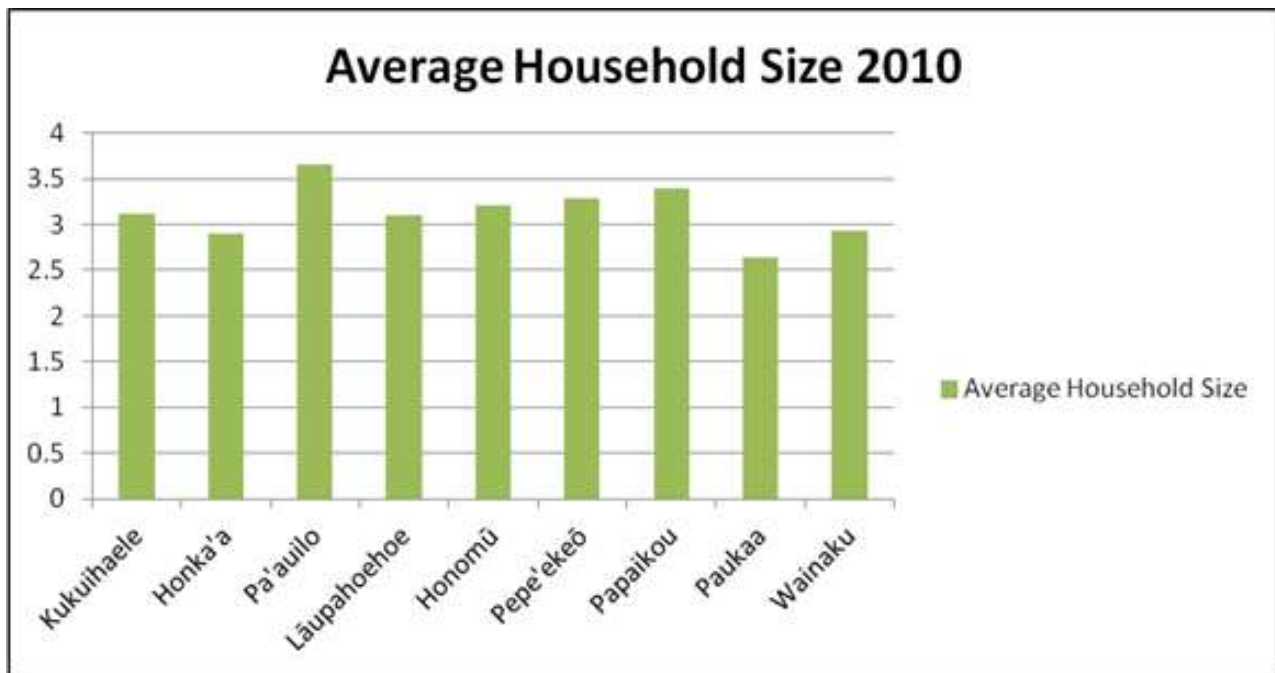
25

1 Based on 2010 Census data, the overall population within the CDPs was 8,994 and has grown very
2 slightly at 2.8% since the 2000 census. However, since the 1990 Census, the overall population has
3 decreased by approximately 515 people or 5.7 percent.⁴⁸

4 **Average Household Size**

5 Average household size is a function of the number of people living in households divided by the
6 number of occupied housing units in a given area. In the Planning Area in 2010, the average household
7 size ranged from a low of 2.64 in Pauka'a to a high of 3.66 in Pa'auilo. In comparison the average
8 household size in Hawaii County during the same time period was 3.0.⁴⁹ The average household size for
9 the nine Census Designated Places in the Planning Area are in Figure 7.

10 **Figure 7. Planning Area Average Household Size (2010)**



11

12

13 **Household Tenure**

14 As illustrated in Table 1.1, households in the Planning Area are more likely to own than rent their
15 homes. In 2010, the range of owner-occupied housing was from a low of 63.1 percent in Pepe'ekeo to
16 a high of 82.1 percent in Pauka'a and an average of 70.55 percent for the Planning Area. By
17 comparison, only 64.1 percent of households in Hawai'i County owned their own residences in 2010.⁵⁰

18 Vacancy rates for owner-occupied housing units were generally low in the Planning Area in 2010, which
19 could illustrate the need for additional owner-occupied housing. Rental-occupied unit vacancy rates
20 were fairly high in the Planning Area in 2010, with Kukuihaele having the highest rate at 17.8 percent.

21

48 <http://www.census.gov/prod/cen2010/cph-1-13.pdf>

49 http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_12_1YR_CP04&prodType=table

50 <http://www.census.gov/prod/cen2010/cph-1-13.pdf>



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Table 2. Comparison of Owner-Occupied and Rental-Occupied Housing 2010

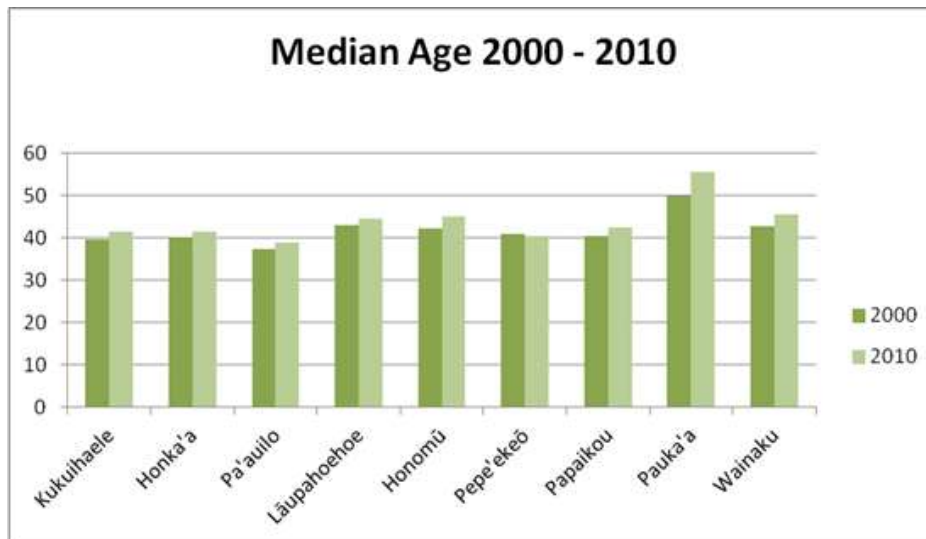
| | Owner Occupied | Renter Occupied | Vacancy Rate Owner-Occupied | Vacancy Rate Rental-Occupied |
|--------------------|----------------|-----------------|-----------------------------|------------------------------|
| Kukuihaele | 65.7 | 23.2 | 1.4 | 17.8 |
| Honoka'a | 63.5 | 36.5 | 3.2 | 13 |
| Pa'auilo | 80 | 20 | 0.6 | 13.3 |
| Laupāhoehoe | 73.4 | 26.6 | 1.2 | 3.4 |
| Honomū | 69.7 | 30.3 | 0 | 9.1 |
| Pepe'ekeo | 63.1 | 36.1 | 0.3 | 4.9 |
| Pāpa'ikou | 70.1 | 26.9 | 1.3 | 8.5 |
| Pauka'a | 82.1 | 17.9 | 0.6 | 10.3 |
| Wainaku | 69.2 | 30.8 | 2.4 | 3 |

4

5 Median Age

6 As indicated in the Chart 1.3, the median age of the population is growing older with an approximately 5
7 percent increase in the average median age from 41.8 to 43.9 between 2000 and 2010. The Planning
8 Area's median age is slightly older than the County 2010 median age of 41.4. As the median age
9 increases, the need for affordable senior housing and facilities will correspondingly increase.

10 **Figure 8. Census Designated Place Median Age (2000-2010)**



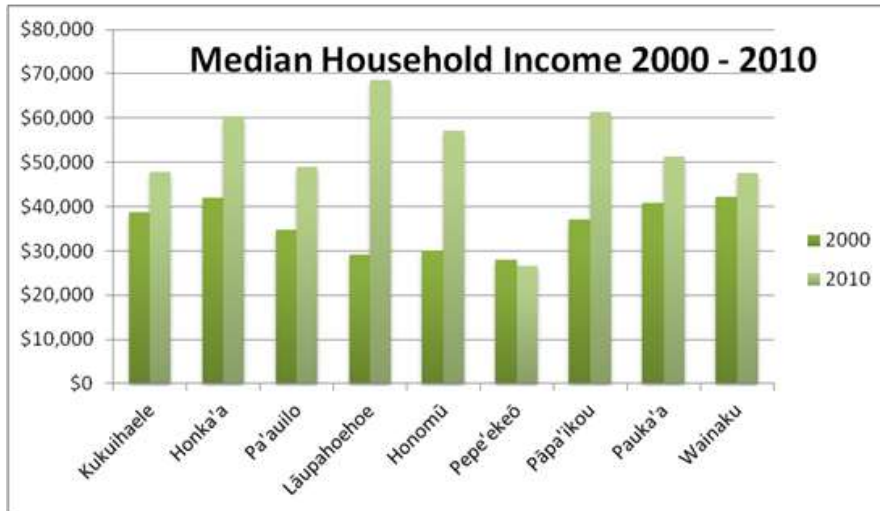
11

1 **Household Income**

2 According to 2011 American Community Survey estimates, the median household income in the
3 Planning Area in 2010 ranged from a low of \$26,484 in Pepe'ekeo to a high of \$68,500 in
4 Laupāhoehoe.⁵¹ This higher end of the range is significantly higher than the estimated median
5 household income of \$50,285 for Hawai'i County.

6 With the exception of Pepe'ekeo, the median income for all Census Designated Places with the Planning
7 Area grew considerably between 2000 and 2010, with an overall average increase of 45 percent. This is
8 a much higher rate of growth in household income as compared to the 26 percent increase in household
9 income during the same time period for Hawai'i County.

10 **Figure 9. Census Designated Place Median Household Income (2000 - 2010)**



11

12 **Housing Stock Conditions**

13 The age of the Planning Area's housing stock varies significantly. The Census generally categorizes
14 housing in 10-year increments ranging from 1939 and older to 2010. Pa'auilo and Kukuihaele have the
15 oldest housing stock with 52 and 36 percent, respectively, in the 1939 and older category. Using
16 American Community Survey data, Laupāhoehoe, Nīnole, O'ōkala have newer housing stock with the
17 majority built in the 1990 to 1999 range. The housing stock in the Planning Area is generally older when
18 compared to the highest percentage of housing stock age in the County, which is in the 2000 to 2009
19 category. The data also indicates that the majority of the Planning Area housing units contain complete
20 plumbing and kitchen facilities.

21 **Units by Structure Type**

22 The majority of housing units in the Planning Area are single-family detached homes. With the
23 exception of Kukuihaele and Pepe'ekeo, single family units comprised the mid to the upper 90 percentile
24 of housing types in each Census Designated Place. The percentage of single-family units in Kukuihaele
25 and Pepe'ekeo are 82.2 and 66 percent, respectively.

26 **Housing Affordability**

51 http://factfinder2.census.gov/faces/nav/jsf/pages/guided_search.xhtml



1 According to the federal government, housing is considered “affordable” if it costs no more than 30
 2 percent of the household’s gross income. Often, affordable housing is discussed in the context of
 3 affordability to households with different income levels. Households are categorized as extremely low-
 4 income, very low-income, low-income, moderate-income, and above moderate-income based on
 5 percentages of the Area Median Income (AMI) established annually by the U.S. Housing and Urban
 6 Development (HUD). Income limits vary by household size.

7 Table 1.2 provides the maximum income limits for a four-person household in Hawai’i County in 2010.
 8 Extremely low-income, very low and low-income households are eligible for federal, state, and local
 9 affordable housing programs. Moderate-income households are eligible for some state and local
 10 housing programs.

11 **Table 3. 2010 Hawaii County Income Limits (based on \$66,700 AMI)**

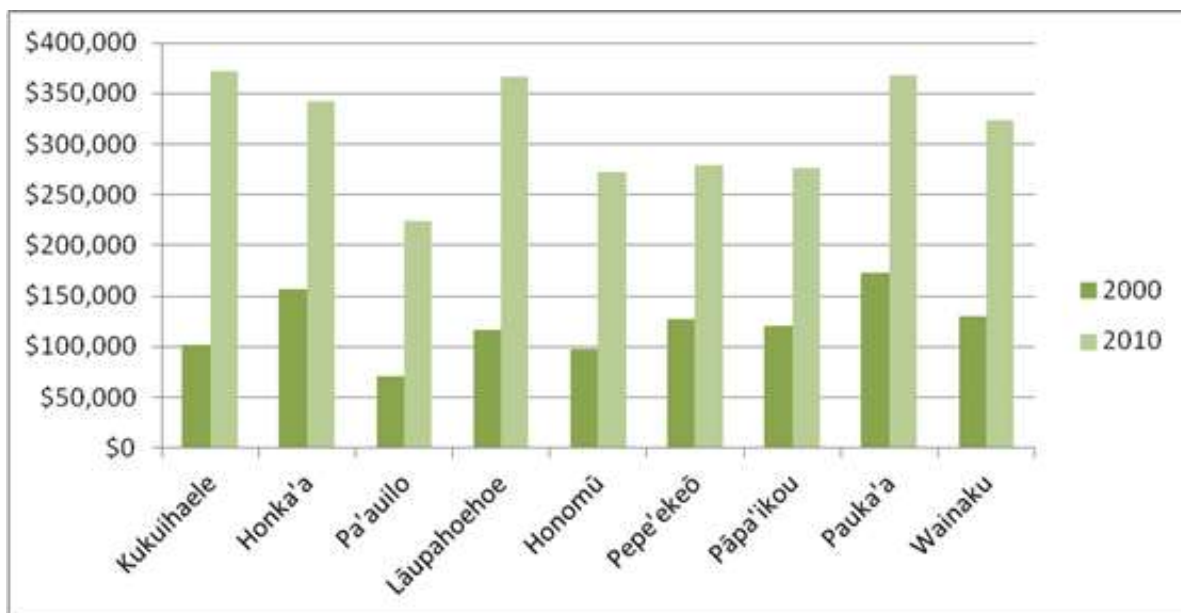
| FY 2010 Income Limit Category | 1 Person | 2 Person | 3 Person | 4 Person | 5 Person | 6 Person | 7 Person | 8 Person |
|---|----------|----------|----------|----------|----------|----------|----------|----------|
| Very Low (50%) Income Limits | \$24,200 | \$27,650 | \$31,100 | \$34,550 | \$37,350 | \$40,100 | \$42,850 | \$45,650 |
| Extremely Low (30%) Income Limits | \$14,550 | \$16,600 | \$18,700 | \$20,750 | \$22,450 | \$24,100 | \$25,750 | \$27,400 |
| Low (80%) Income Limits | \$38,750 | \$44,250 | \$49,800 | \$55,300 | \$59,750 | \$64,150 | \$68,600 | \$73,000 |

12

13 **Ability to Purchase Homes**

14 The following chart shows a comparison of median housing prices in the nine Census Designated Places
 15 (CDP) in the Planning Area between 2000 and 2010.

16 **Figure 10. Census Designated Place Median Home Price in 2000 and 2010**



17

1 Consistent with the County of Hawai'i, housing values grew considerably between 2000 and 2010. The
 2 average of the median home prices for the nine Census Designated Places increase by approximately
 3 158 percent.

4 Table 1.3 illustrates an affordability scenario for four-person households with very low-, low-, and
 5 moderate-incomes. The analysis compares the maximum affordable sales price for each of these
 6 household income categories. The maximum affordable sales price was calculated using household
 7 income limits published by HUD, conventional financing terms of 4.5 percent interest rate, 20% down,
 8 and assuming that households spend no more than 30 percent of monthly gross income on mortgage
 9 payments.

10 **Table 4. Affordability of Census Designated Place Housing 2010**

| Income Level | 30% of Monthly Income | Maximum Sale Price | 20% Down Payment | Availability with the Planning Area |
|---|-----------------------|--------------------|------------------|-------------------------------------|
| Very Low 50% AMI \$34,550/Year | \$863 | \$219,000 | \$43,800 | Not available any CDP |
| Low 80% of AMI \$55,300/Year | \$1,382 | \$342,000 | \$68,400 | Available in five CDPs |
| Moderate up to 120% of AMI \$80,040/Year | \$2,001 | \$494,000 | \$98,800 | Available in nine CDPs |

11 As illustrated in Table 4, the moderate and low-income levels could find housing in the Planning Area
 12 based on 2010 median home prices and current mortgage interest rates. However the very low-income
 13 category could not qualify for a median priced home within any of the nine Census Designated Places.
 14 Although many low and moderate-income families could meet the monthly payment obligation, the
 15 greatest difficulty in purchasing a home is the 20% downtown payment typically required with
 16 conventional financing.

17 **Overpayment**

18 According to Department of Housing and Urban Development (HUD) standards, a household is
 19 considered to be “cost-burdened” (i.e. overpaying for housing) if it spends more than 30 percent of
 20 gross income on housing-related costs. Households are “severely cost burdened” if they pay more than
 21 50 percent of their income on housing cost. The 2010 Census reports that of the nine Census Designated
 22 Places in the Planning Area, the majority of owner-occupied households in six of the CDPs are spending
 23 35 percent of greater in monthly housing cost as compared to income. The exceptions are Laupāhoehoe
 24 and Pepe’ekeo, where the majority of households are spending less than 20 percent of their monthly
 25 income on housing costs, and Honomū, where the majority of households are spending between 30 and
 26 34.9 percent of their monthly income on housing costs

27 **Special Housing Needs**

28 **Elderly Population**



1 As indicated in the Median Age Chart (1,3), the Planning Area population is aging. Within the Planning
2 Area, the range of persons in the median age group of 65 and older in the nine Census Designated Places
3 are from a low of 13.4 percent in Kukuihaele to a high of 34.1 in Pauka'a. As the population continues to
4 age, there will be a greater demand of housing types and services that allow residents to "age in place"
5 in either their own homes or group home facilities.

6 **Summary**

- 7 ▪ The Planning Area grew much slower than Hawai'i County between 2000 and 2010; however, the
8 population slightly recovered from the six percent decline between 1990 and 2000.
- 9 ▪ There is a high rate of owner-occupied housing in the Planning Area. The percentage of owner-
10 occupied housing in all but one of the CDPs exceeds the County of Hawai'i.
- 11 ▪ The Planning Area has an aging population. The average median age rose from 41.8 years old in
12 2000 to 43.9 years old in 2100. The percent of elderly residents, aged 65 years old and older, is also
13 growing, which will create needs for "age in place" housing and services.
- 14 ▪ Household income significantly increased between the 2000 and 2010 Censuses. With the
15 exception of Pepe'ekeo, the median income for all Census Designated Places with the Planning Area
16 increased by an overall average increase 45 percent.
- 17 ▪ The Planning Area's housing stock is dominated by single-family detached home. With the
18 exception of Kukuihaele and Pepe'ekeo, single family units comprised the mid to the upper 90
19 percentile of housing types in each Census Designated Place.
- 20 ▪ The housing stock in the Planning Area is generally older when compared to the highest percentage
21 category of housing stock in the County, which was units built between 2000 to 2009.
- 22 ▪ Virtually all housing units in the Planning Area have complete plumbing and kitchen facilities.
- 23 ▪ Housing costs have significantly increased since 2000. The average of the median home prices for
24 the Planning Area rose by approximately 158 percent.
- 25 ▪ All but above moderate income households would have difficulty purchasing a home in the Planning
26 Area.
- 27 ▪ In 2010, six of the nine CDP's homeowners were overpaying for housing in the Planning Area.

28 **Assets**

- 29 ▪ Towns in the planning area have remained small enough that residents know each other; the towns
30 maintain a spirit of neighborliness and aloha.
- 31 ▪ The Planning Area's towns were built in the plantation era and are comprised of densely populated,
32 somewhat walkable neighborhoods.
- 33 ▪ Most towns have small town cores that could be revitalized.
- 34 ▪ Many of the existing town cores have historic buildings with attractive architectural character.
- 35 ▪ The rural lifestyle lends itself to food resource sharing, and a general emphasis on neighbors helping
36 neighbors.

37 **Challenges**

- 1 ▪ The Planning Area has a large supply of older housing that presently or in the near future will need
2 rehabilitation in order to maintain the units as viable housing stock.
- 3 ▪ Basic infrastructure services such as water/sewer are not consistently available in every town and
4 may inhibit new residential construction.
- 5 ▪ The Planning Area Population is aging, which will create a demand for "aging in place" housing and
6 services that presently are limited in the Planning Area.
- 7 ▪ Housing values significantly increased between 2000 and 2010, making the ability to purchase a
8 home more difficult for the average family.
- 9 ▪ Wages are not increasing comparably to housing cost and thus resulting in families paying more
10 than the recommended 30 percent of gross monthly income for housing expenses.
- 11 ▪ The existing town cores have historic buildings with attractive architectural character and well
12 developed neighborhoods that could be threaten as new growth occurs. Careful attention to
13 residential design, building placement, and density will be critical to maintaining community
14 character.

15 **General Plan Policies and Courses of Action**

16 **Policies**

- 17 ▪ 9.3(a): Encourage a volume of construction and rehabilitation of housing sufficient to meet growth
18 needs and correct existing deficiencies.
- 19 ▪ 9.3(b): Encourage the construction of specially designed facilities or communities for elderly persons
20 needing institutional care and small home care units for active elderly persons.
- 21 ▪ 9.3(c): Encourage corporations and nonprofit organizations to participate in Federal, State and
22 private programs to provide new and rehabilitated housing for low and moderate income families.
- 23 ▪ 9.3(d): Support the construction of housing for minimum wage and agricultural workers.
- 24 ▪ 9.3(f): Continue to study and implement appropriate measures to curb property speculative
25 practices that result in increased housing costs.
- 26 ▪ 9.3(k): Increase rental opportunities and choices in terms of quality, cost, amenity, style and size of
27 housing, especially for low and moderate income households.
- 28 ▪ 9.3(l): Support programs that improve, maintain, and rehabilitate the existing housing inventory to
29 maintain the viability of existing communities.
- 30 ▪ 9.3(m): Accommodate the housing requirements of special need groups including the elderly,
31 handicapped, homeless and those residents in rural areas.
- 32 ▪ 9.3(n): Investigate, develop, and promote the creation of new innovative and timely financing
33 techniques and programs to reduce the cost of housing.
- 34 ▪ 9.3(o): Encourage the use of suitable public lands for housing purposes in fee or lease.
- 35 ▪ 9.3(r): Adopt appropriate ordinances and rules as necessary to implement its housing programs and
36 activities.

- 1 ▪ 9.3(s): Utilize financing techniques that reduce the cost of housing, including the issuance of tax -
2 exempt bonds and the implementation of interim financing programs.
- 3 ▪ 9.3(t): Ensure that adequate infrastructure is available in appropriate locations to support the timely
4 development of affordable housing.
- 5 ▪ 9.3(u): Investigate the use of the County's taxing powers as a possible means to increase the supply
6 of affordable housing.
- 7 ▪ 9.3(v): Work with, encourage and support private sector efforts in the provision of affordable
8 housing.
- 9 ▪ 9.3(x): Vacant lands in urban areas and urban expansion areas should be made available for
10 residential uses before additional agricultural lands are converted into residential uses.
- 11 ▪ 9.3(y): Aid and encourage the development of a wide variety of housing to achieve a diversity of
12 socio- economic housing mix.

13 **Housing Courses of Action – North Hilo**

- 14 ▪ 9.5.3.2(a): Coordinate and participate with State and Federal Governments in providing rural
15 housing programs for low and moderate income families, "gap" groups and the elderly.

16 **Housing Courses of Action – Hāmākua**

- 17 ▪ 9.5.2.2(a): Aid and encourage programs to rehabilitate and replace the existing housing inventory,
18 including consideration for self-help programs.

19 **Tools and Alternative Strategies**

20 **Federal Housing Agencies and Programs**

21 **US Department of Housing and Urban Development (HUD)** administers most of the federal affordable
22 housing and homelessness programs under Community Planning and Development Office. These include
23 the [Community Development Block Grants](#) (CDBG), the HOME program, Shelter Plus Care, Emergency
24 Shelter Grants (ESG), [Section 8](#), Moderate Rehabilitation Single Room Occupancy program (Mod Rehab
25 SRO), and Housing Opportunities for Persons with AIDS (HOPWA).⁵²

26 The majority of HUD programs in Hawai'i operate through the state Hawai'i Public Housing Authority,
27 state Hawai'i Housing Finance and Development Corporation, Hawai'i County's Office of Housing and
28 Community Development and local nonprofit organizations.

- 29 ▪ **Making Home Affordable:** HUD also administers the Making Home Affordable Program® (MHA)
30 intended to help homeowners avoid foreclosure, stabilize the country's housing market, and
31 improve the nation's economy.

32 Homeowners can lower their monthly mortgage payments and get into more stable loans, while
33 potentially getting lower rates depending on the current market. For homeowners who no longer
34 desire or can afford homeownership, the program can provide a way out that avoids foreclosure.
35 Additionally, there are options for unemployed homeowners and homeowners who owe more than
36 their homes are worth.⁵³

52 http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning

53 <http://dbedt.hawaii.gov/hhfdc/making-home-affordable/>

1 **US Department of Agriculture (USDA) Rural Development:** The USDA Rural Development⁵⁴ program has
 2 single and multi-family housing programs. Single Family Housing Programs provide homeownership
 3 opportunities to low and moderate-income rural households through several loan, grant, self-help, and
 4 loan guarantee programs. The programs also make funding available to individuals to finance vital
 5 improvements necessary to make their homes decent, safe, and sanitary.

6 Multi-Family Housing Programs offer Rural Rental Housing Loans to provide affordable multi-family
 7 rental housing for very low, low, and moderate income families, the elderly, farm laborers, and persons
 8 with disabilities. This is primarily a direct mortgage program, but funds may also be used to buy and
 9 improve land and to provide necessary facilities such as water and waste disposal systems. In addition,
 10 subsidy rental assistance is available to eligible families.

11 The following USDA affordable housing loan and grant programs are available:
 12

- 13 ▪ **Direct Housing Loans:** The Rural Housing Direct Loan Program provides very low and low income
 14 families with financing to build, purchase, repair or refinance homes and building sites that meet
 15 local codes. The home must be located in a rural community with less than 10,000 populations, on a
 16 farm or in open country not closely associated with an urban area.

- 17 ▪ **Guaranteed Home Loans:** Single Family Housing Guaranteed Loans require no down payment and
 18 no monthly mortgage insurance and are loans made by approved mortgage lenders to qualified low
 19 and moderate-income individuals and families in rural areas.

- 20 ▪ **USDA Rural Development** is expanding homeownership opportunities and affordability to
 21 homebuyers by providing lenders with loan guarantees that protect the lender from risk of loan loss.
 22 The lender passes the benefit on to the homebuyer in the form of a loan requiring no down
 23 payment or mortgage insurance, limiting loan and closing costs, and offering favorable interest rates
 24 similar to conventional loans. The 2% loan guarantee fee paid by the applicant replaces mortgage
 25 insurance and is significantly lower than projected cost of the monthly mortgage insurance.

- 26 ▪ **Home Improvement and Repair Loans and Grants:** The Home Repair Loan and Grant program
 27 provides loan and grant funds to be used to pay for needed repairs and improvements to dwellings
 28 of eligible very low income families living in rural areas with a population of 10,000 or less.
 29
 30 Grant funds, which must be used to remove health and safety hazards, may be made to persons 62
 31 years or older who lack repayment ability for a loan. Repair loan and grants may be used to remove
 32 health and safety hazards such as repairing roofs, heating, electrical and plumbing systems, water
 33 and waste disposal, installing screens, windows, insulation and other steps to make the home safe.
 34
 35 Home improvement loans may include similar purposes but may also be used to modernize, add a
 36 room, remodeling and making overall improvements to the home. The home must be owner-
 37 occupied.

- 38 ▪ **Self-help Housing:** The Mutual Self-Help Housing Loan program is used primarily to help very low
 39 and low-income households construct their own homes. The program is targeted to families who are
 40 unable to buy clean, safe housing through conventional methods and want to build equity in their
 41 home. Families participating in a mutual self-help project perform approximately 65 percent of the

54 <http://www.rurdev.usda.gov/HI-HousingPrograms.html>

1 construction labor on each other's homes under qualified supervision.⁵⁵ The Hawai'i Island
2 Community Development Corporation (HICDC) administers self-help housing programs and is in the
3 process of creating a 42-lot subdivision in Pepe'ekeo to develop self-help housing.

4 **Federal Housing Administration (FHA)**

- 5 ▪ **FHA Loan for Purchase or Refinance on Principal Residence:** FHA loan is a federal assistance
6 mortgage loan insured by the Federal Housing Administration. FHA loans have historically allowed
7 lower income Americans to borrow money for the purchase of a home that they would not
8 otherwise be able to afford.

9 FHA does not make loans. Rather, it insures loans made by private lenders. The first step in
10 obtaining an FHA loan is to contact several lenders and/or mortgage brokers and ask them if they
11 originate FHA loans. As each lender sets its own rates and terms, comparison-shopping is important
12 in this market. Potential lenders assess the prospective homebuyer for risk. The analysis of one's
13 debt to income ratio enables the buyer to know what type of home can be afforded based on
14 monthly income and expenses and is one risk metric considered by the lender. Other factors, such
15 as payment history on other debts, are considered and used to make decisions regarding eligibility
16 and terms for a loan.⁵⁶

17 **Department of Veterans Affairs (VA)**

- 18 ▪ **Loan Guaranty Program for Purchase or Refinance (VA Loan):** A VA loan is a mortgage loan in the
19 United States guaranteed by the U.S. Department of Veterans Affairs. The loan may be issued by
20 qualified lenders and designed to offer long-term financing to American veterans or their surviving
21 spouses. The basic intention of the VA direct home loan program is to supply home financing to
22 eligible veterans in areas where private financing is not generally available and to help veterans
23 purchase properties with no down payment.

24 The VA loan allows veterans 100% financing without private mortgage insurance or 20% second
25 mortgage. In a purchase, veterans may borrow up to 100% of the sales price or reasonable value of
26 the home, whichever is less. In a refinance, veterans may borrow up to 90% of reasonable value,
27 where allowed by state laws. VA loans allow veterans to qualify for loans amounts larger than
28 traditional Fannie Mae/conforming loans. VA will insure a mortgage where the monthly payment of
29 the loan is up to 41% of the gross monthly income vs. 28% for a conforming loan assuming the
30 veteran has no monthly bills.⁵⁷

31 **Federal Home Loan Bank System**

32 Along with the federal programs administered by the state and county, the Federal Home Loan (FHL)
33 Bank system also manages some grant programs for affordable housing development. The regional
34 district bank supporting projects in Hawai'i is the Federal Home Loan Bank of Seattle, which is one of 12
35 regional district banks established by Congress to support residential mortgage lending. The following
36 grant programs are administered by the FHL Bank system.

- 37 ▪ **Affordable Housing Program (AHP):** The AHP is a competitive program that provides grants through
38 member banks to developers and community organizations for construction, rehabilitation, and

55 <http://www.hawaiihousingprograms.org/HousingPrograms/Federal.aspx>

56 <http://portal.hud.gov/hudportal/HUD?src=/states/hawaii/homeownership>

57 ibid

1 financing of affordable housing. The AHP grants can be used with other programs to increase
2 project feasibility. AHP subsidy may be used in a variety of ways, including to:

- 3 1. Reduce mortgage principal
- 4 2. Provide gap financing
- 5 3. Cover down payment and closing costs
- 6 4. Lower the interest rate on a loan

7
8 The AHP competitive program and its homeownership set-aside program is called Home\$tart⁵⁸.
9 Home\$tart and Home\$tart Plus (H\$P) provide participating members with grants for down payment,
10 closing cost assistance, and/or rehabilitation of existing units to eligible homebuyers, at least one
11 third of which must be eligible first-time homebuyers.

12 Home\$tart and Home\$tart Plus will be made available on a first-come, first-served basis to all
13 members that have executed a 2013 Home\$tart Regulatory Agreement. Once at least one-third of
14 the total amount of 2013's Home\$tart and/or Home\$tart Plus funds have been reserved for eligible
15 first-time homebuyers, members may enroll eligible households who are not first-time homebuyers.

16 The Seattle Bank offers two programs that provide discounted funding to Seattle Bank members
17 supporting affordable housing and economic development initiatives in their communities:⁵⁹

- 18 ▪ **The Community Investment Program (CIP)** offers reduced-rate funding for affordable single- and
19 multi-family housing, including manufactured housing.
- 20 ▪ **The Economic Development Fund (EDF)** offers reduced-rate funding for community economic
21 development, including: small businesses; commercial, industrial, manufacturing, social service, and
22 public facility projects and activities; and public or private infrastructure projects, such as roads,
23 utilities, and sewers.

24 CIP/EDF advances may also be used to finance investments in low-income housing tax credits,
25 mortgage-backed securities, and mortgage revenue bonds, as well as to invest in loan consortia if
26 the underlying loans are CIP/EDF eligible. CIP/EDF advances may be used to finance an eligible
27 loan—or pool of eligible loans—originated by a Seattle Bank member no more than 90 days prior to
28 the effective date of the CIP/EDF advance. CIP/EDF advances are available in terms from three to 30
29 years with fixed or variable rates. The Seattle Bank may make funds available for short-term CIP/EDF
30 advance from time to time. Currently, CIP/EDF advances are available with terms ranging from 12 to
31 35 months.

32 In 2012, First Hawaiian Bank, a member of the FHL Bank of Seattle, was awarded \$450,000 to Hale
33 Uhiwai Nalu at Kapolei, which Cloudbreak Hawai'i, LLC will use to help construct 50 studio
34 apartments for veterans with incomes at or below 30, 50, 60, and 80 percent of area median
35 income.

58 <http://www.fhlbsea.com/CommunityInvestment/OurPrograms/AHP/Default.aspx>
59 <http://www.fhlbsea.com/CommunityInvestment/OurPrograms/CIPEDF/Default.aspx>



1 **State Home Ownership and Rental Programs**

2 **Hawai'i Housing Finance and Development Corporation (HHFDC)**⁶⁰ offers loans through the Hula Mae
3 Mortgage Loan Program for homeowners. For affordable housing developers, it also manages the
4 State's Low Income Housing Tax Credit Program, the Rental Housing Trust Fund, the Rental Assistance
5 Revolving Fund, and the Hula Mae Multi-Family Program. For communities with high foreclosure rates,
6 HHFDC also administers the Neighborhood Stabilization Program.

- 7 **HOME Program:** The HHFDC annually receives funding from HUD under the HOME program, and
8 allocates HOME funds equally to the Counties of Hawai'i, Kaua'i and Maui. HOME provides formula
9 grants to States and localities that communities use-often in partnership with local nonprofit
10 groups-to fund a wide range of activities that build, buy, and/or rehabilitate affordable housing for
11 rent or homeownership or provide direct rental assistance to low-income people.

12 For the HOME program, the Counties of Hawai'i, Kaua'i and Maui utilize the Request for Proposals
13 process to solicit proposals from qualified nonprofits for eligible HOME projects. Funding
14 recommendations are based on the needs and strategies identified in the current Consolidated Plan,
15 and approved by the respective County Councils

16 HOME is the largest Federal block grant to State and local governments designed exclusively to
17 create affordable housing for low-income households. Each year it allocates approximately \$2 billion
18 among the States and hundreds of localities nationwide. The program was designed to reinforce
19 several important values and principles of community development:

- 20
 - HOME's flexibility empowers people and communities to design and implement strategies
21 tailored to their own needs and priorities.
 - HOME's emphasis on consolidated planning expands and strengthens partnerships among
22 all levels of government and the private sector in the development of affordable housing.
 - HOME's technical assistance activities and set-aside for qualified community-based
23 nonprofit housing groups builds the capacity of these partners.
- 24
 - HOME's requirement that participating jurisdictions (PJs) match 25 cents of every dollar
25 in program funds mobilizes community resources in support of affordable housing.
- 26
- 27

- 28 **Hula Mae:** Hula Mae is an innovative mortgage loan program created by the Hawai'i State
29 Legislature in 1979 for families of low and moderate income. Through the sale of tax-exempt
30 revenue bonds, the Hula Mae Program provides eligible homebuyers with mortgage loans at
31 interest rates below those available on conventional loans.

32 HHFDC has the responsibility for the program and works closely with private lending institutions that
33 have made a commitment to participate in the Hula Mae Program. The participating lending
34 institutions accept and review your application to determine your eligibility under the guidelines of
35 the Program. Once your eligibility is verified, the lender processes the loan application and, upon
36 closing, delivers the loan to HHFDC.

60 <http://hawaii.gov/dbedt/hhfdc>

1 ▪ **Mortgage Credit Certificate:** The Mortgage Credit Certificate Program (MCC) was authorized by
2 Congress in the 1984 Tax Reform Act as a means of providing housing assistance to families of low
3 and moderate income. HHFDC is an Issuer of Mortgage Credit Certificates. The MCC reduces the
4 amount of federal income tax you pay, thus giving you more available income to qualify for a
5 mortgage loan and assist you with house payments. The MCC is available to homebuyers who meet
6 household income and home purchase price limits established for the MCC Program, as well as
7 other federal eligibility regulations.

8 The federal government allows each homeowner to claim an itemized federal income tax deduction
9 for the amount of interest paid each year on a mortgage loan. For a homeowner with a MCC, this
10 benefit is even better: 20% of your annual mortgage interest will be a direct federal tax credit,
11 resulting in a dollar-for-dollar reduction of your annual federal income tax liability. The remaining
12 80% of your annual mortgage interest will continue to qualify as an itemized tax deduction.

13 The amount of your mortgage credit depends on the amount of interest you pay on your mortgage
14 loan. However, the amount of your mortgage credit cannot exceed the amount of your annual
15 federal income tax liability. Unused mortgage credit can be carried forward for three years to offset
16 future income tax liability.⁶¹

17 ▪ **Down payment Loan Program:** The Down payment Loan Program is administered by HHFDC and
18 was developed to provide eligible borrowers with down payment loans. Funds made available under
19 this program must be applied toward the down payment for the purchase of a home. The program
20 loan is to be processed simultaneously with the first mortgage and will be recorded or filed as
21 second mortgage on the property purchased with the loan.

22 HHFDC works closely with lending institutions that have made a commitment to participate in the
23 program. The lending institutions accept applications and screen applicants to determine their
24 eligibility under program guidelines, as well as their ability to qualify for the loan.

25 **Hawai'i Public Housing Authority (HPHA)**⁶² helps provide Hawai'i residents with affordable housing and
26 shelter. HPHA administers Federal and State Public Housing projects, Section 8 Rental Housing Choice
27 Voucher Program and annually receives funding from HUD under the Emergency Shelter Grant (ESG)
28 and Housing Opportunities for Persons with AIDS (HOPWA) programs. HPHA works with a selection
29 committee made up of members from the Continuum of Care from the Counties of Hawai'i, Kaua'i and
30 Maui to determine which agencies will receive the ESG and HOPWA program funds.

31 Within the Hāmākua Planning Area, there are only two Public Housing developments: the senior
32 housing facility, Hale Hauoli, which contains 24 studio units and 16 one bedroom units, and the 6
33 Teacher Housing in Honoka'a units (3 are two bedroom and 3 are three-bedroom units).⁶³

34
35 ▪ **Emergency Shelters Grant (ESG) and Housing Opportunities for Persons with AIDS (HOPWA):** For the
36 ESG and HOPWA programs, the HPHA makes its selections based on recommendations of the
37 selection committee made up of members of the Counties' Continuum of Care. The State of Hawai'i
38 will permit pre-awards of up to twenty-five percent of a county's current program year's allocation

61 http://dbedt.hawaii.gov/hhfdc/files/2013/10/MCC-8.5x11-10-15_Layout-1.pdf
62 <http://www.hcdch.hawaii.gov/>
63 http://hpha.hawaii.gov/housingprograms/projects/proj_loc.html

1 for eligible activities in order to avoid the interruption of projects and/or services. Eligible activities
2 for the ESG generally include essential services related to emergency shelter, rehabilitation and
3 conversion of buildings to be used as emergency shelters, operation of emergency shelters, and
4 homelessness prevention services.⁶⁴

5 The HOPWA program is the only Federal program dedicated to address the housing needs of
6 persons living with HIV/AIDS and their families. Funds are distributed to states and cities by [formula](#)
7 [allocations](#) and made available as part of the area's [Consolidated Plan](#).⁶⁵

8 **County Housing Programs**

9 **Office of Housing and Community Development:** Federal housing and community redevelopment
10 programs were reorganized under the 1974 Housing and Community Development Act, which placed
11 much of the initiative for addressing community housing needs to the local government level. As a
12 result, the County established the Hawai'i County Housing Agency and the Office of Housing and
13 Community Development (OHCD)⁶⁶. The Hawai'i County Housing Agency, which is comprised of the
14 members of the Hawai'i County Council, has the capability to develop affordable housing either on its
15 own, in conjunction with the State, or through joint programs with the private sector.

16 The Office of Housing and Community Development administers the Federal Section 8 rental assistance
17 program benefiting low income families, manages several housing projects, and administers federal
18 grants. OHCD focuses on providing housing for a variety of need categories such as employee housing,
19 low and moderate-income groups, special needs groups, and the elderly.

20 ▪ **The Section 8 Housing Choice Voucher Program:** The Section 8 Housing Choice Voucher is a
21 program for assisting very low-income families in renting decent, safe, and sanitary housing in the
22 private market. Since the rental assistance is provided on behalf of the family or individual,
23 participants are able to find and lease privately owned housing, including single-family homes,
24 townhouses and apartments. The participant is free to choose any housing that meets the
25 requirements of the program and is not limited to units located in subsidized housing projects.

26 A family issued a rental voucher is responsible for finding and selecting a suitable rental unit of its
27 choice, which may include its present unit. Rental units must meet minimum standards of health
28 and safety. A housing subsidy is paid to the landlord directly by the County on behalf of the
29 participating family. The family then pays the difference between the actual rent charged by the
30 landlord and the amount subsidized by the program. Under certain circumstances, if authorized by
31 the PHA, a family may use its voucher to purchase a modest home.

32
33 Eligibility for a rental voucher is determined by the County based on the total annual gross income
34 and family size and is limited to U.S. citizens and specified categories of non-citizens who have
35 eligible immigration status. In general, the family's income may not exceed 50% of the median
36 income for Hawaii County. Median income levels are published by HUD and vary by location.

37
38 ▪ **Family Self-Sufficiency Program:** The Family Self-Sufficiency (FSS) program, established within the
39 Section 8 Choice Voucher Program, is a voluntary program designed to assist families in achieving
40 economic independence and self-sufficiency through education and job training.

64 <http://search.usa.gov/search?affiliate=housingandurbandevlopment&query=Emergency+Shelter+Grant>

65 http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/aidshousing

66 <http://www.hawaiicounty.gov/office-of-housing/>

1
2 FSS helps Section 8 participants achieve their goals through the following practices:

- 3 1. Identify career goals
- 4 2. Identify the barriers which could prevent achievement of these goals
- 5 3. Identify resources and services necessary for the participants' success
- 6 4. Develop an "Action Plan" to achieve specific goals and objectives necessary for self-sufficiency
- 7 and economic independence
- 8 5. Obtain support services related to participants plan
- 9 6. Receive case management services, encouragement and moral support

10
11 FFS families are required to sign a Contract of Participation with the Housing Agency that
12 incorporates their goals and a plan of action. FSS families have up to five years to complete specific
13 goals and objectives they establish for themselves. FSS families may receive money in an "Escrow
14 Account."

15
16 Participating families have an opportunity as their income increases and their rent increases, to
17 receive a refund of some or all of their increased rental charges if they comply with the program
18 rules. If the participant completes the program successfully they will receive all of the funds that
19 have been deposited in an escrow account tax free to use however they choose.⁶⁷

- 20
- 21 ▪ **Housing Choice Voucher Homeownership Option Program (HOP):** County's Section 8
22 Homeownership Program makes Section 8 Housing Assistance Payments available for mortgage
23 payments to allow eligible low-income, first-time home buyer Section 8 Participants the ability to
24 purchase an existing dwelling unit to be used as their primary residence. To be eligible, a person
25 must be a Participant in the County's Section 8 Rental Assistance Program and:
 - 26 ○ Have received tenant-based assistance for a minimum of one year.
 - 27 ○ Must not have owned a home in the last three years prior to receiving Homeownership
 - 28 assistance.
 - 29 ○ Have an annual household income equal or greater than the minimum wage multiplied by
 - 30 2,000 hours.
 - 31 ○ Have at least one adult member who has been employed full-time for at least one year.
 - 32 ○ Must complete an approved pre-purchase and post purchase homeownership-counseling
 - 33 program.⁶⁸
 - 34 ▪ **Inclusionary Zoning:** Among other things, Hawaii County Code Chapter 11 requires large resort and
35 industrial enterprises to address related affordable housing needs as a condition of rezoning
36 approvals, based upon current economic and housing conditions.
 - 37 ▪ **Tax exemptions:** HCC 19 provides the following real property tax exemptions:

67 <http://records.co.hawaii.hi.us/WebLink8/DocView.aspx?id=24156&dbid=1>

68 <http://records.co.hawaii.hi.us/WebLink8/DocView.aspx?id=24162&dbid=1>



- 1 ○ Homeowner: Real property owned and occupied as a principal home shall be exempt
2 \$40,000.
- 3 ○ Senior: If the owner is 60 years or older, the homeowner exemption doubles to \$80,000. If
4 70 years or older, the exemption is \$100,000.
- 5 ○ Disabled Veterans: Veterans disabled due to injuries while on duty with the armed services
6 are exempted from real property taxes except for the minimum tax from all property taxes.
- 7 ○ Blind, Deaf, or Disabled: Those with disabilities are exempt \$50,000.
- 8 ○ Historic Property: As explained in the Natural and Cultural Resource Management section,
9 historic residential property dedicated for preservation is exempted from real property
10 taxes except for the minimum tax from all property taxes.

11 **Nonprofit Programs**

12 **Big Island Housing Foundation (BIHF):** BIHF is a private, non-profit corporation formed in 1969 to
13 “enable the provision of attractive, safe and sanitary housing in a healthy social environment giving
14 preference but not limited to low and moderate income families”. BIHF’s activities serve affordable
15 housing interests in the County of Hawai’i and are in compliance with Federal, State and County
16 guidelines. Big Island Housing Foundation has developed and operates the properties throughout
17 Hawai’i County, including 10 elderly units in Pāpa’aloa.⁶⁹

18 **Habitat for Humanity:** Habitat for Humanity (HFH) has more than 1,500 local affiliates in the United
19 States and more than 70 national organizations around the world. Habitat for Humanity has helped to
20 build or repair over 600,000 houses and serve more than 3 million people worldwide.

21 Two affiliates organizations serve Hawaii Island: Hale Aloha O Hilo Habitat for Humanity in Hilo and
22 West Hawai’i HFH in Kailua Kona. Hale Aloha O Hilo HFH accepts applications about once every 12-18
23 months, once they have completed the homes that they are working on now. According to Hale Aloha O
24 Hilo HFH, one way that you can help speed the process along so that the application process can be
25 opened sooner is by volunteering for construction, since this helps us build our homes faster.

26 Lack of adequate housing and income are two important selection criteria. The percentage of an
27 applicant's monthly income that is currently spent on housing is part of how they determine need.
28 Generally, you and your family will be considered if your annual total income is between 30-60% of the
29 median family income for Hawai’i County, as established by the U.S. Department of Housing & Urban
30 Development.

31 Unlike some Habitat affiliates, Hale Aloha O Hilo Habitat for Humanity does not require an applicant to
32 own their own land. They will work with whatever the situation, whether they own your own land, are
33 eligible for Hawaiian Homelands, own another leasehold property, or do not own land at all.⁷⁰

34 **Hawai’i Island Community Development Corporation:**⁷¹ Since 1991, The Hawai’i Island Community
35 Development Corporation (HICDC), has been providing housing for low income families on Hawai’i
36 Island. Their mission is to assist low and moderate income residents of the County of Hawai’i secure
37 affordable housing. In the course of carrying out this mission, HICDC has been engaged primarily in two
38 programs: self-help housing and senior rentals.

69 <http://bigislandhousing.com/>

70 <http://www.hilohabitat.org/apply/index.php>

71 <http://hauolimauloa.org/new/partner/hawaii-island-community-development-corporation-hicdc/>

1 The self-help program involves land acquisition, financing, subdivision development, recruitment and
2 mortgage qualification of families, securing sub-contractors, permits and working with families to
3 construct their homes. The families work together under HICDC's terms and conditions of "sweat
4 equity." The self-help housing program has developed more than 300 homes in 31 separate projects and
5 has involved hundreds of self-help builders.

6 For low income seniors, HICDC has completed rental units in six projects with a seventh project of 60
7 units nearing completion. This seventh project, the Moho'uli Senior Housing Project, is expected to be
8 completed in late 2013 and is the first phase of an eventual 150 unit senior complex.

9 Currently, HICDC is in the process of consolidating and re-subdividing two lots Mauka of Ka'akepa St. in
10 Pepe'ekeo into a 42-lot to support developing self-help program homes.

11 **The Hawai'i HomeOwnership Center (HHOC)**⁷² provides education, information, and support to create
12 successful first-time homeowners in Hawai'i. By addressing barriers and increasing rates of home
13 ownership, the HHOC aims to build stronger families and communities throughout the state of Hawai'i.

14 The HHOC is a chartered member of the NeighborWorks Network, a select group of over 230 non-profit
15 organizations serving urban and rural communities across the country. The NeighborWorks Network is
16 part of NeighborWorks America, a national non-profit created by Congress with a direct appropriation of
17 federal funds. The HHOC provides mortgage assistance with programs for 5 percent down payment and
18 foreclosure prevention.

19 **The Hawai'i Centers for Independent Living (HCIL)**⁷³ is a non-profit organization operated by and for
20 people with disabilities to ensure their rights to live independently and fully integrated into the
21 community of their choice, outside of institutional care settings. The Center was incorporated on June
22 15, 1981 on the historical constitutional beliefs of civil rights and the empowerment of people with
23 disabilities to have equal access, opportunities and creating choices in life, regardless of the severity of
24 their disability. This organization helps its clients with housing assistance and referrals.

25 **Hāmākua Housing Corporation:** Upon the closing of the Hāmākua Sugar Company in 1994 and the
26 cessation of its housing programs for its employees, the Office of Housing and Community Development
27 (OHCD) coordinated the use of Federal funds totaling \$1.6 Million to preserve the economic vitality and
28 secure the social structure of communities from Hilo to Hāmākua. This was accomplished by assisting
29 the non - profit Hāmākua Housing Corporation to subdivide the defunct Hāmākua Sugar plantation
30 camps into individualouselots. Assistance in obtaining title to the newly subdividedouselots was then
31 provided to those former Hāmākua Sugar Company's employees who participated in the final harvest.
32 Upon completion of the conveyance process, OHCD established a program by which qualified owners of
33 the plantation homes were given a \$2,250 grants specifically for emergency improvements to the
34 plantation homes. Over 300 plantation homeowners benefited from this program. Other programs
35 included the design of water distribution systems in Pa'auilo and 'O'ōkala, training for six newly formed
36 community associations, and the closing of existing gang cesspools and sewage lagoons. Located in
37 Pa'auilo exists today and still owns many parcels of vacant land and homes scattered throughout the
38 Planning Area.

72 <http://www.hihomeownership.org/>

73 <http://www.cil-hawaii.org/>

1 **Other Housing Tools, Programs, and Strategies**

2 **PolicyLink**⁷⁴ provides an excellent overview of the range of strategies that communities use to assure
3 affordable housing, including links to hosts of other online resources. It also summarizes six affordable
4 housing tool sets:

- 5 ▪ Regulate the private housing market through rent control, controlling conversion of rental property
6 to owner-occupied housing, and “anti-flipping” transfer taxes
- 7 ▪ Create nonprofit-owned affordable housing that is either rented or sold at affordable prices to very-
8 low, low, and/or moderate-income people
- 9 ▪ Increase affordable housing opportunities, including self-help or sweat-equity housing, as done by
10 Habitat for Humanity and the Hawai’i Island Community Development Corporation
- 11 ▪ Encourage resident-controlled limited-equity ownership in which residents own their units,
12 providing security, wealth creation, and a degree of control and investment. The ownership is
13 limited in certain ways, however, in order to make the unit more affordable to the initial buyer and
14 future owners. There are usually limits on the price at which the housing can be resold or leased,
15 and sometimes to whom. Options for limited-equity housing include condominiums, cooperatives,
16 and land trusts.
- 17 ▪ Leverage market-rate development pressures by requiring or providing incentives for market-rate
18 development to include a percentage of below-market rate units in new developments (called
19 inclusionary zoning) or by requiring fees or land from new development to develop subsidized
20 affordable housing. This is the intent of Hawai’i County Code Chapter 11.
- 21 ▪ Preserve publicly assisted, affordable housing by building public housing or by limiting owners’ of
22 subsidized housing ability to resell at market rates.

23 **Smart Growth Principles and Affordability:** Many communities are realizing the benefits of achieving
24 affordable housing through smart growth planning. The smart growth approach to housing—compact in
25 nature, green in design and construction, and transit-rich in options—can help both communities and
26 their residents be better stewards of the environment and achieve more affordable, livable
27 communities. The conventional approach to housing—large-lot, dispersed, and suburban—has
28 contributed to the conversion of rural land at a rate three times faster than population has grown, as
29 well as a rise in vehicle miles traveled that is also triple that of population growth. This approach
30 challenges our ability as a nation to maintain and protect air and water quality, as well as local
31 governments' ability to finance and maintain the supporting infrastructure of schools, utilities, street
32 networks, and police and fire protection. It also determines the housing and transportation options
33 available to Americans.⁷⁵

34 Smart growth approaches support the construction of healthy homes, built with green building
35 techniques and materials, in locations that permit access to a range of transportation choices. They
36 support the construction of a range of housing types to meet the needs of all households, including
37 families, the elderly, and young professionals. They encourage investment and redevelopment in
38 existing communities, providing an opportunity to use existing infrastructure, as well as to revitalize and
39 add amenities in areas that have suffered from disinvestment. Finally, they provide a critical part of our
40 response to climate change, in which buildings and transportation contribute 63 percent of our nation's

74 http://www.policylink.org/site/c.lkIXLbMNJrE/b.5137215/k.14C2/Affordable_Housing_Development.htm

75 <http://www.epa.gov/smartgrowth/topics/ah.htm>

1 greenhouse gas emissions. Even with advancements in fuel and vehicle technology, we will be ill-
2 equipped to turn the tide on climate change without an improved approach to where we live and how
3 we get around. These approaches deliver benefits for households-better quality of life, more choices,
4 and financial savings-as well as for communities. They are an important part of our approach to
5 protecting the environment.

6
7 Many communities want to foster economic growth, protect environmental resources, enhance public
8 health, and plan for development, but may lack the tools, resources, and information to achieve their
9 goals. In response to this demand, the U.S. Environmental Protection Agency (EPA) developed the Smart
10 Growth Implementation Assistance (SGIA) Program.

11
12 The SGIA program is an annual, competitive solicitation open to state, local, regional, and tribal
13 governments (and non-profits that have partnered with a governmental entity) that want to incorporate
14 smart growth techniques into their future development. Once selected, communities receive direct
15 technical assistance from a team of national experts in one of two areas: policy analysis (e.g., reviewing
16 state and local codes, school siting guidelines, transportation policies, etc.) or public participatory
17 processes (e.g., visioning, design workshops, alternative analysis, build-out analysis, etc.). The assistance
18 is tailored to the community's unique situation and priorities. EPA provides the assistance through a
19 contractor team – not a grant. Through a multiple-day site visit and a detailed final report, the multi-
20 disciplinary teams provide information to help the community achieve its goal of encouraging growth
21 that fosters economic progress and environmental protection. EPA initiated the SGIA program in 2005
22 with three goals in mind:

- 23
- 24 ▪ To support communities interested in implementing smart growth policies;
 - 25 ▪ To create regional examples of smart growth that can catalyze similar projects in the area; and
 - 26 ▪ To identify common barriers and opportunities for smart growth development and create new tools
27 that other communities can use.⁷⁶

28 **Partners for Livable Communities**⁷⁷ is a non-profit leadership organization working to improve the
29 livability of communities by promoting quality of life, economic development, and social equity. Since its
30 founding in 1977, Partners has helped communities set a common vision for the future, discover and use
31 new resources for community and economic development, and build public/private coalition to further
32 their goals.

33 One of their key program areas is "Aging in Place Initiative Developing Liveable Communities for all
34 Ages." Since 1989, Partners for Livable Communities has been a leader in raising awareness of the
35 opportunities inherent in the rise of the older adult population. Developing Liveable Communities for All
36 Ages looks beyond the fields of healthcare and social security and exPELORes housing options, economic
37 development, community support systems, and civic engagement.

38
39 In the course of this project, Partners has formed partnerships with the [National Association of Area](#)
40 [Agencies on Aging \(n4a\)](#), the International City and County Management Association (ICMA), the
41 National League of Cities (NLC) and the National Association of Counties (NACo). Major funding for Aging

76 <http://www.epa.gov/smartgrowth/sgia.htm>
77 <http://www.livable.org/services/technical-assistance>

1 in Place programs has come from the MetLife Foundation, AARP, and a number of local communities
2 interested in planning for their future.

3
4 Partners' Community Technical Assistance program is designed to support public/private partnership in
5 goal setting and visioning, to help design action plans and to assist civic leaders in implementation.
6 Partners' comes to you and provides the training, stimulation, brainstorming and the process of how to
7 go from planning to action for community problem solving. Partners' works with a wide body of civic
8 leadership, including local governments and elected officials, chambers of commerce, community
9 developers, cultural organizations, and community-based organizations.

10
11 **Rebuilding Together**⁷⁸ Affiliate Network consists of 200 chapters, located throughout the United States.
12 For almost 25 years, Rebuilding Together has provided extensive home rehabilitation and modification
13 services to homeowners in-need. Their network of almost 200 affiliated non-profits brings together
14 200,000 volunteers and completes nearly 10,000 projects each year. For every \$1 donated to Rebuilding
15 Together, \$4 of value is delivered to our projects. Collectively that's over \$1.5 billion in market value
16 reinvested to date into the communities they serve. With the help of everyday citizen volunteers, skilled
17 tradespeople, the support of local business and major corporate partners, Rebuilding Together affiliates
18 make life better for thousands of low-income homeowners every year. Their work positively impacts
19 the condition of the surrounding community as well, through community center rehabilitation,
20 playground builds, and partnerships with organizations focused on energy efficiency, sustainable
21 community gardens, volunteer engagement, and education.

23 **Previous Planning/Studies**

24 **State**

25 **State of Hawai'i public Housing Authority, Hawai'i Housing Policy Study (2003):** State-wide housing
26 study that presented housing data for each of the four Counties, including: economic conditions and
27 projected growth, population, number of households, household income, number of occupied housing
28 units, vacancy rates, market conditions for owner-occupied and rental housing, and forecast housing
29 demand.⁷⁹

30 **[HPHA Public Housing Project "Locations and Descriptions"](#):** Contains the list of Hawaii Public Housing
31 Authority projects throughout the State. The list includes two developments within the Planning Area:
32 the senior Hale Hauoli, which contains 24 studio units and 16 one bedroom units and the 3, two
33 bedroom and 3, three-bedroom units Teacher Housing in Honoka'a.⁸⁰

34 **Hawai'i Housing Finance and Development Corporation**⁸¹

35 **[Housing Planning Study \(2011\)](#):** The Hawaii Housing Planning Study is a comprehensive set of housing
36 data prepared for a consortium of state and county housing agencies. The study identifies current
37 housing conditions, presents demographic and economic characteristics of Hawaii's households, and
38 measures housing needs, demand, and preferences. It also provides an update on the housing inventory
39 and rental housing data. The 2011 Hawai'i Housing Planning Study provides a single, comprehensive
40 compilation of data on housing market accessible to all parties engaged in providing housing for

78 <http://rebuildingtogether.org/whoweare/>

79 <http://hpha.hawaii.gov/documents/03policystudy.pdf>

80 http://hpha.hawaii.gov/housingprograms/projects/proj_loc.html

81 <http://dbedt.hawaii.gov/hhfdc/resources/reports/>

1 Hawai'i's people. The 2011 Study also includes information on alternative housing production
2 procedures, the interfaces between housing and transportation, and housing for special needs groups.⁸²

3 **Hawai'i Housing Planning Study Rental Report (2011):** The Rental Housing Study is a fundamental
4 component of the Hawai'i Housing Planning Study 2011. The study provides the number and types of
5 housing units available for rent, vacancy rates, demand, and monthly rent rates for those units, as well
6 as forecasts the housing needs of Hawai'i residents. The rent study was expanded in 2011 to include
7 data from the American Community Survey, the Office of Housing and Urban Development's (HUD) Fair
8 Market Rents, and other sources.⁸³

9 **Hawai'i State 2010 - 2014 Consolidated Plan:** The State Consolidated Plan provides a five-year strategy,
10 housing needs discussion, and market analysis to address the housing needs of Hawai'i's citizens through
11 State administration of the Home Investment Partnerships (HOME), Emergency Shelter Grant (ESG), and
12 Housing Opportunities for Persons with AIDS (HOPWA) programs. The Consolidated Plan is also an
13 application for funds to the U.S. Department and Housing and Urban Development for the HOME, ESG
14 and HOPWA programs, and provides a basis for measuring progress and performance under those
15 programs. The City and County of Honolulu is an entitlement jurisdiction and is required to prepare its
16 own Consolidated Plan (Plan); this Plan focuses on the Counties of Hawaii, Kauai, and Maui.

17 **County of Hawai'i⁸⁴**

18 **2006 Housing Policy Study:** The objectives of the Hawaii Housing Policy Study Update (HPS), 2006 were
19 to update the information gathered in previous studies and to continue the development of the Study as
20 a comprehensive housing planning tool. Findings for the County of Hawaii reported in the study are
21 based on data from many sources, including but not limited to the five components of HPS 2006: the
22 housing stock inventory, the rental price study; the housing production study; the Housing Demand
23 Survey; and the Hawaii Housing Model. In 2006, the housing model was restructured in response to the
24 needs of data users.

25 **SMS Housing Planning Study (2011):** This is the Hawai'i County excerpt from the State-wide 2011
26 Housing Planning Study. The study identifies current, Hawai'i County housing conditions, demographic
27 and economic characteristics of Hawai'i County households, and measures housing needs, demand, and
28 preferences. It also provides an update on the housing inventory and rental housing data. The 2011
29 Study also includes information on alternative housing production procedures, the interfaces between
30 housing and transportation, and housing for special needs groups.

31 **2010 - 2014 Hawai'i County Consolidated Plan:** The Consolidated Plan is required by the Department of
32 Housing and Urban Development for jurisdictions receiving federal funds from Community Development
33 Block Grant (CDBG) and other federal programs. The 2010 - 14, 5-year plan identifies the needs of and
34 develops a plan for housing of very low, low, and moderate income families. The Consolidated Plan
35 funds are used for projects that improve the quality of living for lower-income families.

36 The County's Consolidated Plan has three major sections: Housing & Special Needs Housing; Homeless;
37 and Community Development. The Plan provides goals, priorities, needs, and data used to develop the
38 plan for how the County intends to administer the HUD CDBG Program.

82 <http://files.hawaii.gov/dbedt/hhfdc/resources/HHPS2011%20study.pdf>
83 <http://files.hawaii.gov/dbedt/hhfdc/resources/HHPS%20rental.pdf>
84 <http://www.hawaiicounty.gov/office-of-housing/>

1 The State of Hawai'i's Consolidated Plan provides background, direction, and a plan for how the State
 2 intends to administer HUD's Home Investment Partnership Program (HOME), Emergency Shelter Grant
 3 ESG), and Housing Opportunities for Persons with AIDS (HOPWA) to assist in meeting the housing needs
 4 of Hawai'i's citizens.⁸⁵

5 **Affordable Housing Analysis Table**

6 The following Table shows the process used in evaluating the findings from the research and
 7 consultations throughout the analysis process up to this point. The Table clearly identifies:

- 8 ▪ **Challenges** (1st column) identified in the analysis.
- 9 ▪ **Support/Rationale** (2nd column) lists Policy Support (applicable governmental policies) and Plan
 10 Support (how the issue relates to researched plans/studies). This column will generally link back to
 11 the associated sections of the analysis document where that strategy support is located.
- 12 ▪ **Possible CDP Strategy Direction** (3rd column) – the general strategy direction the CDP will likely be
 13 taking in addressing the challenge in order to meet the community's objectives.

14 The Strategy Directions are categorized into one of the four following CDP Strategy Types:

- 15 ▪ **Policy:** establish policy with policy maps (Official Land Use Map) and policy statements related to
 16 land use, watersheds and natural features, public improvement priorities, government services, and
 17 public re/development;
- 18 ▪ **Advocacy:** recommend advocacy with federal and state policy makers and agencies for policies,
 19 regulations, incentives, programs, and action;
- 20 ▪ **Community-based, Collaborative Resource Management (CBCM):** including research, place-based
 21 planning and program design, and program implementation;
- 22 ▪ **Easement and Acquisition (E&A):** identify easement and acquisition priorities by fee simple
 23 ownership or through conservation easements;

24 At times, the CDP Strategy Direction will relate to other Analysis sections not yet complete (Natural and
 25 Cultural Resources and Economy). In those cases, the table may refer to the appropriate section still
 26 under development, but will not contain a link to that section until that section is complete.

27 **Table 5. Affordable Housing Analysis Table**

| Challenges | Support/Rationale | Possible CDP Strategy Direction |
|---|---|--|
| <p>Housing values significantly increased between 2000 and 2010, making the ability to purchase a home more difficult for the average family.</p> | <p>Plan Support: SMS 2011 Planning Study and 2010 - 2014 County of Hawai'i Consolidated Plan</p> <p>Policy Support: Goal 9.2 (b), (c), (d); Policy 9.3 (k), (r), (s), (t), and (y); and Course of Action 9. 5. 3. 2(a).</p> | <p>Policy: Include CDBG programs and funding in the 2015 – 2019 County Consolidated Plan and the State Consolidated Plan dedicated to first time home buyer downtown payment assistance, closing costs, and gap loans, and promote this</p> |

85 <http://records.co.hawaii.hi.us/WebLink8/PDF/4ssricb0wtypruue4jrldgyw/4/Plans%20-%202010%20-%202014%20County%20of%20Hawai%60i%20Consolidated%20Plan.pdf>

| | | |
|---|---|---|
| | | <p>program to the Hāmākua residence.</p> <p>Policy: Enhancing buying capacity by conduct homebuyer education and counseling sessions in the Hāmākua Planning Area on the availability of Federal, State and Local funding programs, such as the State Hula Mae, Mortgage Credit Certificate; and Financing Programs; such as VA; FHA, Rural USDA Direct Home Loans, Guaranteed Home Loans and Self-help Housing; the Home\$tart Program; etc.</p> <p>Advocacy: Propose and support amendments to County's taxing powers as a possible means to increase the supply of affordable housing.</p> <p>CBCM: Work with self-help non-profits, such as Hale Aloha O Hilo Habitat for Humanity in Hilo to promote construction of homes for eligible buyers in the Planning Area.</p> <p>CBCM: Encourage County agencies to partner with community organizations (non-profits) capable of assisting with development of affordable housing and homebuyer financial assistance programs.</p> |
| <p>Wages are not increasing comparably to housing cost and thus resulting in families paying more than the recommended 30 percent of gross monthly income for housing expenses.</p> | <p>Plan Support: SMS 2011 Planning Study, 2010 - 2014; County of Hawai'i Consolidated Plan and 2011 Housing Planning Rental Study</p> <p>Policy Support: General Plan Goal 9.2 (b), (c), (d), and (f); Policy 9.3 (e), (k), (r), (s), (t), (y), (o), and (p); and Course of Action 9. 5. 3. 2(a).</p> | <p>Policy: Enhance rental capacity by including In the 2015 - 2019 Consolidated Plan a goal to leverage HOME funds with other private, non-profit funding sources to develop a tenant-based Rental Assistance Program and to construct affordable rental housing in the Planning Area.</p> |



| | | |
|--|--|---|
| | | <p>Policy: Program in the 2015 - 2019 Consolidated Plan projectdevelopment matching funds to implement projects that produce affordablehousing using a self-help building method.</p> <p>Policy: Encourage the County to review the County Code Ohana regulations to remove any potential barriers to the construction of Ohana units to increase the supply of affordable rentals in the Planning Area.</p> <p>Policy: The County should hold educational programs for potential and existing home buyers on the availability of the Family Self-Sufficiency Program and the Section 8 Housing Assistance Payments available for mortgage payments to allow eligible low-income, first-time home buyer Section 8 Participants the ability to purchase an existing dwelling unit to be used as their primary residence.</p> <p>Policy: Utilizing the resources from programs such as HUD's Making Home Affordable and the Hawai'i HomeOwnership Center's foreclosure prevention programs, the County should hold educational programs for existing homeowners who may be in jeopardy of losing their homes due to high monthly payments.</p> <p>Advocacy: Encourage the County and State to program funds in the State 2015 to 2019 Consolidated Plan to develop affordable rental housing and programs to low and very low recipients in the Planning Area.</p> |
|--|--|---|

| | | |
|---|--|---|
| <p>The Planning Area Population is aging, which will create a demand for "aging in place" housing and services that presently are limited in the Planning Area.</p> | <p>Plan Support: SMS 2011 Planning Study and 2010 - 2014 County of Hawai'i Consolidated Plan</p> <p>Policy Support: General Plan Goal 9.2 (b), (c), (d), and (f) and Policy 9.3 (b), (e), (k), (r), (s), (t), (y), (o), and (p).</p> | <p>Policy: Include CDBG programs and funding in the 2015 – 2019 County Consolidated Plan and the State Consolidated Plan dedicated to development of affordable senior rental housing in the Hāmākua Planning Area.</p> <p>Advocacy: Encourage the County and State to program funds in the State 2015 to 2019 Consolidated Plan for lower income senior rental housing and facilities.</p> <p>CBCM: Encourage County agencies to utilize the technical resources of organizations such as Partners for Livable Communities to learn how to make the Hāmākua communities more accessible to the aging population to encourage aging in place.</p> <p>Policy/CBCM: Collaborate with the appropriate Hawaii County agencies and non-profits to create a one-stop center to provide information on housing choices and services for the aging populations. Utilize technical and financial resources provided through organizations such as as Partners for Livable Communities and Rebuilding Together, East Hawai'i Canter for Independent Living.</p> |
| <p>Basic infrastructure services such as water/sewer are not consistently available in every town.</p> | <p>Plan Support: SMS 2011 Planning Study and 2010 - 2014 County of Hawai'i Consolidated Plan</p> | <p>Policy: Include CDBG programs, funding and prioritize in the 2015 – 2019 County Consolidated Plan infrastructure (Water /sewer</p> |



| | | |
|---|---|--|
| | <p>Policy Support: General Plan Goal 9.2 (a) and (d), and Policy 9.3 (a)</p> | <p>/street improvements; solid waste disposal; and/ or flood drainage improvements) as needed in the Hāmākua Planning Area to facilitate rental and ownership housing development and existing neighborhood preservation.</p> <p>CBCM: Consider working with the County to create assessment districts to fund necessary infrastructure to improve the quality of existing neighborhoods.</p> |
| <p>The Planning Area has a large supply of older housing that presently or in the near future will need rehabilitation in order to maintain the units as viable housing stock</p> | <p>Plan Support: SMS 2011 Planning Study and 2010 - 2014 County of Hawai'i Consolidated Plan</p> <p>Policy Support: General Plan Goal 9.2 (a), (c), and (e); Policy 9.3 (a), (c), and (l); and Course of Action 9. 5. 2. 2 (a).</p> | <p>Policy: Include CDBG programs, funding and prioritize in the 2015 – 2019 County Consolidated Plan to provide loans/ grants for home rehabilitation.</p> <p>Policy: Include CDBG and HOME programs and funding in the 2015 – 2019 Consolidated Plan for home repair for very low and low income homeowner and promote this program to the Hāmākua residence.</p> <p>CBCM: Encourage County agencies to partner with community organizations (non-profits) capable of assisting with providing education and information to homeowners about funding programs to assist with residential rehabilitation, such as the Rural USDA Direct Housing Loan Program, the USDA Home Improvement and Repair Loans and Grants, the Rebuilding Together organization, etc.</p> |

| | | |
|--|--|--|
| <p>The existing town cores have historic buildings with attractive architectural character and well developed neighborhoods that could be threatened as new growth occurs. Careful attention to residential design, building placement, and density will be critical to maintaining community character.</p> | <p>Plan Support: SMS 2011 Planning Study and 2010 - 2014 County of Hawai'i Consolidated Plan</p> <p>Policy Support: General Plan Goal 9.2 (a), (d) and Policy 9.3 (e).</p> | <p>Advocacy: Encourage the County to develop Community Design Guidelines for new residential development that fosters and preserves the existing character of the communities. Encourage the County to utilize the Smart Growth principles and resources provided by the US EPA Smart Growth Implementation Assistance Program when developing the guidelines.</p> <p>CBCM: Encourage County agencies to partner with community organizations (non-profits) to utilize the resources from organizations such as Rebuilding Together to implement residential rehabilitation projects in the Hāmākua Planning Area.</p> |
|--|--|--|

1

2 **Transportation**

3 **Overview, Assets, and Challenges**

4 **Figure 11: “Regional Transportation Network”** includes much of the Planning Areas transportation
5 infrastructure referenced below.

6 **State Highways:** There is one regional arterial providing access to and through the Planning Area—
7 Māmalahoa Highway (also known as the Hawai’i Belt Road). The Hawai’i Belt Road is a State two-lane
8 road. State Route 240 (aka: Honoka’a-Waipio Road), a nearly ten-mile highway that intersects with
9 Hawai’i Belt Road at the Honoka’a turn-off and travels through downtown Honoka’a (in downtown
10 Honoka’a it is known as Māmane Street) leads to Waipi’o Valley.

11 **Old Māmalahoa Highway/Alternative Route:** The Old Māmalahoa Highway once served as the regional
12 highway through the Planning Area connecting the historic towns and villages. When the State built the
13 Hawai’i Belt Road, the State transferred segments of the Old Māmalahoa Highway to the County. It is
14 narrow, curvy, and scenic. Portions of Old Māmalahoa Highway are currently used as
15 alternative/emergency routes as necessary. Further improvements and increased maintenance may be
16 needed in order to ensure that segments of this route are serviceable for two-wheel drive cars for
17 alternative/emergency usage.

18 **County Roads:** The County has relatively good connectivity and numerous roads that travel
19 mauka/makai. Part of Māna Road is located in the Planning Area, and it provides access to mauka
20 hunting, hiking, recreation, and provides an alternative route to Waimea. Also, due to the vulnerability
21 of traffic disruptions from lane closures on Highway 19, increased redundancy of north-south connector



1 roads and **alternative/emergency routes** running parallel to the highway would be advantageous in
2 order to increase overall connectivity and deal with emergency situations.

3

4 **County Bridges:** The County also has numerous bridges that were built by plantation companies during
5 the plantation era. Many of these older bridges are in poor condition, and the Federal Highways
6 Administration has identified several as “structurally deficient”⁸⁶. “Federal guidelines classify bridges
7 “structurally deficient” if one of the three key components is rated at 4 or less (poor or worse), meaning
8 engineers have identified a major defect in its support structure or its deck. (There is a handful of other
9 criteria that can result in a deficient grade, but for the majority of deficient bridges, one of these three
10 primary components rates a 4 or below.) Federal law requires states to inspect all bridges 20 feet or
11 longer at least every two years, though states typically inspect structurally deficient bridges far more
12 often.”⁸⁷⁸⁸

13 As noted by Transportation For America’s 2013 report⁸⁹:

14 *Bridges may be rated deficient for a range of reasons and not all of them pose an immediate threat*
15 *to public safety. However, allowing bridges to remain in serious need of repair can lead to the*
16 *sudden closure of a critical transportation link or, far worse, a collapse that results in lives lost and a*
17 *major economic impact to the affected region.*

18 The affected communities that rely on these antiquated bridges are thus vulnerable to isolation if the
19 bridges were to fail or be closed. Please see the table [below](#) for a list of structurally deficient bridges in
20 the Planning Area.

21 Of particular concern is the prevalence of older and deficient bridges serving the communities of Kalōpa-
22 Pa’auilo. This area has the highest concentration of bridges in the Planning Area. Of the nineteen
23 bridges in the Kalōpa-Pa’auilo Mauka area, ten are wooden and date back to the 1920s⁹⁰, and eleven are
24 deemed structurally deficient by the Federal Highways Administration (see table below). The
25 prevalence of old and deficient bridges leaves this community particularly vulnerable to bridge failures,
26 other traffic interruptions, and/or inaccessibility in the event of a natural disaster or localized
27 infrastructure failure.

86 Structurally deficient bridges are defined by the Federal Highways Administration as bridges that require significant maintenance, rehabilitation or replacement. See: <http://www.kitv.com/news/hawaii/report-nearly-13-of-hawaiis-bridges-are-structurally-deficient/-/8905354/20299236/-/9snft7/-/index.html?absolute=true> and <http://www.fhwa.dot.gov/bridge/0650dsup.cfm>

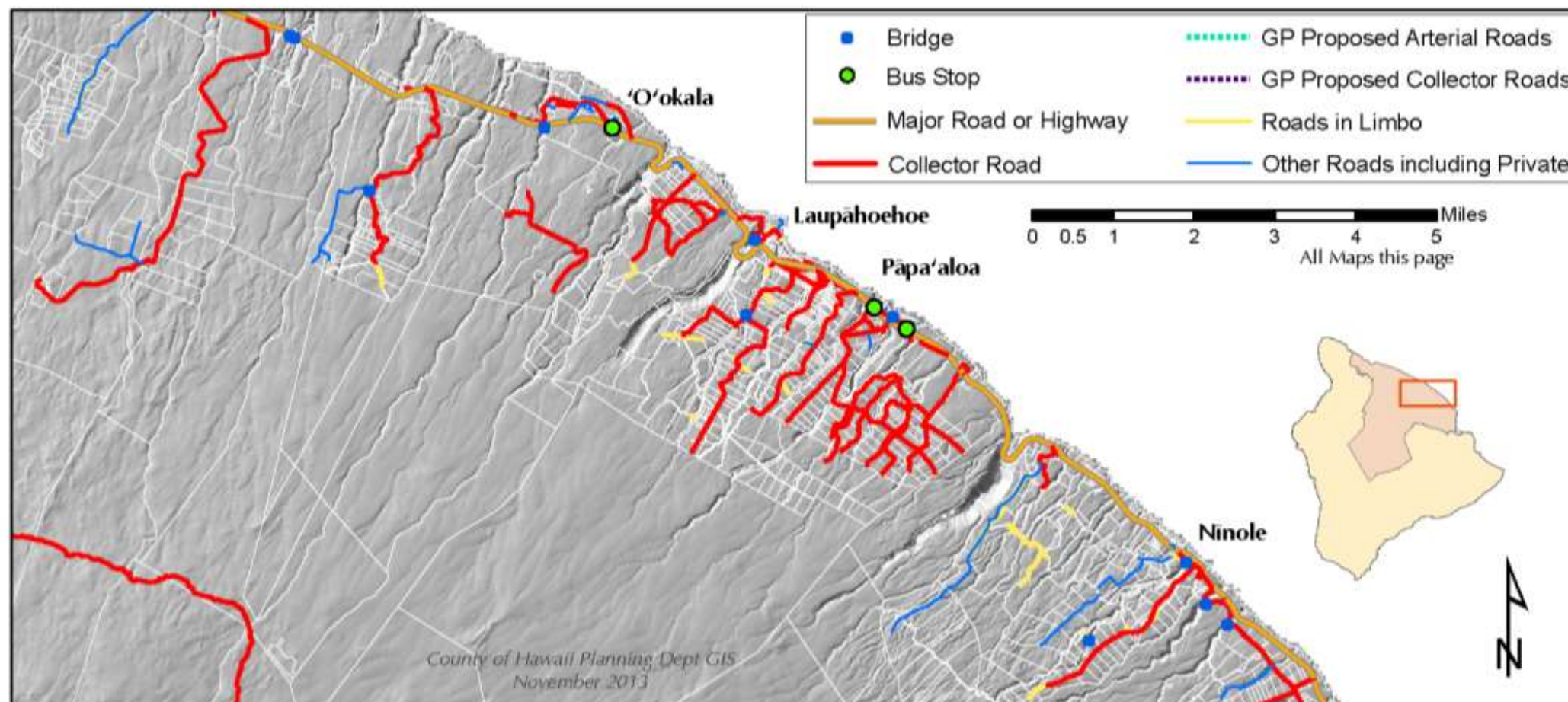
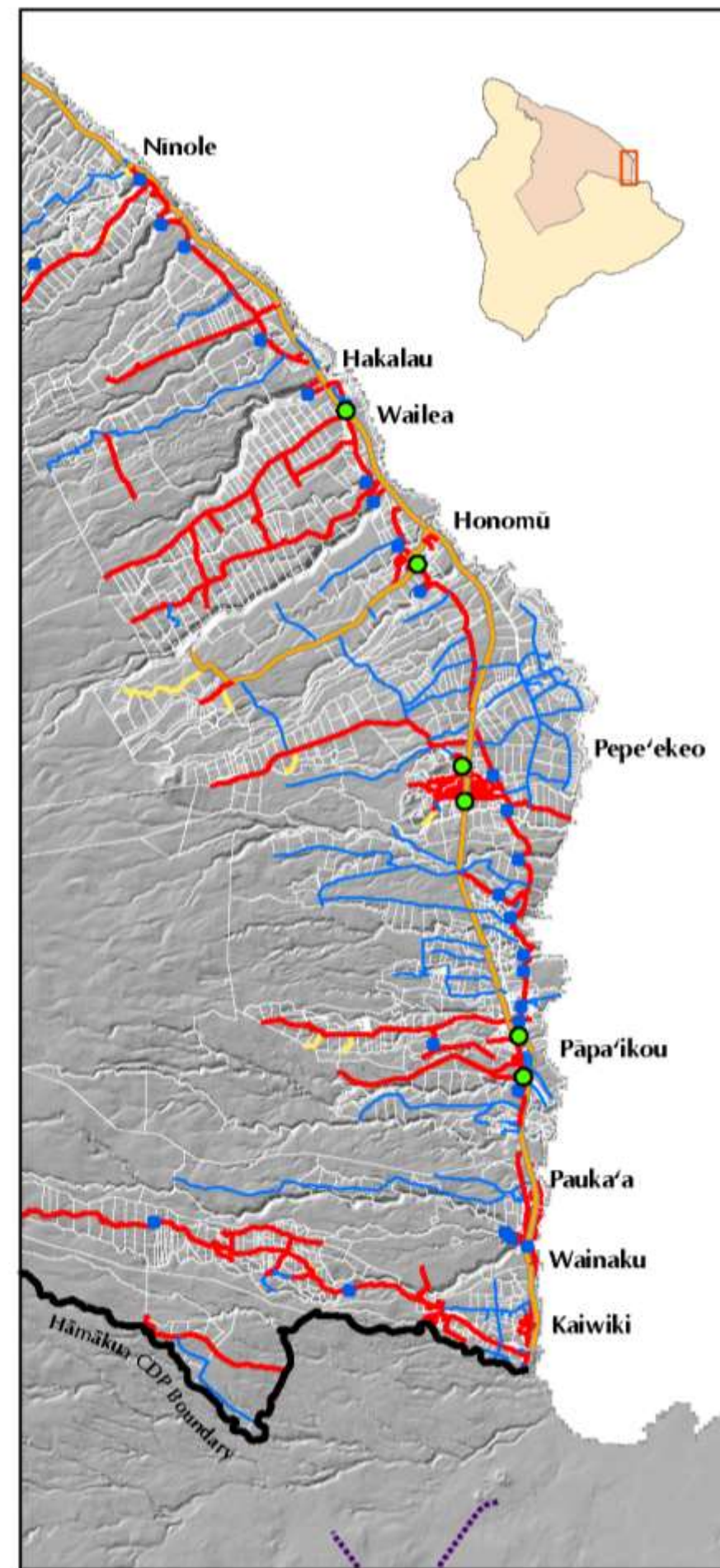
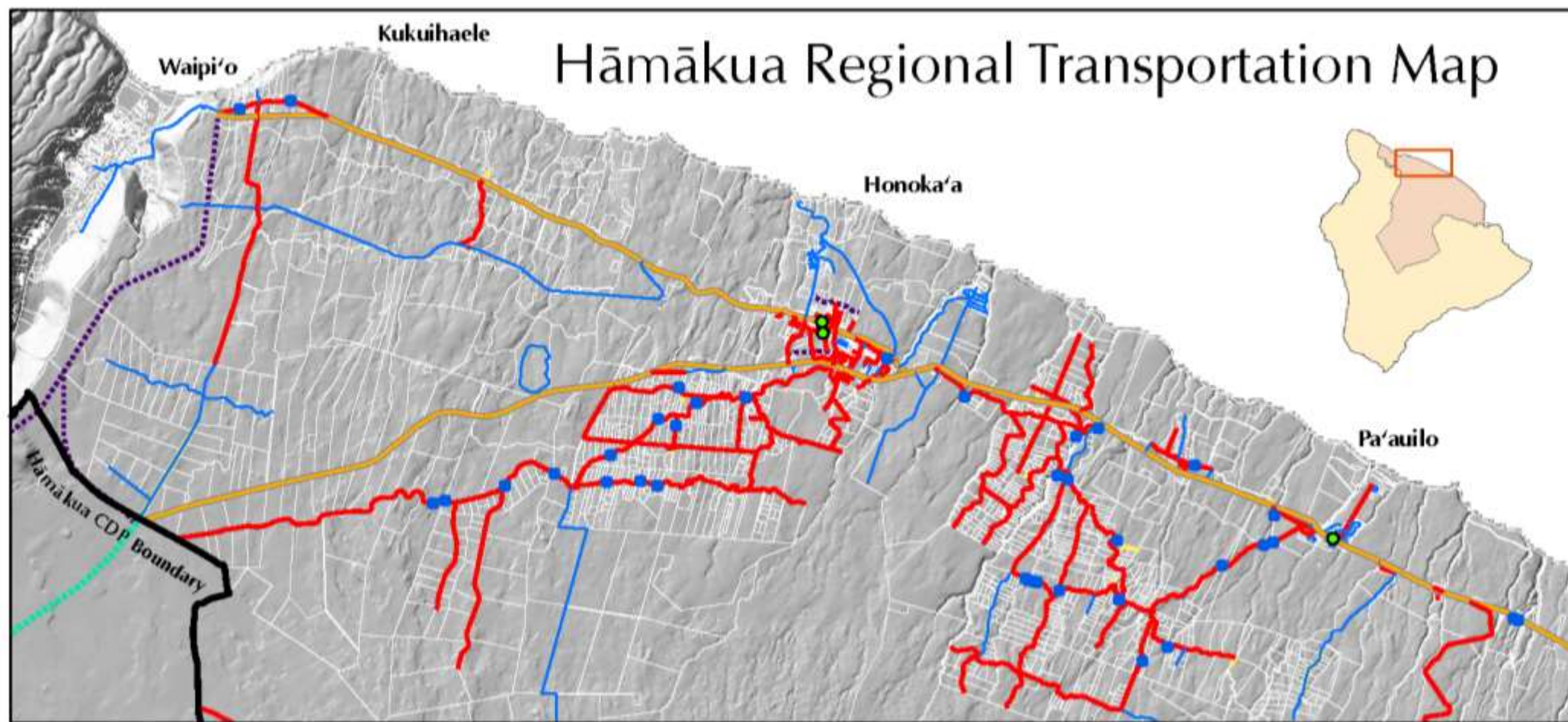
87 <http://t4america.org/docs/bridgereport2013/2013BridgeReport.pdf>

88 Note: Bridges must span a distance of 20 feet to be listed on the Federal Highways Registry, which means there may be shorter bridges not listed on the Registry in need of repairs or replacement within the Planning Area

89 <http://t4america.org/docs/bridgereport2013/2013BridgeReport.pdf>

90 <http://www.hawaii-countycdp.info/hamakua-cdp/about-the-hamakua-cdp-planning-area/past-and-current-planning-activities-in-the-hamakua-cdp-planning-area/Bridges.pdf/view>

Figure 11. Regional Transportation Map



- Bridge
- Bus Stop
- Major Road or Highway
- Collector Road
- - - GP Proposed Arterial Roads
- - - GP Proposed Collector Roads
- Roads in Limbo
- Other Roads including Private

0 0.5 1 2 3 4 5 Miles
All Maps this page



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1 **Table 6: Structurally Deficient Bridges in the Planning Area**^{91 92}

- 2 Planning Area Bridges that have been deemed structurally deficient by the Federal Highways
 3 Administration

| | Location | Approximate Name of Bridge | Nearest TMK* | Year Built | Avg. Daily Traffic | Bridge Owner |
|------------------|---|--|--|----------------------|--------------------|--------------|
| Rural South Hilo | Wainaku, Kaiwiki Rd. | Kaiwiki Rd | 2-6-009:010 | 1900 | 280 | COH |
| | Honoli'i, Old Māmalahoa Hwy. - 3 Bridges | Maili Stream Bridge Kaiwiki Br. #1Honoli'i Stream Bridge | 2-6-012:045 2-6-012:33 2-6-012:034 | 1916 1920 1911 | 530 | COH |
| | Wainaku** ,Kaiwiki Rd. | Kaiwiki Hmstd. Bridge | 2-6-011:015 | | -- | COH |
| | Onomea, Old Māmalahoa Hwy - 2 bridges | Ka'ie'ie Stream Bridge | 2-7-035:012 | 1904 1929 | 1090 | COH |
| | Pepe'ekeo, Old Māmalahoa Hwy | | 2-8-007:006 | 1930 | 330 | COH |
| | Onomea** | Onomea Camp Road Bridge | 2-7-010:004 | | -- | COH |
| | Honomū**, Old Māmalahoa Hwy | Honomū Stream | 2-8-013:003 | | -- | COH |
| | Between Honomū & Wailea, Kolekole area of Old Māmalahoa Hwy | Ka'ahakini Stream Bridge | 2-9-003:039 | 1929 | 40 | COH |
| North Hilo | Umauma, Old Māmalahoa Hwy | Opea Stream Bridge | 3-1-003:017 | 1912 | 200 | COH |
| | Nīnole, Old Māmalahoa Hwy | Waikaumalo Stream Bridge | 3-2-002:062 | 1920 | 200 | COH |
| | Umauma, Old Māmalahoa Hwy | Umauma Stream Bridge | 3-1-001:027 | 1920 | 980 | COH |

91 <http://hosted.ap.org/specials/interactives/wdc/bridges/>

92 <http://t4america.org/resources/bridges/>



| | | | | | | |
|---------|--|--|--|------|--------------------------|-----|
| | Pāpa'aloa, near Pāpa'aloa Estates | | 3-5-003:073♦ | 1923 | 200 | COH |
| | Manowai'opae Hmstd. Rd. | Kilau Stream Bridge | 3-6-003:012 | 1930 | 200 | COH |
| | 'O'ōkala | Kaula Gulch Bridge | 4-1-001:015 | 1928 | 300 | COH |
| Hāmākua | Pa'auilo | Mahuna Gulch Bridge | 4-2-002-020 | 1930 | -- | COH |
| | Pa'auilo, mauka (Ka'apahu Rd. area) 4 Bridges | Manienie Gulch Kalōpa Ali'ipali Bridge | 4-3-012:003 4-3-015:009 4-3-012:013 4-3-014:001 | | 200 200 200 200 | COH |
| | Pa'auilo, Ka'apahu Hmstd. Rd. & Kalia Rd. 2 Bridges | | 4-4-011:012 4-4-011:012 | 1930 | 200 | COH |
| | Pa'auilo, Kalōpa 2 Bridges | Waika'alulu Gulch Bridge & Kalōpa Gulch Bridge | 4-4-009:009 4-4-008:002 | 1919 | 40 | COH |
| | Pa'auilo, mauka | Kalōpa Gulch Bridge | 4-4-002-007 | 1930 | 200 | COH |
| | Pa'auilo, mauka | Waika'alulu Gulch Bridge | 4-4-002-006 | 1930 | 200 | COH |
| | Āhualoa | Āhualoa #2 Br. Āhualoa #1 Br. | 4-6-007:024 4-6-009:006 | 1930 | 300 | COH |
| | <p>*These TMK numbers are used for reference purposes only. State and County bridges do not necessarily have tax map key numbers linked to their structure. The TMKs referenced by the Federal Highways Administration relates to the nearest associated TMK to the bridge structure, which is generally a TMK affiliated with a privately owned parcel.</p> <p>** Bridges with a double asterisk were listed on a previous inventory of structurally deficient bridges, but for unknown reasons, these could not be reconfirmed with the 2013 list.</p> <p>♦ The TMK used for reference here is no longer in use, possibly due to a recent subdivision.</p> | | | | | |

1 **Mass Transit:** Typical of rural areas with low population densities, public transit service is minimal other
 2 than the commute trip to the South Kohala resorts. One challenge with mass transit has been the lack of
 3 sheltered bus stops and the limited bus schedule.

4 The Hele-On Bus⁹³ currently has runs through the Planning Area (Hilo to Honoka’a). This route offers 13
 5 trips (9 Daily) and begins/ends in the Honoka’a Gym Complex upper parking lot and leaves the highway
 6 to go through the following Neighborhoods/communities: Pauka’a, Pāpa’ikou (stop at Post Office),
 7 Pepe’ekeo (stop at Kula’imano Apartments), Honomū (Stop at Ishigo Store), and Honoka’a.

8 Currently, there are two County constructed bus shelters - one in Pepe’ekeo (near the senior housing
 9 complex) and in Pāpa’ikou (near the school cross-walk) and two other community-built shelters (with
 10 materials provided by the County) in Pāpa’aloa and ‘O’ōkala. There is a new County bus shelter in the
 11 works for Pa’auilo (it will be located near the overpass on the makai side of the highway) and another
 12 one planned for Pāpa’ikou near the Plantation Museum and Post Office.

13 There is one official “Park-and-Ride” facility in Honoka’a which allows transit riders to park their vehicles
 14 in a secure area and access to reliable transit. An unofficial park-and-ride area is used in Laupāhoehoe
 15 next to the pedestrian overpass.

16 Coordinated Services for the Elderly (CSE) provides transportation for those unable to use conventional
 17 transportation (ill or disabled). For those who are not ill or disabled, Hawai’i County Economic
 18 Opportunity Council (HCEOC) provides paratransit services throughout the Planning Area on contract
 19 with the County Mass Transit Agency.

20 **Walkability within Towns and Villages:** Pedestrians, for the most part, walk on the street shoulders as
 21 many of the towns and villages in the Planning Area do not have sidewalks. While bicycles share the
 22 road with drivers, there are generally no bike lanes. These are typical rural conditions given the low
 23 traffic volume and narrower road width that slows the traffic speed. Where Highway 19 bisects towns
 24 (Pa’auilo, Laupāhoehoe, and Wailea/Hakalau), the State built pedestrian overpasses to aid in safe
 25 crossing.

26 **Lack of Redundancy:** While the Planning Area has relatively good connectivity, relying on one arterial
 27 can be problematic during traffic interruptions due to accidents, rock falls, bridge damage, road
 28 construction, or other disruptions. The lack of emergency alternative routes can cause significant traffic
 29 delays and present other problems (community isolation) if the cause of the delay is ongoing, or
 30 catastrophic in nature.

31 **Hazard Vulnerability:** The highway is vulnerable to landslides and rock falls, particularly during extreme
 32 weather events. Mitigation to minimize these hazards has improved the areas around two of the three
 33 gulches (Maulua and Laupāhoehoe), with Ka’awali’i Gulch still slated for improvements⁹⁴. Bluff Stability
 34 is also an issue in areas where HWY 19 is close to the coastline (e.g., bluff stability strategies have been
 35 used in Umauma and Hakalau). Further hazard mitigation along HWY 19 may be needed throughout the
 36 Planning Area.

37 **Bridges:** Highway 19 comprises of multiple large bridge crossings. Many of these bridges are
 38 antiquated and some are registered as Historic Places⁹⁵. Hawai’i Department of Transportation has been

93 www.heleonbus.org

94 http://oeqc.doh.hawaii.gov/Shared%20Documents/EA_and_EIS_Online_Library/Hawaii/2000s/2009-07-08-HA-DEA-Hawaii-Belt-Rd-Rockfall-Protection-Maulua.pdf

95 <http://files.hawaii.gov/dlnr/shpd/architecture/reghaw-1205.pdf>

1 systematically making improvements to, or replacing, these bridges. However, the prevalence of large
2 bridges, coupled with their age and condition, serves as both an asset and challenge for the Planning
3 Area (click [here](#) for information on bridge deficiencies)

4 **Insufficient Passing Lanes:** Highway 19 has few safe areas to pass slower traffic due to the curves and
5 grades. Truck traffic is expected to increase with the logging industry.

6 **Impact of Saddle Road/Daniel K. Inouye Highway:** With the improvements to Saddle Road, more traffic
7 between the East side and West side of the island is potentially bypassing the Planning Area. This may
8 relieve future traffic growth, but it also may divert potential business from the Planning Area.

9 **Heritage Corridor/Scenic Lookouts:** Parts of Highway 19 have been designated as the Hāmākua Heritage
10 Corridor drive, and the drive is renowned as scenic for its natural beauty and its taste of ‘old’ Hawai‘i.
11 The highway also features several scenic overlooks where traffic can pull over to view the coastline.
12 Maintaining view sheds to the ocean and the mountain, and protecting the existing scenic overlook
13 areas from development and biological encroachment (e.g., tree and shrubbery blocking the views) is a
14 community priority for aesthetic and cultural reasons.

15 **Roads-in-Limbo (RIL):** The Planning Area has the highest number and mileage of roads-in-limbo in the
16 County. The territorial government created these roads to serve the homestead lots that were
17 subdivided in the late 1800’s to early 1900’s prior to Statehood. They are classified as either existing or
18 paper roads. For decades, the State and County government argued over maintenance responsibility
19 because of limited recourses. Typically, existing roads are referred to as “government roads” or
20 “homestead roads.”⁹⁶ In 2010, County Department of Public Works estimated they had a total of 100
21 miles of RIL⁹⁷ on their inventory. As funds become available, they are improving these roadways an
22 average of 3-5 miles per year⁹⁸.

23 The challenges of adopting/improving these roads includes how to pay to upgrade roads in poor
24 condition, stream-crossing problems, road segments that do not follow right-of-way boundaries, paper
25 roads that provide no physical access, and the issue of improperly and privately gated roads that block
26 public access.

27 Furthermore, questions over the safety of these roads, which can often include bridges, have given rise
28 to concerns over loss of property and lives, and associated liability issues. A recent (2012) death of a
29 tourist on a North Hilo RIL whose car was swept into a river during a storm highlights the increasing
30 dangers of these roads/bridges that have continued to experience development growth without
31 receiving proper maintenance or signage.

32 **General Plan Policies and Courses of Action**

33 **Policies**

- 34
- 35 ▪ 13.1.3(b): The agencies concerned with transportation systems shall provide for present traffic and
36 future demands, including the programmed development of mass transit programs for high growth
37 areas by both the private and public sectors.
 - 37 ▪ 13.1.3 (c): The improvement of transportation service shall be encouraged.

96 <http://www.hawaiicounty.gov/pw-roads-in-limbo/>

97 November 18, 2010 DPW Director Warren Lee, addressing the Pa`auilo Mauka and Kalopā Community Association (PMKCA)
re: “Roads in Limbo” (RIL)

98 <http://hawaiiitribune-herald.com/sections/news/local-news/residents-say-road-where-tourist-died-dangerous.html>

- 1 ▪ 13.1.3 (d): Consider the provision of adequate transportation systems to enhance the economic
2 viability of a given area.
- 3 ▪ 13.1.3 (e): Develop a comprehensive, islandwide multi-modal transportation plan that identifies the
4 location and operation of automobile, mass transit, bicycle and pedestrian systems, in coordination
5 with appropriate Federal and State agencies.
- 6 ▪ 13.1.3 (f): Work with various non-profit agencies to coordinate transportation opportunities.
- 7 ▪ 13.2.3(f): Consider the development of alternative means of transportation, such as mass transit,
8 bicycle and pedestrian systems, as a means to increase arterial capacity.
- 9 ▪ 13.2.3(i) Encourage the State Department of Transportation to establish special scenic routes within
10 and between communities.
- 11 ▪ 13.2.3(l): Adopt street design standards that accommodate, where appropriate, flexibility in the
12 design of streets to preserve the rural character of an area and encourage a pedestrian-friendly
13 design, including landscaping and planted medians.
- 14 ▪ 13.2.3(n) Encourage the development of walkways, jogging, and bicycle paths within designated
15 areas of the community.

16 **Courses of Action - Rural South Hilo**

- 17 ▪ 13.2.5.2.2(a) Portions of the old Māmalahoa Highway, especially those serving Pepe’ekeo and
18 Honomū, should be improved to provide a secondary north-south route along the Hāmākua coast.
- 19 ▪ 13.2.5.2.2(b) Major east-west collector roads between the old Māmalahoa Highway and the Belt
20 Highway and those serving upper homestead areas should be widened and improved.

21 **Courses of Action - North Hilo:**

- 22 ▪ 13.2.5.3.2 (a) Restore and maintain existing homestead roads.
- 23 ▪ 13.2.5.3.2 (b) Encourage the State Department of Transportation to improve those portions of the
24 Hawai’i Belt Highway at Maulua, Laupāhoehoe and Ka’awali’i Gulches.
- 25 ▪ 13.2.5.3.2 (c) Encourage the State Department of Transportation to realign that portion of the
26 Hawai’i Belt Highway at Kapehu Camp.
- 27 ▪ 13.2.5.3.2 (d) Encourage the State to install additional passing lanes at various sections along
28 Highway 19.

29 **Airports & Harbors - Course of Action:**

- 30 ▪ 13.3.5.3.2(a) Continue to improve the small boat ramp at Laupāhoehoe, extend the offshore
31 protective structure, and provide for adequate parking.

32 **Roadways - Courses of Action - Hāmākua:**

- 33 ▪ 13.2.5.4.2(a) Encourage the State to install additional passing lanes along Highway 19 at appropriate
34 locations.
- 35 ▪ 13.2.5.4.2(b) Provide for an industrial traffic connection leading from the former sugar mill to
36 Highway 19, separating this traffic from local traffic movement on Mamane Street.

- 1 ▪ 13.2.5.4.2(c) Encourage the State to construct a scenic highway from the Waipi’o Valley lookout
2 extending mauka to connect to Mud Lane at the entrance of Waimea.
- 3 ▪ 13.2.5.4.2(d) Improve County maintained roads and encourage the improvement of non-county
4 owned roads by the State of Hawai’i or private landowner.
- 5 ▪ 13.2.5.4.2(e) Consider alternatives in the management of Pakalana Street, such as its conveyance to
6 the State Department of Education or its conversion to a one-way traffic pattern.
- 7 ▪ 13.2.5.4.2(f) Provide a cross-town connection to Plumeria Street by extending Kamani Street.
- 8 ▪ 13.2.5.4.2(g) Provide a mauka-makai connection from the Kamani Street extension to Mamane
9 Street on the Hilo side of the elderly housing.
- 10 ▪ 13.2.5.4.2(h) Eliminate the Milo Street extension on the Waipi’o side of Pakalana Street.

11 **Mass Transit Policies**

- 12 ▪ 13.4.3(a): Improve the integration of transportation and land use planning in order to optimize the
13 use, efficiency, and accessibility of existing and proposed mass transportation systems.
- 14 ▪ 13.4.3(b): Support and encourage the development of alternative modes of transportation, such as
15 enhanced bus services and bicycle paths.
- 16 ▪ 13.4.3(d): Provisions to enhance the mobility of minors, non-licensed adults, low-income, elderly,
17 and people with disabilities shall be made.

18 **Boat Launch Course of Action**

- 19 ▪ 13.3.5.7(a): Provide for general aviation and small boat harbor facilities and launching activities as
20 the need arises. [See Parks and Recreation section for discussion of Laupāhoehoe Boat Ramp](#)

21 **Previous Planning**

22 **The Hawai’i Statewide Transportation Plan⁹⁹**

23 The HSTP, with a planning horizon of over twenty years (to 2025), provides policy-level direction to the
24 activities of the Hawai’i Department of Transportation and each of the county transportation agencies in
25 the near-term, mid-term, and long-term. The goals and objectives presented, together with the
26 appropriate strategies and examples of implementing actions, are broad enough to address projects and
27 programs that are not yet defined. At the same time, they are narrow enough to provide meaningful
28 guidance to planners, decision makers, and the public while seeking to identify specific projects and
29 programs for development. Each broad goal statement is followed by several specific objectives and
30 strategies to attain those objectives.

31 **MISSION:** To provide for the safe, economic, efficient, and convenient movement of people and goods.

- 32 ▪ **GOAL I:** Achieve an integrated multi-modal transportation system that provides mobility and
33 accessibility for people and goods.
- 34 ▪ **GOAL II:** Ensure the safety and security of the air, land, and water transportation systems.
- 35 ▪ **GOAL III:** Protect and enhance Hawai’i’s unique environment and improve the quality of life.

99 <http://www.state.hi.us/dot/stp/completehstp.pdf>

- 1 ▪ GOAL IV: Support Hawai'i's economic vitality.
- 2 ▪ GOAL V: Implement a statewide planning process that is comprehensive, cooperative, and
- 3 continuing.

4 **Statewide Pedestrian Master plan**¹⁰⁰

5 The Statewide Pedestrian Master Plan (Plan) is a comprehensive strategy developed by the State of
6 Hawai'i Department of Transportation (HDOT) for improving pedestrian safety, mobility, and
7 accessibility along state highways throughout Hawai'i.

8 The Plan's comprehensive approach not only focuses on improving pedestrian safety, it evaluates ways
9 to enhance pedestrian mobility and accessibility to help create a multi-modal transportation system.
10 The Plan serves as one component of implementing the HDOT's mission to provide a safe, efficient and
11 accessible highway system. The Plan also prioritizes pedestrian infrastructure improvements and
12 programs, promotes the Complete Streets vision for the state, and fulfills federal requirements for
13 multimodal planning.

14 The goals and objectives of the plan are as follows:

- 15 1. Improve pedestrian mobility and accessibility.
 - 16 a) Increase pedestrian activity.
 - 17 b) Encourage use of the Hawai'i Pedestrian Toolbox.
 - 18 c) Implement projects along state highways to enhance mobility and accessibility.
 - 19 d) Improve maintenance of pedestrian facilities.
- 20 2. Improve pedestrian safety.
 - 21 a) Reduce the number of crashes and fatalities involving pedestrians.
 - 22 b) Increase driver and pedestrian knowledge of laws, legal requirements, rights, and
 - 23 responsibilities.
 - 24 c) Modify driver and pedestrian behaviors to improve pedestrian safety.
 - 25 d) Use best practices for design and operation of all pedestrian crossings
- 26 3. Improve connectivity of the pedestrian network.
 - 27 a) Support development of seamless and continuous pedestrian networks along state highways
 - 28 with connections to paths, walkways, trails, transit centers, rail stations, and other pedestrian
 - 29 facilities.
 - 30 b) Encourage pedestrian connectivity across jurisdictions.
 - 31 c) Support Safe Routes to School programs to encourage more students to walk to and from school.
- 32 4. Promote environmental benefits of walking.
 - 33 a) Broaden public awareness about the environmental benefits of pedestrian travel.
 - 34 b) Reduce overall vehicle miles traveled through increased pedestrian trips.
 - 35 c) Increase the use of other modes of transportation that reduce the use of fossil fuels.
 - 36 d) Integrate pedestrian facility design with the natural environment to the greatest extent
 - 37 possible.
- 38 5. Encourage walking to foster healthy lifestyles

100 <http://www.hawaiipedplan.com/documents/Statewide%20Pedestrian%20Master%20Plan%20without%20Appendices.pdf>



- 1 a) Broaden public awareness about the health benefits of walking/pedestrian travel.
- 2 b) Improve public health through encouragement of walking.
- 3 c) Support community-based events such as fun runs, walks, parades, and other pedestrian-based
- 4 activities that encourage walking for daily exercise and socialization.
- 5 6. Enhance communities and economic development by creating pedestrian-oriented areas and
- 6 positive pedestrian experiences.
- 7 a) Encourage priority pedestrian infrastructure investment in communities that are in high-density
- 8 residential, visitor/tourist locations, and/or that have higher pedestrian-oriented populations
- 9 (seniors, youth, low-income, and households with no access to vehicles).
- 10 b) Encourage reference to and use of the Hawai'i Pedestrian Toolbox to create pedestrian settings
- 11 that provide a positive pedestrian experience and attract high levels of activity.
- 12 c) Require development projects to include pedestrian infrastructure for the appropriate land use
- 13 and facility.
- 14 7. Promote and support walking as an important transportation mode that reduces overall energy use.
- 15 a) Strengthen public awareness about the energy conservation benefits of walking.
- 16 b) Increase the use of other modes of transportation that reduce the use of fossil fuels.
- 17 c) Reduce resident and visitor motor vehicle fuel demand to help meet 2030 targets for energy
- 18 efficiency.
- 19 d) Encourage Smart Growth development with coordinated land use and transportation
- 20 planning.

21 **Bicycle Transportation:** Hawai'i DOT has created Bike Plan Hawai'i 2003¹⁰¹, to create a guide for
22 enhancing the bicycling environment through a variety of channels – from grassroots initiatives to
23 government actions. The plan recognizes that bicycle facilities have become integral to our state and
24 city transportation infrastructure.¹⁰² In rural settings, “distances between residences and destinations
25 may be large enough to discourage bicycling as a means of transportation for all but the most avid
26 bicyclists. Lower density is often accompanied by greater open space, which is ideal for recreational
27 bicycling. Like beads on a string, small, rural communities are often spaced out along a major highway
28 (for example, the belt roads and coastal highways). Residents who bicycle may need to travel along
29 relatively busy highways to get to their local commercial center or to public facilities. In rural settings,
30 the primary focus of the bicycle plan is both to enhance recreational opportunities that take advantage
31 of natural or cultural assets, and to provide safe connections on the main roads.” (Hawaii State
32 Department of Transportation, 2003). Although the Bike Plan proposes the following bike facilities in
33 the Planning Area, the plan does not provide any details on how these proposals would be
34 implemented:

- 35 ▪ Priority II (Mid-Term Proposals <20 years):
 - 36 ○ Mud Land Shared Use Path (I.d. no. 102, 5.8 miles, \$2.2 million, County/Private)
- 37 ▪ Priority III (Long-Term Proposals >20 years):
 - 38 ○ Belt Highway (Hwy 19) Signed Shared Road (I.d. no. 1, 39.0 miles, \$142,000, State)
 - 39 ○ Old Māmalahoa Highway Shared Use Path (I.d. no. 106, 27.2 miles, \$10.5 million, County)

101 <http://hawaii.gov/dot/highways/Bike/Bike%20Plan>

102 <http://hawaii.gov/dot/highways/Bike/Bike%20Plan>

- 1 ○ Lower Cane Haul Road Shared Use Path (Waipi’o to ‘O’ōkala) (I.d. no. 104, 15.9 miles, \$6.2
- 2 million, County/Private)
- 3 ○ Coastal Connector Signed Shared Road (Haina-Honoka’a-Waipio) (I.d., no. 105, 1.9 miles,
- 4 \$0.6 million, County/Private)
- 5 ▪ A signed shared roadway is a street or highway that is specifically designated by
- 6 signs as a preferred route for bicycle use.
- 7 ▪ Shared use path refers to a bikeway that is physically separated from motorized
- 8 vehicular traffic by an open space or barrier, and is either within the highway right-
- 9 of-way or has an independent right-of-way.

10 **Roads in Limbo:**

11 A “road in limbo” is a government road (under the Highways Acts of 1892, all roads existing at that time
 12 were declared to be public highways and title thereto vested in the government. In *Re Application of*
 13 *Kelley*, 50 Haw. 567 (1968); in addition, “All roads, alleys, streets, ways, lanes, bikeways, bridges, and all
 14 other real property highway related interests in the State, opened, laid out, subdivided, consolidated,
 15 and acquired and built by the government are declared to be public highways. (HRS §264-1(a));

- 16 ▪ that is not part of the State Department of Transportation’s state highway system (a public highway
- 17 is not a state highway unless it is designated for inclusion in the state highway system under §264-
- 18 41. *Santos v. Perreira*, 2 H. App. 387 (1982));
- 19 ▪ nor on the County’s road inventory (the County Department of Public Works maintains an inventory
- 20 of undisputed roads that the County owns and has the responsibility to maintain, and for which fuel
- 21 tax proceeds can be used for maintenance or improvement);
- 22 ▪ owned, built or laid out by government (either an existing road or “laid out” but unbuilt paper road,
- 23 see letter to DLNR from the State Attorney General’s office dated 7/21/99);
- 24 ▪ transferred to county ownership by operation of law (“The ownership of all county highways is
- 25 transferred to and vested in the respective counties in which the county highways lie.” HRS §264-2).

26 Under the Land Act of 1895, the territorial government at the time (which became the State) created
 27 homestead lots. Many of the roads that today are considered roads-in-limbo are “homestead roads”
 28 built or “laid out” to serve these homestead lots. For decades, the State and counties argued over
 29 ownership and associated maintenance responsibility of roads-in-limbo (see *Jaworski* 1989). In 2006,
 30 Hawai’i County agreed to take responsibility for roads-in-limbo, and in return, the State agreed to fund
 31 \$2M as a one-time payment to repair some of these roads (County of Hawai’i DPW 2010).

32 The County took an inventory of the roads-in-limbo in 2005. According to this initial inventory, the
 33 Planning Area has over half of the roads-in-limbo in the County in terms of number and total miles.
 34 Focusing just on the existing roads (i.e., not the paper roads), the County DPW assessed the condition of
 35 202 roads-in-limbo segments covering 122.6 miles of roadway around the island (County of Hawai’i DPW
 36 2010). The Hāmākua CDP Planning Area has over half of the island’s roads-in-limbo with approximately
 37 62 miles.

38 Of the \$2M provided by the State, DPW budgeted \$1M for the actual repairs, with the balance budgeted
 39 for emergency bridge repairs, safety assessment, signage, and contingency. Recognizing that the \$1M
 40 will not go far, the County Council passed Resolution No. 320-10 directing DPW to partner with com-
 41 munities where the County would provide maintenance material from County-owned quarries.

1 **Capital Improvements**

2 State Capital Improvements (STIP): The Hawai'i Statewide Transportation Improvement Program
3 (STIP) provides a multi-year listing of the State and County projects and identifies those projects
4 slated for federal funding. It is a multi-modal transportation improvement program that is
5 developed utilizing existing transportation plans and policies, and current highway, transit and
6 transportation programming processes. The STIP delineates the funding categories and the federal
7 and local share required for each project.

8 Recent STIP projects in the Planning Area include:

9 ▪ Bridge repair or replacement

- 10 ○ Umauma (HS5)
- 11 ○ Pāhoehoe (HS6)
- 12 ○ Kupapaulua (Widening & Seismic Retrofit of Historic Bridge)

13 ▪ Bridge seismic retrofit (HS15)

- 14 ○ East Pa'auilo
- 15 ○ Ā'āmanu
- 16 ○ Kainehe
- 17 ○ Kalapahapu'u

18 ▪ Safety improvements to guardrail and shoulder

- 19 ○ Kaumoali Bridge towards Waipunahina Bridge (HS7)
- 20 ○ Kealakaha Bridge towards Kaula Bridge (HS8)
- 21 ○ Kupapaulua Bridge towards Ka'awali'i Gulch (HS9)
- 22 ○ Papalele Road towards Kaumoali Bridge (HS10)
- 23 ○ Ka'ala Bridge towards Kealakaha Bridge (HS11)
- 24 ○ Waipunahina Bridge towards East Pa'auilo Bridge (HS12)

25 ▪ Rockfall protection

- 26 ○ Laupāhoehoe Gulch (HS13)
- 27 ○ Maulua Gulch (HS14)
- 28 ○ Ka'awali'i Gulch (HS38)

29 Other State Capital Improvement Projects

1 ▪ \$1 million; Māmane Street; Honoka’a; construction improvements to intersection and sidewalk from
 2 Lehua Street to Plumeria Street, provide a pedestrian connectivity between town and North Hawai’i
 3 Education Research Center and State long-term care and emergency room¹⁰³

4 ▪ Saddle Road Realignment and Extension (\$8,175,000)

5 ▪ Pāpa’aloha Drainage Improvements (\$2,500,000)

6 **County Capital Improvements**

7 Appropriations were made for the following capital road improvements within the Planning Area:¹⁰⁴

8 ▪ Hāmākua Roads, General (\$460,568)

9 ▪ Hāmākua Road Baseyard Improvements (\$1,250,000)

10 ▪ Hāmākua/North Hilo Highway Maintenance Building Construction (\$2,105,000)

11 ▪ Island-wide bus stops & shelters, East Hawai’i (\$370,000)

12 ▪ Bridge Improvements or Replacements:

13 ○ Ka’ahikini Bridge Rehabilitation Project

14 ○ Maili Stream Bridge (Kaiwiki Road)

15 ○ Waika’alulu Gulch Bridge Rehabilitation

16 ○ Kalōpa/Māmalahoa Bridge Replacement

17 ▪ Other Specific Projects Listed:

18 ○ Kalōpa Sand Gulch Bypass Road (\$1,400,000)

19 ○ Laupāhoehoe Point Access Road (\$2,300,000)

20 ○ Kaiwiki Road Repairs (\$1,000,000)

21 ○ Laupāhoehoe & Manowai’opae Hmstd. Roads Improvements (\$1,985,000)

22 ○ Manowai’opae Homestead Road Retaining Wall (\$550,000)

23 ○ Lehua Street Sidewalk Improvements (\$920,000)

24 ○ Pāpa’ikou Arch Culvert Replacement

25 **Tools and Alternative Strategies**

26 **Framework for Rural Transportation:** Multi-modal transportation planning strives to provide
 27 transportation choices so that people do not have to rely on automobiles. Some areas have established
 28 a transportation hierarchy to guide priorities for funding and road space allocation. A “green”

103 http://www.capitol.hawaii.gov/memberfiles/senate/solomon/Newsletters/Solomon_Newsletter_May_2013.pdf

104 There are various other CIP funds for transportation projects that are in the Island-wide CIP list, such as funding for bridge inspections, and ADA improvements.

1 transportation hierarchy that favors more affordable and efficient (in terms of space, energy, and other
 2 costs) is as follows:

- 3 1. Pedestrians
- 4 2. Bicycles
- 5 3. Public transit (including fixed route bus, express bus, paratransit, ridesharing and vehicle sharing
 6 programs)
- 7 4. Service and freight vehicles
- 8 5. Taxis (including shared taxi)
- 9 6. Multiple occupant vehicles (carpools)
- 10 7. Single occupant vehicles.

11 **Rural Multi-Modal Transportation System**

12 In developing a multi-modal system, it is helpful to consider the trip purposes and types of users.

13 **Table 7. Multi-Modal Transportation System Matrix**

| Trip Purpose | Destination | User | Existing Modes | Notes |
|---------------------|---|---|--|--|
| Work commute | Employment centers of Hilo, Waimea, South Kohala or Kona resorts | Working age adults | Drive, bus, van pool, rideshare | Carshare at destination would enable occasional errands to entice catching the bus |
| Medical | Medical offices or hospital in Waimea, Honoka'a, or Hilo | Driver, non-driver, disabled | Drive, paratransit service | HCEOC, Elderly Services, handi-van currently provide to qualified residents |
| School | UH-Hilo, NHERC, Honoka'a, Hilo, KS-Kea'au, Pa'auilo, Laupāhoehoe, Pāpa'ikou | Driver student or faculty, Non-driver student | Drive, bus, walk or bike (for students living near school) | |
| Shopping | Kona, Waimea, Honoka'a, Hilo | All groups | Drive, bus, walk or bike (for neighborhood stores) | Need to carry bags |
| Recreation | Various | All groups | Drive, bus, walk, bike | |

14

15 **Complete Streets:** is a transportation policy and design approach that requires streets to be planned,
 16 designed, operated, and maintained to enable safe, convenient and comfortable travel and access for

1 users of all ages and abilities regardless of their mode of transportation. Complete Streets allow for safe
 2 travel by those walking, bicycling, driving automobiles, riding public transportation, or delivering goods.

3 The National Complete Streets Coalition list the following benefits to implementing complete streets
 4 policies and designs:¹⁰⁵

- 5 ▪ **Complete Streets make economic sense.** A balanced transportation system that includes
 6 complete streets can bolster economic growth and stability by providing accessible and efficient
 7 connections between residences, schools, parks, public transportation, offices, and retail
 8 destinations.
- 9 ▪ **Complete Streets improve safety by reducing crashes through safety improvements.** One
 10 study found that designing for pedestrian travel by installing raised medians and redesigning
 11 intersections and sidewalks reduced pedestrian risk by 28%.
- 12 ▪ **Complete Streets encourage more walking and bicycling.** Public health experts are encouraging
 13 walking and bicycling as a response to the obesity epidemic, and complete streets can help. One
 14 study found that 43 percent of people with safe places to walk within 10 minutes of home met
 15 recommended activity levels, while just 27% of those without safe places to walk were active
 16 enough.
- 17 ▪ **Complete Streets can help ease transportation woes.** Streets that provide travel choices can give
 18 people the option to avoid traffic jams, and increase the overall capacity of the transportation
 19 network. Several smaller cities have adopted complete streets policies as one strategy to increase
 20 the overall capacity of their transportation network and reduce congestion.
- 21 ▪ **Complete Streets help children.** Streets that provide room for bicycling and walking help children
 22 get physical activity and gain independence. More children walk to school where there are
 23 sidewalks, and children who have and use safe walking and bicycling routes have a more positive
 24 view of their neighborhood. Safe Routes to School programs, gaining in popularity across the
 25 country, will benefit from complete streets policies that help turn all routes into safe routes.

26 In addition, Complete Streets are adaptable to a rural context by “completing” dangerous, rural roads,
 27 improving access and transportation options to critical services and destinations, and providing for
 28 active, healthy choices for children and the elderly.¹⁰⁶

29 In 2009, the Hawai‘i legislature amended state statutes¹⁰⁷ to require the Hawai‘i Department of
 30 Transportation (HDOT) and Hawai‘i’s four county transportation departments to adopt complete streets
 31 policies that accommodate all users of the roadways, including pedestrians, bicyclists, transit users,
 32 motorists and persons of all ages and abilities. Kauai County has embraced the Complete Streets
 33 concept and passed a complete streets resolution in 2010.¹⁰⁸ Since then they have been working with
 34 the “Get Fit Kauai” build environment task force¹⁰⁹ to plan and implement complete streets projects.¹¹⁰

105 <http://www.smartgrowthamerica.org/complete-streets/complete-streets-fundamentals/benefits-of-complete-streets/>
 106 <http://www.smartgrowthamerica.org/documents/cs/factsheets/cs-rural.pdf>
 107 Act 54, Session Laws of Hawaii (SLH) 2009
 108 [http://www.kauai.gov/Portals/0/Planning/project_documents/Reso_2010-48_D1_Complete_Streets\[1\].pdf](http://www.kauai.gov/Portals/0/Planning/project_documents/Reso_2010-48_D1_Complete_Streets[1].pdf)
 109 <http://www.getfitkauai.com/built-environment.html>
 110 <http://www.getfitkauai.com/built-environment.html>

1 At this time, Hawai'i County has not adopted complete streets policies, but there have been recent
2 discussions amongst community and county stakeholders to move in that direction.

3 **Active Transportation:** A recent study¹¹¹ by the Rails to Trails Conservancy¹¹² examined “active
4 transportation” in rural areas and small towns. Active transportation is human-powered mobility,
5 including biking and walking. It has been repeatedly shown that people who live in communities where
6 it is safe and convenient to engage in active transportation enjoy better overall health, greater economic
7 opportunities, a cleaner environment, lower energy bills, and numerous personal and social gains
8 associated with a strong sense of community.

9 This study's findings challenged the conventional wisdom that people in rural areas walk and bike less
10 than people in urban areas. In most cases, rates of bicycling and walking in rural communities are not
11 dramatically different from that of large cities. Biking and walking amount to a significant means of
12 transportation across the countryside.

13 And when it comes to work, residents of certain kinds of rural communities walk and bike in relation to
14 their work almost as much (and in a few cases, even more) as residents of cities and inner suburbs.
15 Within small towns of 2,500 to 10,000 residents, people walk for work purposes (both commuting and
16 during work) at a rate similar to cities and close-in suburbs and nearly double that of urban centers.

17 Active transportation creates more jobs per dollar than highway projects, and attracts business
18 investment. Opportunities for people to bike and walk can transform a community's economic picture,
19 as a string of towns along the Root River State Trail in far southeastern Minnesota discovered:

20 *Lanesboro (population: 750), which was fast becoming a ghost town before the state built the trail*
21 *on an out-of-service rail line, now reaps a \$1.5 million yearly dividend from bike riders and other trail*
22 *users, and has seen many new businesses open on its now-thriving Main Street. Other communities*
23 *along the 60-mile trail network have seen similar gains.*

24 Rural areas receive almost twice as much funding per capita as urban areas from the federal
25 Transportation Enhancements (TE) program¹¹³. Transportation Enhancements, which has been the
26 nation's primary source for funding trails, bicycling and walking infrastructure for 20 years, also
27 improves local communities by preserving historic landmarks, creating safe and attractive streets, and
28 otherwise mitigating problems created by roadways. The TE program is being replaced by the
29 **Transportation Alternatives Program (TAP)**.

30 **Bicycle Transportation:** Bicycles are best accommodated as part of the traffic on town, village, and rural
31 roads rated 25 mph or lower.

32 On some rural roads, paved shoulders or bike lanes are indicated in the proposed thoroughfare sections.
33 On these roads, even though speeds are expected to be 35 mph or less, sight lines may be more difficult
34 to maintain, so bike lanes are recommended.

35 In rural areas where desired destinations are usually miles away, driving is the fastest and sometimes
36 the only mode of choice. However, for various reasons, travelers often need or prefer travel by
37 alternative modes:¹¹⁴

111 <http://www.railstotrails.org/ourWork/reports/beyondurbancenters.html>

112 www.railstotrails.org

113 http://www.fhwa.dot.gov/environment/transportation_enhancements/;
<http://www.enhancements.org/profile/HIprofile.php>

114 Litman, 2012

1 ▪ Many people *cannot* drive. In a typical community, 20-40% of the total population, and 10-20% of
 2 adolescents and adults, cannot drive due to disability, economic, age constraints, or vehicle failures.
 3 Inadequate transportation options can reduce a non-drivers ability to access activities and compels
 4 motorists to chauffeur non-drivers.

5 ▪ Many people *should not* drive for some trips, due to inebriation, disability, or economic constraints.
 6 For example, efforts to reduce driving by higher-risk groups (people who are impaired by alcohol or
 7 drugs, young males, or people with dementia) can only succeed if there are good alternatives to
 8 driving. The high costs of automobile transport places a major financial burden on many lower-
 9 income people.

10 ▪ Travelers sometimes *prefer* using alternative modes, for example, because walking and cycling are
 11 more enjoyable and provide healthy exercise, or public transit commuting imposes less stress and
 12 allows commuters to read, work, or rest.

13 **Functional Road Classification/Road Standards:** Transportation planners classify roads according to the
 14 role the road plays in the road network. The Federal Highway Administration (FHWA) Functional
 15 Classification Guidelines classifies rural roads into four types:

- 16 ▪ Principal arterials connect the major cities, towns, and villages;
- 17 ▪ Minor arterials connect other major destinations (e.g., resort areas) to the principal arterials;
- 18 ▪ Major and minor collectors provide intraregional connections;
- 19 ▪ Local roads provide access to adjacent land.

20 The General Plan (§13.2.4) basically follows the FHWA classification system:

21 ▪ **Primary Arterial:** Includes major highways, parkways, and primary arterials that move vehicles in
 22 large volumes and at higher speeds from one geographic area to another; highest traffic volume
 23 corridor. Designed as a limited access roadway. Primary arterials shall have a minimum right-of-
 24 way of 120 feet.

25 ▪ **Secondary Arterial:** A street of considerable continuity that is primarily a traffic artery between or
 26 through large areas; interconnect with and augment primary system. Designed as a limited access
 27 roadway. Secondary arterials shall have a minimum right-of-way of 80 feet.

28 ▪ **Major Collector:** Any street supplementary to the arterial street system that is a means of transit
 29 between this system and smaller areas; used to some extent for through traffic and to access
 30 abutting properties; collect and distribute traffic between neighborhood and arterial system. Major
 31 collectors shall have a minimum right-of-way of 60 feet.

32 ▪ **Local Streets-commercial/industrial:** Local streets within commercial and industrial areas shall have
 33 a minimum right-of-way of 60 feet.

34 ▪ **Minor Collector and Local Streets:** Minor collectors are used at times as throughstreets and for
 35 access to abutting properties. The principal purpose of a local street is to provide access to property
 36 abutting the public right-of-way.

37 The classification assigned to a road has the following implications:

- 38 ▪ Determines the width of the right-of-way;

- 1 ▪ Determines the types and size of right-of-way components such as travelway lanes, medians, on-
- 2 street parking, bicycle facilities (e.g., shared lane or bike lane), pedestrian facilities (e.g., sidewalk),
- 3 drainage facilities (e.g., curbs or swales), lighting, landscaping, and utilities;
- 4 ▪ Determines the eligibility for federal-aid funding whereby only arterials and major collectors qualify;
- 5 ▪ Determines the degree of regional vs. local benefit that suggests whether an appropriate funding
- 6 source should be a more general taxpayer-funded source for regional-serving roads such as arterials
- 7 and collectors (e.g., General Obligation bonds), or a more localized source or exaction for local roads
- 8 or minor collectors.

9 The Department of Public Works maintains a State-approved list of roads classified as arterials or major
10 collectors. Within the Planning Area, the list includes:

11 Arterials:

- 12 ▪ Hawai'i Belt Road (Highway 19)
- 13 ▪ Daniel K. Inouye Hwy (Saddle Rd.)

14 Collectors:

- 15 ▪ Honomū: 'Akaka Falls Rd.
- 16 ▪ Laupāhoehoe: Old Māmalahoa Hwy (Between Laupāhoehoe School and The Train Museum)
- 17 ▪ Pa'auilo: Hauola Rd., Pōhākea Rd., Ka'apahu Rd., Pa'auilo Mauka Rd., Kula Kahiko Rd., Kalōpā Rd.,
- 18 Papalele Rd.,
- 19 ▪ Honoka'a/Kukuihaele: Pakalana St., Lehua St., Plumeria St., Honoka'a-Waipio Rd., Kukuihaele Rd.
- 20 ▪ Āhualoa: Old Māmalahoa Hwy.

21 Sections 23-41 and 23-86 and 87 of the County's Subdivision Code establish minimum road right-of-way
22 and pavement widths in feet, unless otherwise indicated on the County General Plan Roadway
23 Standards.

24 In addition, the Fire Department requires a minimum 15 foot wide road for emergency vehicle access.

25 Because many of the streets in Planning Area towns and villages were designed before these standards
26 were established, they may not conform.

27 **Table 8. General Plan Roadway Standards**

| Type of Street | Minimum Right of Way | Minimum Urban Pavement | Minimum Rural Pavement | Minimum Nondedicable Agricultural Pavement (for lots 3 acres or larger) |
|--------------------|----------------------|------------------------|------------------------|---|
| Parkway | 300 | 24 | | |
| Secondary Arterial | 80 | 60 | 24 | 24 |

| | | | | |
|--|----|----------------------------|----|----|
| Business & Industrial Streets | 60 | 36 | 24 | 24 |
| Collector Streets | 60 | 24 (36 with curb & gutter) | 20 | 20 |
| Minor Streets | 50 | 20 (32 with curb & gutter) | 20 | 20 |
| Alleys | 20 | 20 | 20 | 20 |

1

2 **Subdivision Code:** Section 23-28ff of the County’s Subdivision Code establishes the following block
3 design parameters:

4 ▪ Block design: The lengths, widths, and shapes of blocks shall be designed with regard to providing
5 adequate building sites suitable to the use contemplated, needs for convenient access, circulation,
6 control, and safety of street traffic, and limitations and opportunities of topography.

7 ▪ Block sizes: Blocks shall not exceed two tiers of lots in width and thirteen hundred feet in length,
8 except for blocks adjacent to arterial streets or when the previous adjacent layout or topographical
9 conditions justify a variation. Blocks shall not be less than four hundred feet in length. The desired
10 length for normal residential blocks is from eight hundred to one thousand feet. When the layout is
11 such that sewers will be installed or easements for future sewer lines are provided along rear lot
12 lines, the block should not exceed eight hundred feet in length.

13 ▪ Pedestrian ways: In any block over seven hundred fifty feet in length, the director may require
14 creation of a pedestrian way to be constructed to conform to standards adopted by the department
15 of public works at or near the middle of the block. If unusual conditions require blocks longer than
16 thirteen hundred feet, two pedestrian ways may be required. The pedestrian way shall be dedicated
17 for public use and shall have a minimum width of ten feet.

18 Section 23-40 of the County’s Subdivision Code provides the following requirements for street
19 connectivity: The location, width, and grade of a street shall conform to the County general plan and
20 shall be considered in its relation to existing and planned streets, to topographical conditions, to public
21 convenience and safety, and to the proposed use of land to be served by the street. Where the location
22 is not shown in the County general plan, the arrangement of a street in a subdivision shall either:

23 ▪ Provide for the continuation or appropriate projection of existing principal streets in surrounding
24 areas; or

25 ▪ Conform to a plan for the neighborhood that has been approved or adopted by the director to meet
26 a particular situation where topographical or other conditions make continuance or conformance to
27 existing streets impractical.



1 **Alternate Routes**

2 **State Scenic Byway Program**¹¹⁵: Scenic Byways are “roads that tell a special story” and contribute to the
3 legacy of Hawai‘i. Local byways are sponsored by the Hawai‘i Department of Transportation (DOT) and
4 facilitated locally by a community sponsor that wishes to lead the preservation, protection and/or
5 promotion of the byway with a Local Advisory Committee and Corridor Management Plan. Hawai‘i
6 joined the National Scenic Byways Program in 2009, and participates with other U.S. States, National
7 Parks and other Federal land agencies, Native American tribes as well as with Canada and Japan.

8 Local byway sponsors and committees receive technical assistance and training from the State byways
9 program and the National Scenic Byway Program. The Federal Highways Administration also has an
10 Annual Discretionary Grant program corridor management, safety improvements, facilities, access
11 improvements, resource protection, interpretation, and marketing.

12 **County Scenic Corridor Program:** If there is a need to regulate development along a corridor to
13 preserve the character and views, the zoning code has a scenic corridor provision pursuant HCC §25-6-
14 60. For transportation corridors that require a comprehensive planning approach, the Hawai‘i County
15 Council may, by ordinance, establish all or portions of public roadways and an appropriate portion of the
16 adjacent property as a scenic corridor. Within scenic corridors, all permitted uses defined by the
17 underlying zoning classification remain in place unless otherwise specified by the scenic corridor-
18 enabling ordinance.

19 Any standards and conditions not included in the underlying zoning related, but not limited, to signage,
20 lighting, design standards, access management, landscaping, parking, height, historic and cultural
21 preservation, view planes, and/or setbacks, must be included as part of the scenic corridor management
22 plan and adopted by scenic corridor enabling ordinance by the Council. The scenic corridor
23 management plan must demonstrate the need for the adoption of special standards and conditions in
24 order to preserve, maintain, protect, or enhance the intrinsic character of the corridor.

25 A scenic corridor may only be established if the proposed district meets the following criteria:

- 26 ▪ (1) Is consistent with the intent and purpose of the Zoning Code and the County General Plan.
- 27 ▪ (2) Will not result in a substantial adverse impact upon the surrounding area, community and/or
28 region.
- 29 ▪ (3) Will enhance Hawai‘i County’s significant natural, visual, recreation, historic and/or cultural
30 qualities.
- 31 ▪ (4) Will protect and enhance the attractiveness of Hawai‘i County to make it a better place to live,
32 work, visit, and/or play.
- 33 ▪ (5) Will improve Hawai‘i County’s economic vitality by enhancing and protecting our unique natural,
34 scenic, historic, cultural, and/or recreational resources.
- 35 ▪ (6) Is located on a major or minor arterial highway, or collector road.
- 36 ▪ (7) Significantly possesses at least one of the following intrinsic qualities: scenic, natural, historic,
37 cultural, archaeological, recreational, or demonstrates local, private, and public support and
38 participation.

115 <http://www.hawaiiiscenicbyways.org/>

1 Steps for establishing a scenic corridor include:

- 2 ▪ The Planning Director or Council introduces a resolution to initiate the establishment of a scenic
3 corridor.
- 4 ▪ Notice is served to all owners and lessees of property within 300 feet of the proposed corridor.
- 5 ▪ Within 24 months of the adoption of the resolution, the Planning Director or a corridor advocacy
6 group identified in the resolution completes a corridor management plan and enabling ordinance. A
7 scenic corridor management plan is a written document that assesses the intrinsic qualities of the
8 corridor and specifies actions, procedures, controls, and administrative as well as community
9 strategies that will be pursued to maintain those qualities.
- 10 ▪ Within 120 days, the Planning Commission reviews the proposed plan and ordinance, holds a public
11 hearing, and makes a recommendation to Council.
- 12 ▪ The Council may adopt the plan by ordinance, with or without conditions.

13 After adoption of a scenic corridor enabling ordinance and corridor management plan, all approvals
14 including, but not limited to sign permits, grading and grubbing permits, building permits, and
15 subdivision approvals shall conform to the standards and conditions contained in the scenic corridor
16 ordinance.

17 **Heritage Corridor:** The County designated the Belt Highway (Highway 19) as the “Heritage Corridor” in
18 the mid-1990s to stimulate eco-tourism in the area after the closure of the sugar plantations. Although
19 there is some signage along the highway, there has never been an official designation and market
20 promotion of this Corridor has not gelled.

21 The addition of the Old Māmalahoa Highway to the Heritage Corridor designation would serve several
22 purposes:

- 23 ▪ It would provide a scenic, slower, more personalized experience of the Planning Area than the
24 higher-speed Belt Highway;
- 25 ▪ It would connect the towns and villages bringing visitor traffic to stimulate revitalization of the
26 towns and villages;
- 27 ▪ It would provide a bypass route should Highway 19 close.

28 The General Plan supports the improvement of the Old Māmalahoa Highway segment between
29 Pepe’ekeo and Honomū (General Plan §13.2.5.2.2(a)). The other segments of the route are in fairly
30 good condition, although the road is curvy and narrow. The State’s Bike Plan identifies Old Māmalahoa
31 Highway as a long-term priority for shared use path. Given the narrow right-of-way, the
32 accommodation of a separated bike path would be quite challenging. However, it is worth further study
33 to find solutions to create a complete street that safely accommodates vehicles, bicycles, pedestrians,
34 slower plug-in electric vehicles, or other modes (except larger buses).

35 The Heritage Corridor could serve as an economic catalyst to attract primarily those visitors who value
36 learning about the heritage of an area, desire a more personable experience, who travel in smaller
37 groups or independently, or prefer to slowly move through the area to savor the experience. The intent
38 is to separate large tour bus visitors from the small group or independent visitors (which includes local
39 residents in this latter group). The Old Māmalahoa Heritage Corridor would be aimed for the small
40 group and independent visitors.

1 The Heritage Corridor route features and connects several scenic and cultural treasures in Hāmākua:
2 the historic towns/villages, backroads through lush vegetation and waterfalls, historic places such as
3 Waipi’o Valley and the former plantation landings, State Parks, farms offering agricultural tours, and
4 selected trails that draw the visitor out of their vehicles to experience the natural beauty of the area.
5 These cultural and scenic features definitely support designation under the State Scenic Byways
6 program. The Scenic Byways program provides market promotion opportunities.

7 The suggested Heritage Corridor route includes the Belt Highway, Old Māmalahoa Highway, and
8 connecting segments to scenic or cultural places. The suggested route includes the future improvement
9 of Mud Lane as currently supported by the General Plan (§13.2.5.4.2 (c)). Although the General Plan
10 calls for this improvement as a State scenic byway, it could be a minimal road and a shared use path as
11 suggested by the State’s Bike Plan. The Mud Lane connection would complete a network that would
12 bring more visitors to Waipi’o Valley and Honokaa as they travel to or from Waimea.

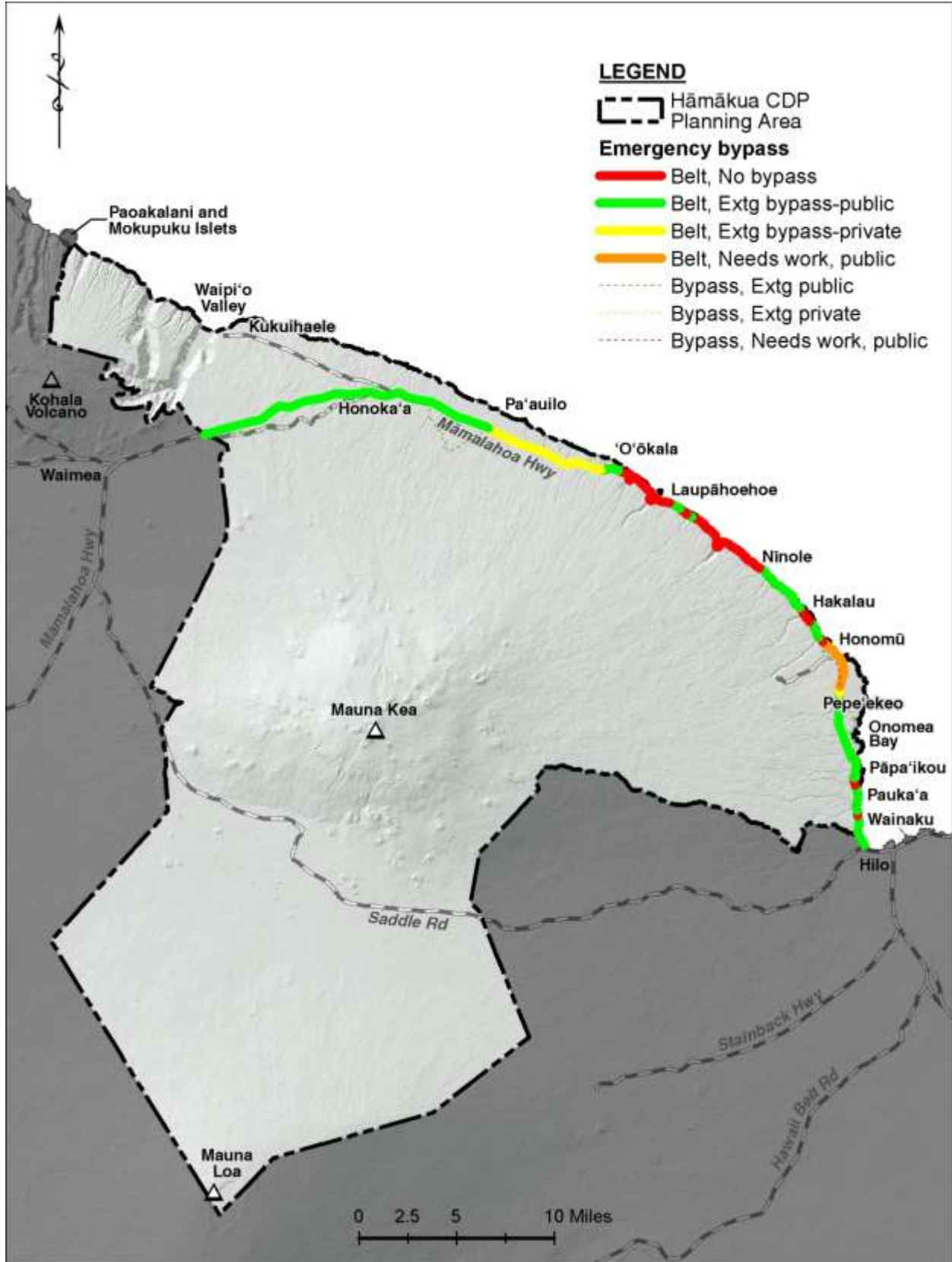
13 In order for the Old Māmalahoa Heritage Corridor to become reality, the following actions require
14 attention:

- 15 ▪ **Paving.** The segment between Pepe’okeo and Honomū is currently unpaved or has very narrow
16 pavement. Since this segment functions as an emergency bypass in the event of the Belt Highway
17 closure in this area, one potential source is Hazard Mitigation (FEMA) funding. To be eligible for
18 such funding requires this project to be listed in the County’s Hazard Mitigation Plan.
- 19 ▪ **Traffic Restrictions.** The narrow and curvy route would not be conducive to large buses. Besides
20 restrictions on large buses, there may be other appropriate restrictions for safety or to mitigate
21 traffic concerns (e.g., designation and signage as a shared road with bicycles). Corporation Counsel
22 would advise if these restrictions are appropriate and whether they would have to be adopted in the
23 Traffic Code schedules (Hawai’i County Code chapter 24).
- 24 ▪ **Heritage “Story”.** There are ongoing efforts at NHERC, Laupāhoehoe Train Museum, and other
25 community organizations to record the history of the area. If this effort could be integrated with the
26 Heritage Corridor, a consistent and authentic “story” could be told in several ways—by residents to
27 each other or passing visitors, by teachers to students, by grandparents to grandchildren, by tour
28 drivers to visitors, by publicity media to the world. The places along the Corridor could be brought
29 to life. Interpretive signage would highlight relevant portions of the story to provide a meaningful
30 experience.
- 31 ▪ **Permission/Acquisition for Privately Owned Corridor Segments or Features.** Although the Heritage
32 Corridor route is entirely County-owned, there are road and trail segments that are connected to
33 the Corridor route that lead users to these private roads or trails. These privately owned segments,
34 essentially offshoots of the Corridor, would require appropriate agreements with the landowners.
35 These private offshoots include the following: Sugar Mill Road in Pepe’okeo, Koholālele Landing,
36 access to the proposed Pa’auilo slaughterhouse and agricultural processing complex, and access to
37 Haina and Pā’auhau Landings.

38 **Emergency Bypass:** The proposed Heritage Corridor route does not provide emergency bypass options
39 for the entire length of the Belt Highway. For these missing sections, Civil Defense may need to open
40 private roads as needed during emergencies. The map also shows in red the segments where no known
41 bypass option exists. Identified bypass routes would not be published in the CDP, but rather kept by the
42 Planning Department and Civil Defense. Publishing the map may invite unauthorized use of the private
43 roads.

44 Civil Defense should maintain an inventory of bypass routes using Figure 12. Preliminary Emergewncy
45 Bypass Evaluation for Hwy 19 (next page), as a starting point. The map would identify road segments

1 Figure 12. Preliminary Emergency Bypass Evaluation for Highway 19



2

1 that require improvements, provide notice to private owners or lessees who control access to privately
2 owned segments, ensure periodic inspection by Civil Defense to ensure that the bypass roads are
3 passable for 2-wheel vehicles, and determine a follow-up protocol if maintenance is required.

4 **Village and Town Connectivity:** If transportation connections are sparse, then travel between locations
5 requires more time, and people spend more time traveling and less time visiting family, going fishing or
6 hunting, hiking, or otherwise enjoying life. Moreover, in the event of an emergency, there are fewer
7 options to evacuate or choose alternate routes, and rescuers have fewer routes to reach those who
8 need help.

9 Limited transportation connections also generate greater vehicle miles of travel (VMT) compared to a
10 rich, diverse network. Planners use VMT as one measurement of travel impacts because vehicle miles of
11 travel can be converted into hours of travel (using an average travel speed) as well as into pounds of
12 pollutants and volumes of greenhouse gases created by automobile travel.

13 With additional connectivity, travel times and VMT are reduced because we there are more direct
14 routes to our destinations. When the network includes trails and paths, as well as conventional streets
15 and roads, there are options of going by non-motorized transportation methods, for even more
16 sustainable transportation.

17 **Kona CDP Connectivity Standards:** The Kona CDP includes alternative connectivity standards.
18 Specifically, within the Kona Urban Area (UA), new development shall contribute to this interconnected
19 transportation network of streets, pedestrian, and bicycle access that work to disperse traffic and
20 connect and integrate new development with the existing fabric of the community. Proposals for new
21 development or redevelopment within Kona’s UA shall meet the following connectivity standards:

- 22 ▪ **Maximum Block Size.** In lieu of HCC section 23-29(c), the maximum length of blocks for
23 predominantly residential subdivisions shall be 800 feet, unless unfeasible due to natural
24 topography, protected resources, or surrounding development patterns.
- 25 ▪ **Connection to Adjoining Development.** The road system for new development shall contribute to
26 the local transportation network. To supplement HCC section 23-40, at a minimum, new
27 subdivisions shall incorporate and continue all collector streets, and selected local streets to
28 adjoining property. If a portion of the stub-out is not improved, the current developer shall improve
29 the stub-out portion. Connection to adjoining properties may not be required if seriously
30 constrained by topography or other physical hindrances, or in cases where through travel cannot
31 occur because the property is bounded by development with private streets previously allowed.
- 32 ▪ **Gated Entry.** In the Kona UA, gates will be prohibited across new roadways identified to service the
33 local transportation network.
- 34 ▪ **Cul-de-sacs Discouraged.** Cul-de-sacs are discouraged based on Policy TRAN-2.1 (1) Maximum Block
35 Size and Policy TRAN-2.1 (2) Connection to Adjoining Property unless construction of a through
36 street is found to be impracticable. Where cul-de-sacs or dead-end streets are allowed, they shall
37 meet the prevailing standards in the Chapter 23 Subdivision Code.
- 38 ▪ **Future Extensions.** Roads serving future transportation interconnectivity will be identified for any
39 proposed subdivision located adjacent to a vacant parcel. To supplement HCC section 23-44, where
40 necessary to give access to or permit a satisfactory future subdivision of adjoining land, or to
41 conform with the Official Transportation Network Map, a street stub-out or pedestrian path
42 improved to the boundary is required unless financially guaranteed to enable the County to
43 coordinate the stub-out construction as a regional project or in coordination with the development
44 of the adjoining property. Applicants submitting preliminary development plans shall provide for

1 extension of selected local streets to adjoining undeveloped properties and eventual connection
2 with the existing street system. Within phased subdivisions, temporary stub-outs shall be required.

- 3 ▪ Connectivity. In the Kona UA, all new roads that will serve as part of the interconnecting roadway
4 system shall be dedicated to the County.

5 Along those lines, the Hāmākua CDP could provide clear, place-based connectivity standards that so that
6 new roads contribute to the existing transportation network of streets, pedestrian, and bicycle access
7 and integrate new development with the existing fabric of the community.

8 **Public Transit- Fixed Route Buses:** There are various types of public transit including heavy rail, light rail,
9 streetcars, and buses. In this County, the County’s Mass Transit Agency operates the Hele-On Bus
10 System. The existing routes and frequency in the Planning Area primarily serve the commuters to the
11 neglect of other trip purposes. The commute bus routes that traverse the Planning Area on the Belt
12 Highway include:

- 13 ▪ Hilo/South Kohala Resorts
- 14 ▪ Kona/Hilo
- 15 ▪ Waimea/Hilo

16 During the day, the Hilo/Honoka’a route offers 13 trips (9 Daily) and begins/ends in the Honoka’a Gym
17 Complex upper parking lot and leaves the highway to go through the following communities: Pauka’a,
18 Pāpa’ikou (stop at Post Office), Pepe’ekeō (stop at Kula’imano Apartments), Honomū (stop at Ishigo
19 Store), and Honoka’a. Currently, there is one county constructed bus shelter in Pepe’ekeō and two
20 other community-built (with materials provided by the County) shelters in Pāpa’aloa and ‘O’ōkala.

21 Integration between the bus and other modes is an important factor that influences the level of usage.
22 From home to the bus stop, the availability of convenient, safe, and affordable places to park and ride or
23 bike and ride would entice more users. Currently, there is only one official “Park-and -Ride” facility
24 (Honoka’a) which allow transit riders to park their vehicles in a secure area with convenient access to
25 transit. An emerging concept is a carshare or bikeshare program where users have convenient access to
26 a car or bike at their destination area that they can rent for the short time they need it to run an errand
27 or get to a doctor’s appointment.

28 **Paratransit:** In rural areas, it may not be cost-effective to increase bus routes and frequency with buses.
29 Paratransit may offer more feasible options for rural areas. Paratransit is “an alternative mode of
30 flexible passenger transportation that does not follow fixed routes or schedules.”¹¹⁶ The service is
31 typically provided by minibuses, vans, jitneys (e.g., the historic sampans that once served Hilo), or share
32 taxis. Paratransit is commonly used for the special transportation services provided for the disabled or
33 elderly. The County studied the feasibility of a rural paratransit system that would serve the general
34 public.

35 Based on the current schedule for these routes, a bus heading north towards Kona passes through the
36 Planning Area approximately every 15 minutes during the early morning commute hours (3:30-6:30)

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1 The study recommended a feeder service integrated with the existing bus system.¹¹⁷ With intelligent
 2 transportation systems using GPS, cell phones, and computerized dispatching and reservation systems,
 3 the future of paratransit could possibly be a coordinated service provided by public, nonprofits, and/or
 4 private entities.

5 **Roads in limbo alternatives**

6 **Minimum road standard:** The minimum road standard for a County-dedicable road is a 50’ right-of-way
 7 with paved swales (Standard Details R-33 and R-34). For a private non-dedicable agricultural road
 8 serving 6 lots or less, the standard is a 20’ right-of-way with 16’ pavement (Standard Detail R-39). A
 9 road-in-limbo is a government road so the dedicable road standard should logically apply. However, a
 10 fully paved 50’ right-of-way is not appropriate for the very rural conditions served by the roads-in-limbo.
 11 The General Plan (§13.2.3(m)) calls for a minimum standard that meets public safety requirements—i.e.,
 12 an all-weather road accessible by emergency vehicles. To date, the County has not yet developed such a
 13 minimum standard for roads-in-limbo.

14 **Improvements:** Many of the roads-in-limbo are substandard or nonexistent, so a reduced dedicable
 15 standard would enable more cost-effective improvements. There are three alternatives to fund
 16 improvements:

- 17 ▪ General Revenue Sources. County funds the full cost through general obligation bonds or other
 18 general revenue sources. As a minor road, the project would have to compete with higher priority
 19 projects that provide more regional benefits.
- 20 ▪ Lot Owner Assessment. Lot owners fund the cost through an Improvement District or other land-
 21 secured public financing. The County would establish the financing district and provide a long-term
 22 loan at a below-market interest rate.
- 23 ▪ Self-help. County Resolution No. 320-10 directs DPW to partner with communities where the
 24 County would provide maintenance material from County-owned quarries.

25 **Maintenance:** Once the County acknowledges that a road-in-limbo meets the minimum standard, the
 26 County would add the road to its inventory. The County uses fuel tax revenues to maintain the roads on
 27 its inventory

28 **Transportation Analysis Table**

29 **Table 9. Transportation Analysis Table**

| Challenges | Support/Rationale | CDP Strategy Direction |
|---|--|--|
| Lack of Redundancy/ Alternative, Emergency Routes | Plan Support: <ul style="list-style-type: none"> ▪ The Hawai’i Statewide Transportation Plan Policy Support: <ul style="list-style-type: none"> ▪ General Plan 13.2.3(f); 13.2.5.2.2 (a) | Policy: Encourage Civil Defense, Police Department, Fire Department, and Planning to Develop an alternative emergency route program Policy: Prioritize CIP funding to improve and maintain substandard sections of the Old Māmalahoa Highway for use as |

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| | | |
|---|--|---|
| | | an emergency, alternative Route to Hwy 19. |
| Substandard Bridges | <p>Plan Support:</p> <ul style="list-style-type: none"> ▪ The Hawai'i Statewide Transportation Plan <p>Policy Support:</p> <ul style="list-style-type: none"> ▪ General Plan 13.2.3(l); 13.2.5.3.2(a); 13.2.5.4.2(d) | Policy: Prioritize CIP funding to improve and maintain substandard bridges in the Planning Area. |
| Limited Mass Transit, Bus Shelter, Park and Ride, and Bicycle Facility Options | <p>Plan Support:</p> <ul style="list-style-type: none"> ▪ Hawai'i Statewide Pedestrian Master Plan ▪ The Hawai'i Statewide Transportation Plan <p>Policy Support:</p> <ul style="list-style-type: none"> ▪ General Plan 13.1.3(c); 13.1.3(e); 13.2.3(f); 13.2.3(l); 13.2.3 (n); 13.4.3(d) | <p>Policy: Encourage mass transit agency to continue to prioritize construction of bus shelters within the Planning Area</p> <p>CBCM: Encourage communities to identify locations for bus stops, biking facilities (i.e. bike racks, lanes, etc.) and park and ride facilities in their town revitalization plans</p> |
| Road Hazard Vulnerability to Erosion and Rock fall | <p>Plan Support:</p> <ul style="list-style-type: none"> ▪ State CIP Budget ▪ The Hawai'i Statewide Transportation Plan <p>Policy Support:</p> <ul style="list-style-type: none"> ▪ General Plan 13.2.5.3.2(b); 13.2.5.4.2(d) | Advocacy: Encourage State DOT to identify areas vulnerable to mauka rock fall and makai shoreline erosion areas and prioritize for mitigation |
| Rural Road Standards/Roads-in-Limbo/Homestead Roads | <p>Plan Support:</p> <ul style="list-style-type: none"> ▪ CIP Funding ▪ "Roadway Design Standards for the County of Hawai'i" <p>Policy Support:</p> | Policy: Encourage DPW to adopt and implement recommendations from "Roadway Design Standards for the County of Hawai'i" study to allow for a "Rural" road standard. This would help to minimize road construction/maintenance costs and bring road sizes in line with |



| | | |
|--|---|---|
| | <ul style="list-style-type: none"> General Plan 13.2.3(l); 13.2.5.2.2(a); 13.2.5.2.2(b); 13.5.3.2(a) | rural character which would allow more rural roads to be added to the County’s Road Inventory |
| Limited Passing Lane Availability on Hwy 19 | <p>Plan Support:</p> <ul style="list-style-type: none"> The Hawai’i Statewide Transportation Plan <p>Policy Support:</p> <ul style="list-style-type: none"> General Plan 13.2.5.3.2(d); 13.2.5.4.2(a) | Advocacy: Encourage State DOT to exPELORe highway passing options for Hwy 19 |

1

2 Potable Water

3 Assets, and Challenges

4 There are eleven (11) County water systems within the Planning Area:

5

- **Hilo Water System:** This system serves the Kaiwiki and Wainaku communities.

6

- **Pauka’a-Pāpa’ikou Water System.** This is the largest system in the Planning Area (853 connections, 0.29 mgd average production (2003)). The water sources are two springs and one well—Ka’ie’ie Mauka Spring (Pāpa’ikou) supplies the mauka areas, and Ka’ie’ie Meideros Spring serves the makai areas. The well will replace Ka’ie’ie Mauka Spring to ensure a more reliable supply. The water system is connected to the Hilo water system by a valve that is normally closed but can be opened as needed to allow water to flow in either direction.

7

- **Pepe’ekeo Water System.** This is the third largest system in the Planning Area (491 connections, 0.20 mgd average production (2003)). The water sources are one spring (Maukaloa Spring) and one well. Unlike other nearby DWS water systems, does not serve outlying areas with water main extensions along the Hawaii Belt Road. One well and one spring provide the water supply. A booster pump station is being developed so the mauka portions of the water system do not have to rely exclusively on the Maukaloa Spring source. The water system is not connected to any other water system.

8

- **Honomū Water System.** This is one of DWS’s smaller systems and the eighth largest system in the Planning Area (242 connections, 0.06 mgd average production (2003)). The water source is one spring (Honomū Spring), located mauka on Akaka Falls Road. From Honomū Spring, the supply is conveyed to Honomū Tank, from which customers are supplied by gravity. Water is disinfected and treated to provide corrosion control. Most of the customers are located on or near the Hawaii Belt Road or Māmalahoa Highway. The water system is not connected to any other water system.

9

- **Hakalau Water System.** This is one of DWS’s smaller systems and the sixth largest system in the Planning Area (28 connections, 0.074 mgd average production (2003)). The water source is one spring (Honomū Spring) and one well. Both sources are chlorinated and there is corrosion control treatment at the spring source to prevent copper from leaching out of household pipes. The southern boundary of the water system is about 0.75 mile away from the northern boundary of the Honomū water system. The water system is not connected to any other water system.

- 1 ▪ **Nīnole Water System.** This is the smallest DWS system (49 connections, 0.011 mgd average
2 production (2003)). The water source is one spring (Nīnole (Chaves) Spring). Water is disinfected and
3 treated to provide corrosion control. The majority of the water mains are along Māmalahoa
4 Highway and the Hawaii Belt Road. The water system is not connected to any other water system.

- 5 ▪ **Laupāhoehoe Water System.** This is the fourth largest system in the Planning Area (399
6 connections, 0.13 mgd average production (2003)) stretches for approximately five miles along the
7 Hawaii Belt Road serving Laupāhoehoe, Pāpa’aloha, Kapehu, and Waipunalei. The water sources are
8 the two Laupāhoehoe wells and the majority of the water system is fed from these wells without
9 additional pumping. This is one of four systems (Hakalau, Kalapana, and Kapoho are the others) in
10 which agricultural water use exceeds 20% of the total water system use. The water system is not
11 connected to any other water system.

- 12 ▪ **‘O’ōkala Water System.** Another small water system, the O’ōkala water system, is less than a mile
13 away from the Laupāhoehoe water system (83 connections, 42,000gpd average production (2003)).
14 The O’ōkala well supplies all of the water, and the entire water system is located makai of the
15 Hawai’i Belt Road.

- 16 ▪ **Pa’auilo Water System.** The Pa’auilo water system is one of eight DWS water systems with fewer
17 than 200 customers (199 connections, 81,000gpd average production (2003)). The Pa’auilo well is
18 the only regular source of supply, though water can be obtained from a connection with the Haina
19 water system if needed.

- 20 ▪ **Haina Water System.** The Haina water system is DWS’s most spread out water system, with
21 approximately 260 feet of pipe per customer (1,557 connections, .28mgd average production
22 (2003)) equaling 77 miles of pipe. The service area stretches from Pu’ukapu at the border of the
23 South Kohala District to the west, to a normally closed connection with the Pa’auilo water system to
24 the east. Approximately half of the customers reside in the community of Honoka’a. Water supply
25 comes from the Haina deep well and the Waimea Water Treatment Plant, with the majority supplied
26 by the treatment plant. The Haina deep well is located in Haina and water from it is pumped mauka
27 to the Haina, Hospital, DeSilva (Āhualoa No. 3), and Hagiwara Tanks. The remainder of the Haina
28 system, including areas to the east, is served by water from the treatment plant. A backup series of
29 pump stations is in place to pump water from Haina to the mauka parts of Āhualoa in the event the
30 water supply from the Waimea Water Treatment Plant is interrupted. There is a state well at the
31 Hospital Tank; however, it is not maintained by DWS.

- 32 ▪ **Kukuihaele Water System.** The Kukuihaele water system is another small DWS water system with a
33 relatively simple operation (157 connections, 71,000gpd average production (2003)). The system
34 consists of a single source, Kukuihaele (Waiulili) Spring, with water pumped mauka to two
35 operational zones, each served by a single tank. The water system serves the Kukuihaele community
36 with a water main extending east along Honoka’a-Waipī’o Road to Kapulena. DWS is developing a
37 well in the Kapulena area to replace Waiulili Spring.

38 **Catchment:** The Planning Area’s rainfall levels are well over 200 inches per year therefore landowners
39 often qualify and receive a water variance and rely on rain catchment.¹¹⁸ This is particularly true for
40 some of the mauka areas, including Homestead Lots. Therefore, due to the abundance of rainwater

118 <http://www.ctahr.hawaii.edu/hawaiirain/>

1 available, the availability of municipal water is not necessarily a strong factor to incentivize or
2 disincentivize development.

3 **General Plan Policies and Courses of Action**

4 **Policies**

- 5 ▪ **11.2.2(a):** Water system improvements shall correlate with the County's desired land use
6 development pattern.

7 **Courses of Action**

- 8 ▪ **11.2.4.2.2 (b)** Private systems shall be installed by land developers for major resort and other
9 developments along shorelines and sensitive higher inland areas, except where connection to
10 nearby treatment facilities is feasible and compatible with the County's long-range plans, and in
11 conformance with State and County requirements.
- 12 ▪ **11.2.4.8.2(c):** Continue to evaluate growth conditions to coordinate improvements as required to
13 the existing water system.
- 14 ▪ **11.2.4.8.2(d):** Investigate alternative means to finance the extension of water systems to
15 subdivisions that rely on catchment.
- 16 ▪ **11.2.4.3.2(a):** Replace old, substandard, or deteriorating lines and storage facilities.
- 17 ▪ **11.2.4.3.2(b)** Develop a standby well for the 'O'ōkala system.

18 **Previous Planning**

19 **Department of Water Supply Plans and Policies:** The Department of Water Supply (DWS) is a semi-
20 autonomous agency of the County of Hawai'i that operates by the Rules and Regulations adopted by the
21 Water Board. Members of the Water Board are nominated by the Mayor and confirmed by the County
22 Council. DWS operates and maintains its water systems with revenues generated wholly through water
23 rates paid by DWS customers. DWS does not receive any county tax revenues.

24 The primary function of the Department of Water Supply is to provide safe, affordable domestic water
25 service through its 22 water systems and 67 sources scattered throughout the island. Its focus,
26 therefore, is on maintaining and upgrading its own existing water systems. DWS projects are prioritized
27 according to safety needs, compliance with EPA regulations, improvements to operational efficiency and
28 DWS Water System Standards.

29 The Water Board endeavors to keep rates affordable, and any proposed rate increase requires an in-
30 depth study, public hearings, and the approval of the Water Board. Because DWS has to act in a
31 financially responsible manner, it will typically only be willing to take over an existing water system, one
32 that is owned or operated by someone else, if it already meets the Department's Water System
33 Standards and if the revenue it will generate pays for operations and maintenance of the system.
34 Similarly, DWS normally only assumes debt service for system improvements when revenues received
35 will cover capital costs, operations, and maintenance.

36 The cost of expanding existing water systems or constructing new water systems can be very high
37 relative to the revenues gained by adding new customers and doing so could lead to significant rate
38 increases for all of the Department's customers. DWS typically only expands its existing system capacity
39 when replacing and upgrading infrastructure. Generally, DWS leaves the expansion of water systems
40 and creation of new water systems to developers, who pay for the infrastructure improvements through
41 a portion of their land sales. Water system expansion can also occur when community members get
42 together and form improvement districts, which can then finance the desired improvements with grants

1 or low interest loans to enhance living conditions for the community as well as increase land values.
 2 DWS is willing to help support such community efforts by providing technical support with a preliminary
 3 conceptual design and preliminary estimation of engineering costs, overall construction management
 4 and administration, DWS inspectors for construction inspections, and credits applied to the facilities
 5 charge required for each unit of water based on which water system facilities are actually constructed.

6 Changes of zone and subdivisions require that water is available and that the water systems serving
 7 those specific areas will meet the county’s Water System Standards. When reviewing applications, the
 8 Planning Department requests a determination of water availability from DWS. Determinations of water
 9 availability must be made on a case-by-case basis by the DWS engineering division and must take into
 10 account various factors, including, but not limited to:

- 11 ▪ Is the parcel within the Department’s pressure service zone or is it “Out of Bounds”?
- 12 ▪ Would there be pressure issues at any location within the subject parcel requiring an “Elevation
 13 Agreement”?
- 14 ▪ What is the general water availability in the subject pressure service zone?
- 15 ▪ Is the parcel a pre-existing lot of record (PELOR)? If not, what was the PELOR?
 - 16 ○ Has there been a change of zone previously?
 - 17 ○ Has there been a subdivision previously?
- 18 ▪ Will the meter be located on a private, County, or State road?
 - 19 ○ Are permits or easements required?
 - 20 ○ Is there existing meter box overcrowding or service lateral overcrowding at the location
 21 where the service would originate?
- 22 ▪ Is there remaining capacity in the pipeline to be tapped?
 - 23 ○ Are there existing services and is there overuse of water by existing services?
- 24 ▪ Is the pipeline strictly a transmission waterline, in which case tapping the line for service is not
 25 allowed?

26 operating storage for each water system based on the 2005, 2010, and 2025 water system demands.
 27 Operating storage requirements for each water system are the maximum day demands for that system.
 28 Standards for required operating and fireflow storage are discussed in Chapter 7 of the plan.

29 The required fireflow volumes for each system are based on the largest fireflow required for the types of
 30 land use within each water system. For example, systems that have commercial, industrial, school, or
 31 hospital land uses have higher fireflow requirements than systems serving only single-family residential
 32 and agriculture. The capacity of a water system to meet required fireflow volume is calculated assuming
 33 the system is experiencing maximum day demands.

34 This plan also compared the available and required storage volumes for each water system. The water
 35 systems are presented by judicial district. For each water system, the available and required storage,
 36 and the resulting projected surplus or deficit, is presented for 2005, 2010, and 2025. The following is a
 37 breakdown of the storage capacities, pressure issues, and other general improvements identified in the
 38 DWS Plan.

1 **Rural South Hilo Water Systems:**

- 2 ▪ The **Pauka'a-Pāpa'ikou** system has a deficit of 0.22 mg in 2005, decreasing to 0.16 mg in 2025. No
3 new storage is planned for these systems. The deficit is anticipated to decrease over time due to the
4 expected decrease in unaccounted-for water. The plan recommends replacing all water mains that
5 are less than 6 inches with minimum of 6-inch pipes.
- 6 ▪ The **Pepe'ekeo** system has a slight storage deficit (0.01 mg) that will be eliminated with the planned
7 construction of the new Kula'Imano Tank. The plan recommends replacing pipelines that are less
8 than 6 inches with a minimum of 6-inch mains as part of DWS's ongoing main replacement program.
9 The areas that show potentially low pressures at peak demands are very limited; it is not critical that
10 DWS take any action for these areas at this time.
- 11 ▪ Both the **Honomū** and **Hakalau** systems have projected shortfalls for 2005 through 2025. In 2025
12 the deficit is 0.16 mg in Honomū and 0.18 mg in Hakalau. New or additional storage is planned for
13 both of these systems, which will reduce the deficit for 2025 to 0.01 mg in Honomū and 0.03 mg in
14 Hakalau.

15 The plan makes the following water system improvement recommendations:

- 16 ○ For Honomū, replace 6-inch pipeline with 8-inch (1,700 ft) along Stable Camp Rd. and 'Akaka
17 Falls Rd., makai of Honomū Tank.
- 18 ○ For Hakalau, replace existing Hakalau No. 1 Tank with a new tank and raise the overflow
19 elevation by at least 20 feet if possible. When the pipelines along the highway and along
20 Chin Chuck Rd. are scheduled for replacement, replace 6-inch mains with 8-inch. Both of
21 these improvements will help provide better fireflow protection. (Note: DWS is now looking
22 at replacing the Hakalau No. 2 Tank which was not mentioned in the 2006 plan.)

23 **North Hilo Water Systems:**

- 24 ▪ The three systems in the North Hilo District all have a storage deficit in 2005 through 2025. For
25 **Nīnole** and **'O'ōkala** the storage deficits are small (0.02 mg and 0.01 mg, respectively) and are due
26 to a shortfall in fireflow storage. No new or additional storage is planned for 'O'ōkala.
- 27 ▪ A new storage facility is planned for **Nīnole**. DWS's minimum tank size for new construction is 0.10
28 million gallons, which would provide the needed storage for the system. The plan recommends
29 replacing all pipelines less than 6 inches with minimum of 6-inch mains. This would allow the
30 required fireflow to be provided where it currently is not met.
- 31 ▪ **Laupāhoehoe** has a storage deficit of 0.54 mg with existing storage facilities for all years. DWS plans
32 to replace the existing Manowaiopae Tank with a larger tank, which will reduce the storage deficit to
33 0.21 mg. (Note that storage often needs to be strategically located throughout the system in order
34 to functionally meet storage capacity issues.) The plan recommends replacing all pipelines that are
35 less than 6 inches with minimum 6-inch mains and replacing the 6-inch main with an 8-inch main
36 between Kihalani BPS and No. 1 Tank.

37 **Hāmākua Water Systems:**

- 38 ▪ The **Pa'auilo** systems also have storage deficits with existing storage facilities. Deficits in 2025 are
39 0.24 mg for Pa'auilo. No new storage is planned for this system. Other plan recommendations for
40 Pa'auilo include replacing all pipelines that are less than 6 inches with minimum 6-inch mains. Also,
41 the pipeline along Old Māmalahoa Hwy from Pa'auilo Makai St. to the east end of the system should
42 be replaced with 8-inch main (13,000 ft).

- 1 ▪ In **Haina-Honoka’a**, with existing storage tanks, there is a deficit of 0.57 mg in 2005, increasing to
 2 0.66 mg in 2025. New storage is planned for the Haina system. Other plan recommendations
 3 include:
 - 4 ○ Replace 6-inch main between the Sawmill tank and Āhualoa Filter tank with minimum 8-inch
 5 and potentially 12-inch depending on planned development in the area (6,200 ft).
 - 6 ○ Replace 6-inch pipeline along Pikake St., mauka of Mauna Loa St. to Māmalahoa Hwy. with
 7 12-inch (1,270 ft).
 - 8 ○ Replace 6-inch pipeline along Mauna Loa St. and Pakalana St. from Pikake St. to Nakamali’i
 9 St. with 8-inch (2,100 ft).
 - 10 ○ Replace 6-inch pipeline along Pā’auhau St. from Māmalahoa Hwy to New Pā’auhau tank
 11 with minimum 8-inch (3,500 ft).
 - 12 ○ Replace all pipelines that are less than 6 inches, with minimum of 6-inch mains.
- 13 ▪ **Kukuihaele** system has a storage deficit in 2025 of .15mg., however, new storage is planned for this
 14 system that would reduce the deficit to 0.04 mg.
- 15 ▪ For a prioritization of these projected improvements relative to CIP budgets, please refer to Table
 16 10-4, 10-5, and 10-6 of the DWS Plan.

17 **System Water Availability:** The current water availability in the Planning Area is generally as follows **but**
 18 **is subject to change without notice:**

19 Note: An Equivalent Unit of Water (EU or “unit”) allows an average day usage of up to 400 gallons per
 20 day with a maximum day usage of 600 gallons per any one day. One EU of water is generally considered
 21 suitable for a single-family residence and is typically allowed to serve one residence only.

- 22 ▪ **Hilo (Kaiwiki):** Three units of water are typically available per pre-existing lot of record (PELOR).
 23 Service is typically available for subdivision and ‘ohana dwellings lots, but not for rezones/SLU
 24 Boundary amendments.
- 25 ▪ **Hilo (Wainaku):** Seven units of water are typically available per PELOR makai of the Ha’aheo
 26 Reservoir and south of the Honoli’i Stream. Service is typically available for subdivision and ‘ohana
 27 dwellings, but not for rezones/SLU Boundary amendments.
- 28 ▪ **Pauka’a/Pāpa’ikou:** Upper Ka’ie’ie (mauka of Medeiros tank – 539’ elevation) One unit of water is
 29 typically available per PELOR. Lower Ka’ie’ie (north of closed valve at Honoli’i Bridge) water is
 30 typically available for up to seven units of water per PELOR. Water is typically available for
 31 subdivision and ‘ohana dwellings, but not changes of zone/SLU boundary amendments.
- 32 ▪ **Kula’imano (Pepe’ekeo):** One unit of water is typically available per PELOR. There is currently no
 33 service capacity for ‘ohana dwellings, subdivision, or changes of zone.
- 34 ▪ **Honomū:** Below the reservoir on ‘Akaka Falls Road, seven units of water are typically available per
 35 PELOR. Water is typically available for subdivision and ‘ohana dwellings and up to three additional
 36 units of water are available for changes of zone/SLU boundary amendments, provided it doesn’t
 37 exceed seven units total.
- 38 ▪ **Wailea/Hakalau:** One unit of water is typically available per PELOR. There is currently no service
 39 capacity for ‘ohana dwellings, subdivision, or changes of zone/SLU boundary amendment.

- 1 ▪ **Nīnole:** One unit of water is typically available per PELOR. There is currently no service capacity for
2 ‘ohana dwellings, subdivision, or changes of zone/SLU boundary amendment.
- 3 ▪ **Laupāhoehoe/Pāpa‘aloo:** Water is typically available for up to seven units of water per PELOR.
4 Water is typically available for subdivision and ‘ohana dwellings as well as changes of zone/SLU
5 boundary amendment. In the Kapehu area, one unit of water is typically available per PELOR but
6 there is no service capacity for ‘ohana dwellings, subdivision, or changes of zone/SLU boundary
7 amendment.
- 8 ▪ **‘O‘ōkala:** Water is typically available for up to seven units of water per PELOR. Water is typically
9 available for subdivision and ‘ohana dwellings, but not changes of zone/SLU boundary amendment.
- 10 ▪ **Pa‘auilo:** Water is typically available for up to seven units of water per PELOR. Water is typically
11 available for subdivision and ‘ohana dwellings, but not changes of zone/SLU boundary amendment.
12 Mauka of the Pōhākea / Pa‘auilo Tank, only one unit per PELOR is available.
- 13 ▪ **Haina (Āhualoo/Honoka‘a/Haina/Pōhākea):** One unit of water is typically available per PELOR.
14 There is currently no service capacity for ‘ohana dwellings, subdivision, or changes of zone/SLU
15 boundary amendment.
- 16 ▪ **Kukuihaele:** Currently there is a freeze on new service connections, with no new services available
17 until the Kapulena well and reservoir comes online between 2014 and 2016.

18 **Potable Water Analysis Table**

19 **Table 10. Potable Water Analysis Table**

| Challenges | Support/Rationale | CDP Strategy Direction |
|---|---|---|
| <p>Lack of water available to support development within existing towns and villages</p> | <p>Plan Support: DWS Water Master Plan</p> <p>Policy Support:</p> <ul style="list-style-type: none"> ▪ General Plan 11.2.2(a); 11.2.4.2.2 (b); 11.2.4.8.2(c); 11.2.4.8.2(d); 11.2.4.3.2(a); 11.2.4.3.2(b) ▪ | <ul style="list-style-type: none"> ▪ Advocacy: Encourage Department of Water Supply to prioritize water system capacity expansion and allocation polices to concentrate growth within existing towns and villages |

20

21 **Solid Waste & Recycling**

22 **Overview, Assets, and Challenges**

23 There is no residential curbside pickup of solid waste or recyclables provided by the County, so most
24 residents self-haul recycling and rubbish to solid waste disposal facilities. The Solid Waste Division of the
25 County Department of Environmental Management operates all solid waste disposal facilities. Island-
26 wide, this includes two sanitary landfills and twenty-one transfer stations. The County’s two landfills are
27 located outside the Planning Area in North Kona and Hilo. Within the Planning Area, Solid Waste
28 Recycling and Transfer stations are located at Honoka‘a, Pa‘auilo, Laupāhoehoe, Honomū and Pāpa‘ikou.

1 **Recycling & Transfer Station Facilities¹¹⁹**

2 According to the County’s **Island-Wide Transfer Stations Repair and Enhancement Plan** (2006), all five
 3 of the transfer stations in the Planning Area had major deficiencies that required repair or
 4 reconstruction. Since 2006, improvements have been made at all of the Planning Area transfer stations,
 5 however, further improvements are needed for basic maintenance, safety, and efficiency concerns.
 6 Also, each transfer station would benefit by an increase in their capacity to receive solid waste and
 7 recycling materials in order to keep up with community usage.

8 All transfer stations accept residential self-haul rubbish at no charge. Business and Institutional garbage
 9 must be disposed of at one of the two County sanitary landfills and are charged a landfill tip fee rate,
 10 currently \$85.00 per ton (pro-rated for any fraction thereof).¹²⁰

11 **HI-5 Program:** The Hawai’i Deposit Beverage Container Program (HI-5) is a State of Hawai’i funded
 12 program that places a 5¢ redeemable deposit on each qualified beverage container. The only certified
 13 redemption center in the Planning Area is at the Honoka’a Recycling and Transfer Station.

14 **Other Recycling Services**

- 15 ▪ County scrap metal recycling facilities are located outside the Planning Area in Hilo and
 16 Kealakehe/Kailua-Kona Scrap Metal Facilities, and are open daily. Scrap Metal facilities/bins accept
 17 self-hauled materials from household generators but no commercial or agency material allowed.
- 18 ▪ County greenwaste recycling facilities are located outside the Planning Area at the East Hawai’i
 19 Organics Facility, at the West Hawai’i Organics Facility, and at the Kealakehe Greenwaste Facility.
 20 These greenwaste facilities accept materials from both households and commercial businesses.
- 21 ▪ Hilo Auto Recycling (a private company) is operating a scrap metal business within the Planning
 22 Area, on Sugar Mill Road, in Pepe’ekeo.

23 **Challenges:**

- 24 ▪ Due to the distance from approved greenwaste facilities, greenwaste is routinely discarded in
 25 transfer station receptacles or gulches.
- 26 ▪ Honoka’a Recycling and Transfer Station is currently over capacity and is in need of an additional
 27 chute and receptacle as well as greenwaste and other recycling services.

28 **General Plan Policies and Course of Action**

- 29 ▪ 4.3(d): Encourage the concept of recycling agricultural, industrial, and municipal waste material.
- 30 ▪ 10.5.2(c): Appropriately designed and cost-effective solid waste transfer station sites shall be
 31 located in areas of convenience and easy access to the public.
- 32 ▪ 10.5.2(f): Continue to encourage programs such as recycling to reduce the flow of refuse deposited
 33 in landfills.
- 34 ▪ 10.5.2(h): Encourage the full development and implementation of a green waste recycling program.

35 **Previous Planning**

119 http://www.hawaiizerowaste.org/facilities/#.UmcW_JTF1_8
 120 Hawai’i County Code §20-49 (a)(1)(A)

1 According to a 2006 Kohala Center report entitled: **Waste Management on the Big Island: Mapping a**
2 **vision for an economically and ecologically sustainable Hawai'i**, by Meleah Houseknecht:

3 *In 1991 the state of Hawai'i enacted the "Hawai'i Integrated Solid Waste Management Act," (HRS*
4 *§342G) which created the Office of Solid Waste Management within the state Department of Health*
5 *(DOH). The Act also set forth goals for reducing the solid waste stream prior to disposal—25 percent*
6 *by January 1, 1995 and 50 percent by January 1, 2000. In order to meet these goals the Act directed*
7 *counties to develop and adopt integrated solid waste management plans and submit them to the*
8 *DOH by January 1, 1993. These plans were supposed to set out a roadmap for how each county*
9 *intended to reach the state's waste reduction/diversion goals through (in explicit order of priority):*
10 *source reduction, recycling and bioconversion, including composting, and landfilling and incineration*
11 *(with the "respective roles of landfilling and incineration...left to each county's discretion"). The*
12 *state's waste reduction goals, along with several other goals and mandates set forth in the Act, are*
13 *yet to be met.*

14 The County of Hawai'i compiled its first integrated solid waste management plan in 1993 and officially
15 adopted it in October 1994. As required by state law, the plan was then amended in December 2002.
16 The **Update to the Integrated Solid Waste Management Plan of the County of Hawai'i** (UISWMP)
17 primarily focused on "the establishment of a solid waste management system in East Hawai'i to replace
18 South Hilo Landfill." It included a 2001 waste composition study specifically for the waste stream
19 entering the South Hilo Landfill, 14 as well as projected costs, impacts, and volume reduction potential
20 of various alternative scenarios, ranging from transporting all of East Hawai'i's waste to Pu'uana'hulu
21 landfill, to intensive recycling prior to transportation to Pu'uana'hulu, to incineration or other
22 technologies used for waste volume reduction. The UISWMP iterated the results of an extensive
23 evaluation process undertaken by an appointed **Solid Waste Advisory Committee** (SWAC). The SWAC's
24 decisions made regarding the replacement of the South Hilo Landfill were:

- 25 ▪ Construct no new landfill in East Hawai'i;
- 26 ▪ Emphasize the recovery of recyclable materials at the planned East Hawai'i sort station, possibly by
27 incorporating features of a material recovery facility (MRF);
- 28 ▪ Procure a waste reduction facility for the East Hawai'i waste stream using either waste-to-energy,
29 thermal gasification, or anaerobic digestion technology; and

30 Establish a county recycling program with a long list of elements that has the potential to increase the
31 waste diversion significantly.

32 Also according to the Kohala Center report, these upgrades to the County transfer stations are needed:

33 In order to take full advantage of other improvements to the recycling infrastructure, significant
34 upgrades at all residential trash transfer stations are also needed. In addition to simply improving the
35 safety and usability of transfer stations, two specific types of upgrades would be needed at all transfer
36 stations in order to maximize the impact on diversion of the other facilities mentioned above.

- 37 1. All transfer stations should be upgraded to include a full complement of recycling facilities and
38 convenient, safe and clean recycling infrastructure. This includes depositories for paper, glass,
39 plastics, biodegradable organics, scrap metal, appliances/white goods, and clean construction
40 waste.
- 41 2. All transfer stations should also be outfitted with the capacity to separate biodegradable organics
42 (wet/dry separation) for composting. This may not mean including separate collection containers for
43 organics right now, but designing stations to include a logical and user-friendly space for future
44 source separation.

1 Over the coming 10 to 20 years the county is already planning to upgrade all of its transfer stations at a
 2 cost of approximately one million dollars each, ¹²¹ which affords a perfect opportunity to drastically
 3 improve recycling and reuse infrastructure at little to no additional cost. ¹²²

4 In 2007, the Hawai'i County Council joined hundreds of states, counties, cities, nationwide
 5 municipalities, and countries passing legislation adopting the mission to reduce the county's ecological
 6 footprint. In February 2009, the County received the [Draft Zero Waste Implementation Plan](#) and held
 7 public meetings on the plan to get public input. To see the presentation for the **Hawai'i Zero Waste**
 8 **Plan**, follow the footnote and link. ¹²³

9 The waste reduction efforts suggested in the Integrated Solid Waste Plan are beginning to be
 10 implemented in the Planning Area. The community re-use program at Laupāhoehoe Recycling and
 11 Transfer Station is an example of reducing waste by diversion and reuse, and it is one of five such
 12 facilities at County transfer stations (it is currently the only reuse center in the Planning Area). It
 13 functions under an informal arrangement between the County and community members. The County
 14 provided the facility, and community members staff it and keep it clean. ¹²⁴ This arrangement could be
 15 used as a model for similar programs to be developed at other solid waste and recycling transfer
 16 stations, as well as other County facilities.

17 **County Capital Improvements**

18 **Recent Solid Waste Projects include:**

- 19 ▪ The County of Hawaii has appropriated nearly 4.5 million for Rural Transfer Station
 20 Replacement/Enhancement for island wide projects in the FY2012-32013 CIP budget
- 21 ▪ Reuse Tent in Laupāhoehoe
- 22 ▪ Recycling Collection at all Transfer stations

23 **Solid Waste/Recycling Analysis Table**

24 **Table 11. Solid Waste/Recycling Analysis Table**

| Challenges | Support/Rationale | CDP Strategy Direction |
|--|---|--|
| Insufficient greenwaste capacity within the Planning Area | Plan Support: <ul style="list-style-type: none"> ▪ County Draft Zero Waste Implementation Plan ▪ Integrated Solid Waste Management Plan of the County of Hawai'i | Policy: Encourage DEM to incorporate greenwaste facilities at rural transfer stations |

121 Schrandt, Colleen and Lane Shibata, 2006, "Audit of the County of Hawai'i's Recycling and Diversion Grants Program." A report to the Finance Committee, County of Hawai'i, conducted and submitted by the Legislative Auditor's Office, County of Hawai'i, June 2006.

122 http://www.kohalacenter.org/pdf/waste_mgmt.pdf

123 <http://www.hawaiiizerowaste.org/uploads/files/Hawaii%20Zero%20Waste%20Plan%20Presentation.pdf>

124 see the Hāmākua Community Profile, page 5-15

| | | |
|---|--|--|
| | <ul style="list-style-type: none"> ▪ Island-Wide Transfer Stations Repair and Enhancement Plan <p>Policy Support:</p> <ul style="list-style-type: none"> ▪ General Plan 4.3(d); 10.5.2(f); 10.5.2(h) | |
| <p>Insufficient capacity for solid waste collection at the Honoka’a Recycling & Transfer Station</p> | <p>Plan Support:</p> <ul style="list-style-type: none"> ▪ Island-Wide Transfer Stations Repair and Enhancement Plan <p>Policy Support:</p> <ul style="list-style-type: none"> ▪ General Plan 10.5.2(c) | <p>Policy: Prioritize CIP funding to add additional chute/receptacle at the Honoka’a facility</p> |

1

2 **Wastewater**

3 **Overview, Assets, and Challenges**

4 The County of Hawai’i maintains four wastewater systems in the Planning Area – in Pauka’a/Pāpa’ikou,
5 in Pepe’ekeo, in Kapehu Camp, and in Haina/Honoka’a. For information on the capacity of each system,
6 see the Hāmākua Community Profile, page 5-12.

7 For new subdivisions within 300’ of an existing public sewer, the subdivision code requires the
8 subdivider to hookup.¹²⁵ If the new subdivision is within a planned service area of a public sewerage
9 system, then the County may require the subdivider to install “dry sewers.”¹²⁶ When a new public sewer
10 line is installed, landowners fronting the new sewer line must hookup subject to certain exceptions.¹²⁷
11 For new construction outside areas served by sewer, the Department of Health’s critical wastewater
12 disposal areas (CWDA) map restricts cesspools to non-critical areas as identified in the Department of
13 Health’s Critical Wastewater Disposal Area map (see Figure 5-4 of the Hāmākua Community Profile). In
14 such non-critical areas, the contamination risk from cesspool leachate to groundwater or nearshore
15 coastal water quality is low. The DOH must approve the design and construction of any onsite
16 wastewater disposal system (e.g., cesspools, septic systems). Under current rules, the DOH requires a
17 new wastewater treatment plant if a subdivision will create more than 50 dwelling units.

18 Challenges

- 19 ▪ Most of the Planning Area’s recent growth has been outside of areas served by municipal
20 wastewater systems.

125 Hawai’i County Code §23-85

126 Hawaii County Code §21-6

127 Hawai’i County Code §21-5

1 **Hawai'i Department of Health (DOH), Wastewater Branch**

2 The Wastewater Branch administers the statewide engineering and financial functions relating to water
3 pollution control, including individual wastewater systems program. The various program activities
4 include the review and approval of all new wastewater systems, including cesspools and septic tanks.

5 New cesspools are prohibited in designated critical wastewater disposal areas (CWDA) on all islands,
6 where the disposal of wastewater has or may cause adverse effects on human health or the
7 environment due to existing hydrogeological conditions. New cesspools are allowed under certain
8 conditions and require the approval of the Director of DOH, and large-capacity cesspools (i.e., those
9 designed to serve 20 or more people per day) have been banned.

10 DOH Wastewater Branch has identified the following zones to guide its regulation applications for new
11 disposal systems:

- 12 ▪ Critical Wastewater Disposal Area (CWDA): All lots within this designated area are subject to the use
13 of a septic tank system approved by DOH.
- 14 ▪ Cesspool -1: Cesspools are not allowed for lots less than one (1) acre in size.
- 15 ▪ Cesspool - 5: Cesspools are not allowed for lots less than five (5) acres in size.
- 16 ▪ Non-CWDA - Cesspools are allowed. Note: the inhabited areas of the Planning Area are designated
17 non-CWDA and cesspools are allowed and regulated by DOH.
- 18 ▪ Pursuant HAR 11-62-05, CWDA zones are identified based on one or more of the following concerns:
 - 19 ○ (1) High water table;
 - 20 ○ (2) Impermeable soil or rock formation;
 - 21 ○ (3) Steep terrain;
 - 22 ○ (4) Flood zone;
 - 23 ○ (5) Protection of coastal waters and inland surface waters;
 - 24 ○ 6) High rate of cesspool failures; and
 - 25 ○ (7) Protection of groundwater resources.

26 For subdivisions of 50 or more single family lots, the DOH Wastewater Branch requires a centralized
27 wastewater treatment system. Otherwise, individual wastewater systems are permitted according to
28 the zone in which the subdivision is proposed.

29 The entire CDP Planning lies within a Non-CDWA zone, so cesspools are allowed. In addition, DOH
30 requires a 50' distance from a stream, the ocean at the vegetation line, pond, lake, or other surface
31 water body for cesspools.¹²⁸

32 **General Plan Policies and Courses of Action**

128 <http://gen.doh.hawaii.gov/sites/har/AdmRules1/11-62a.pdf>

- 1 ▪ 11.2.4.2.2(b): Private systems shall be installed by land developers for major resort and other
2 developments along shorelines and sensitive higher inland areas, except where connection to
3 nearby treatment facilities is feasible and compatible with the County's long-range plans, and in
4 conformance with State and County requirements.
- 5 ▪ 11.2.4.2.2(d): Continue to seek State and Federal funds to finance the construction of proposed
6 sewer systems and improve existing systems.
- 7 ▪ 11.2.4.2.2(e): Plans for wastewater reclamation and reuse for irrigation and biosolids composting
8 (remaining solids from the treatment of wastewater is processed into a reusable organic material)
9 shall be utilized where feasible and needed.
- 10 ▪ 11.2.4.2.2(f): Require major developments to connect to existing sewer treatment facilities or build
11 their own.
- 12 ▪ 11.6.4.2.2(b): Expand the existing sewer collection system to all densely populated areas in and
13 around Hilo.
- 14 ▪ 11.6.4.2.2(c): Upgrade and/or rehabilitate aging sewer pump stations and collector sewers.
- 15 ▪ 11.6.4.3.2(a): Continue operation of the existing sewerage system at Kapehu.
- 16 ▪ 11.6.4.4.2(a): Investigate possible alternatives to eliminate the need for and continued use of the
17 oxidation ponds.

18 **Previous Planning**

19 **Capital Improvement Projects**

- 20 ▪ Over 18 million dollars was appropriated in the County budget of 2012-13 to convert Honoka'a
21 Large Capacity Cesspools to public sewer connections. Recently the County completed a Large
22 Capacity Cesspool Conversion project in downtown Honoka'a. This allowed for the connection of
23 downtown businesses and residents to the public sewer system.
- 24 ▪ Funds appropriated for Kula'imano and Pāpa'ikou WWTP dewatering

25 **Emergency Services**

26 **Overview, Assets, and Challenges**

27 **Fire:** The County Fire Department provides firefighting, emergency medical service, search and rescue,
28 hazard materials response, and life guarding services. Fire stations located in Honoka'a and
29 Laupāhoehoe, together with the fire stations in Hilo provide adequate response times for firefighting.
30 However, only the Honoka'a station presently provides EMS. A volunteer fire station is located in
31 Pepe'ekeo which will serve as offices/training facility for Volunteer Firefighter training for East Hawai'i
32 volunteer firefighters. In addition, there is a Volunteer Fire Company in Pa'auilo who recently agreed
33 with the Hāmākua Housing Authority (HHA) to base its Company operations out of HHA's building makai
34 of the Highway in Pa'auilo.

35 For wildfires in the Planning Area, the area is divided into response zones. In general, the Planning
36 Area's population centers along the coast are served by the Hawai'i County Fire Department. Areas
37 surrounding the summits of Mauna Kea and Mauna Loa are primarily served by the State Department of
38 Forestry and Wildlife (DOFAW). Other mauka areas that include the Forest reserve areas are served
39 cooperatively between DOFAW and the County. Lands surrounding Pōhakuloa are jointly served by the
40 military and DOFAW.

1 **Police:** The Planning Area extends over Hāmākua Patrol District as well as portions of the North and
 2 South Hilo Patrol Districts. The Hāmākua patrol District covers 223 square miles and 18 sworn positions
 3 are assigned to this area. There is a police station and sub-station located in Honoka’a. Several
 4 initiatives are underway in this district, including Crime Reduction Units, to eliminate offense at parks
 5 and community functions. A School Resource Officer is also assigned to Honoka’a High School.

6 The North Hilo District encompasses 144 square miles and is assigned 12 sworn positions. There is a
 7 police station in Laupāhoehoe. The District coordinates with the Hāmākua District to offer drug-free
 8 events for the community.

9 The South Hilo District encompasses 635 square miles and in addition to a portion of the Planning Area,
 10 includes the majority of urbanized Hilo. 80 sworn positions are dedicated to this District. There is a
 11 police sub-station in Pepe’ekeo, however, it is rarely staffed.

12 **Civil Defense:** Planning by the County’s Civil Defense agency is not disaster-specific. Instead, the Multi-
 13 Hazard Mitigation Plan¹²⁹ establishes general goals and objectives based on the General Plan, and the
 14 Emergency Operations Plan serves as a “manual” to guide hazard preparation and response.

15 **Emergency Communications:** Public Safety radio is transmitted across the island via microwave towers
 16 that are arranged in a ring that encircles the island. Transmission can go both clockwise and
 17 counterclockwise, so if one tower fails, transmissions still reach the remaining towers. Capital funds
 18 have also been appropriated for an island wide 700 mhz emergency radio upgrade project.

19 **Warning Sirens and Evacuation System**

20 The Hawai’i County Multi-Hazard Mitigation Plan describes the County’s emergency preparedness in-
 21 cluding detection, warning, communications, public education (awareness, preparedness, flood insur-
 22 ance), evacuation, and sheltering.

23 Warnings to the public include:

- 24 ▪ The warnings from the Pacific Tsunami Warning Center and National Weather Service are issued as a
 25 “watch” and/or a “warning” to the County Civil Defense Agency.
- 26 ▪ The Civil Defense activates the sirens to alert people to seek further information from the radio or
 27 TV. The Civil Defense transmits warnings to the public through the Emergency Alert System, which
 28 consists of simultaneous broadcasts over all radio and television stations.
- 29 ▪ An effective public education program ensures a calm, organized, and efficient response to the
 30 warnings.
- 31 ▪ The County currently has 68 sirens and 12 simulators in operation around the island. Simulators
 32 provide a signal to manned stations where personnel are utilized to disperse the warning (see Figure
 33 3-13).
- 34 ▪ Sirens have an effective average range of one-half mile. Sirens are critical for populated coastal
 35 areas for tsunami warnings.
- 36 ▪ Police, fire and other emergency vehicles equipped with siren and PA equipment will sound and
 37 broadcast warnings in areas to be evacuated, particularly in affected areas not covered by the CD

129 <http://records.co.hawaii.hi.us/Weblink8/Browse.aspx?startid=18324&dbid=1>

1 sirens or in radio reception “dead spots”. The Civil Air Patrol, County, military and private
2 helicopters provide warnings to isolated areas.

3 **Shelters:** Emergency shelters within the Planning Area are located at Honoka’a High & Intermediate
4 School, Laupāhoehoe School, and Kalaniana’ole Elementary (see Figure 3-12). Laupāhoehoe is not a
5 State designated shelter; therefore, Red Cross will not staff it. However, the County will utilize
6 Laupāhoehoe as needed and use Parks and Recreation staff¹³⁰.

7 The State Civil Defense has designated the Honoka’a and Kalaniana’ole shelters as special needs and
8 pet-friendly shelters. Special Needs Shelters provide limited support to persons with special health
9 needs, but such evacuees must either be capable of taking care of their own personal needs or be
10 accompanied by a caregiver. The Department of Health is tasked with managing “Alternative Care Sites” for
11 special needs populations, and the Humane Society is tasked with managing Pet Friendly sites. Household
12 pets entering a Pet-Friendly Shelter must be caged for safety and owners should provide water and food
13 for their pets (State Civil Defense 2010).

14 Ideally, all shelters should be hurricane-resistant; however, detailed structural assessments have not yet
15 been conducted for these shelters. The Multi-Hazard Mitigation Plan includes shelter evaluations as a high
16 priority mitigation project.

17 **Emergency Bypass Routes:** During emergencies, Civil Defense has the power to open private roads for
18 evacuation. Because of the vulnerability of the Planning Area to bridge failure, rock slides, or other
19 reasons for closure of the Belt Highway, it is imperative to inventory these bypass routes and assess
20 their condition. [provide notice to private owners or lessees who control access on these roads,
21 recommend periodic inspection by Civil Defense to ensure that the road is passable for 2-wheel vehicles,
22 and determine a follow-up protocol if maintenance is required.

23 Challenges:

24 The Planning Area is vulnerable to the following natural disasters:

- 25 ▪ High winds, tropical cyclones, and hurricanes;
- 26 ▪ Earthquakes;
- 27 ▪ Landslides and rockfalls;
- 28 ▪ Tsunami;
- 29 ▪ Floods and dam failures;
- 30 ▪ Droughts;
- 31 ▪ Wildfires;

32 Further challenges as identified in the County’s Multi-hazard Mitigation Plan or through CDP Team
33 research include:

- 34 ▪ The Laupāhoehoe Fire Station does not have EMS capability;
- 35 ▪ A 1993 study evaluating the seismic risk to hospitals found non-structural hazards at all the County’s
36 hospitals;

130 See the Hāmākua Community Profile, page 3-22

- 1 ▪ The Honokaʻa Fire Station is at risk of economic losses or loss of functionality. The report
2 recommended a retrofit primarily consisting of installing a completed load path for hurricane wind
3 uplift;
- 4 ▪ The Laupāhoehoe Police Station is at risk of economic losses or loss of functionality in a hazard
5 event;
- 6 ▪ Emergency Evacuations from Waipiʻo Valley and Laupāhoehoe Point communities have been fraught
7 with efficiency and safety issues; a feasible evacuation plan is needed to ensure that appropriate
8 ingress for emergency personnel does not negatively impact the egress of evacuees;
- 9 ▪ Shoreline development is vulnerable to coastal landslides and very little data is available on local
10 bluff stability [see the Kahakai section of the ʻĀina chapter - link]
- 11 ▪ Vulnerability of Plantation Homes and Other Post-and-Pier Single-Wall Construction: Single-wall and
12 double-wall constructed homes built prior to 1999 were not structurally required to meet updated
13 hurricane and earthquake standards. Since most of the homes in the Planning Area are single- or
14 double-wall homes built prior to 1999, the local housing stock is particularly susceptible to hurricane
15 and earthquake damage;
- 16 ▪ Need for Hardening. According to an all-hazard rapid visual screening of approximately 70-80 critical
17 facilities in the County reported in the County’s 2010 Hazard Mitigation Plan, the Planning Area’s
18 hospital, medical clinic, and fire stations ranked as follows:
 - 19 ○ Hale Hoʻola Hāmākua, which provides emergency and long-term care services: Ranked #3 in
20 terms of estimated dollar loss from earthquake or hurricane.
 - 21 ○ Hāmākua Health Center: Ranked #22 in terms of earthquake damage and #10 in terms of
22 hurricane damage.
 - 23 ○ Honokaʻa Fire Station: Ranked #7 in terms of loss of use from hurricane damage.
 - 24 ○ Laupāhoehoe Fire Station: Ranked #2 in terms of loss of use from hurricane damage.

25 Of the above facilities, the Hazard Mitigation Plan included only the Honokaʻa Fire Station on its
26 short list for further action.

- 27 ▪ Increased agricultural/building materials thefts in the Planning Area

28 **General Plan Policies and Courses of Action**

- 29 ▪ 10.3.2(a): Development of police and fire facilities should entail joint use structures whenever
30 feasible.
- 31 ▪ 10.3.2(c): Development of volunteer fire facilities with proper planning to be replaced or to co-exist
32 with full time Fire/EMS personnel.
- 33 ▪ 10.3.2(g): Encourage the further development and expansion of community policing programs and
34 neighborhood and farm watch programs in urban, rural and agricultural communities.
- 35 ▪ 10.3.2(j): Mitigate hazards through the preparation of disaster assessment reports and appropriate
36 follow-up on the assessment recommendations.
- 37 ▪ 10.3.2(k): Educate the public regarding disaster preparedness and response, especially proper
38 responses for sudden impact hazards.

- 1 ▪ 10.3.2(j): Encourage the State to evaluate the disaster shelters’ ability to withstand various natural
2 disasters.
- 3 ▪ 10.3.2(m): Consider the proximity to fire stations in approving any rezoning to permit urban
4 development.
- 5 ▪ 10.3.2(n): The Fire Department, in cooperation with other related governmental agencies and the
6 involved land owners, shall prepare a fire protection and prevention plan for forest reserves and
7 other natural areas

8 **Previous Planning**

9 **Hawai’i County Multi-hazard Mitigation Plan:** The Plan developed by Hawai’i County Civil Defense
10 includes the following mitigation goals and objectives:

- 11 1. Goal: Continually strive to improve the state of the art for the identification of hazard areas,
12 prediction capabilities, and warning systems.
 - 13 1.4 Establish a warning system that is cognizant of warning siren gaps that require supplemental
14 field warning, which strives to fill those gaps based on population, that is routinely tested and
15 maintained, and that educates the public on proper response.
- 16 2. Goal: Control future development and retrofit existing structures within hazard areas to
17 minimize losses.
 - 18 2.2 Periodically review the effectiveness of current land-use- related plans, codes, and standards
19 to control future development within hazard areas.
- 20 3. Goal: Ensure that all emergency response critical facilities and communication systems remain
21 operational during hazard events.
 - 22 3.1 Harden all essential emergency facilities and communication systems to withstand
23 earthquake and hurricane forces.
- 24 4. Goal: Provide adequate pre- and post- disaster emergency shelters to accommodate residents
25 and visitors.
 - 26 5.1 Identify and harden selected shelters to withstand hurricane.
- 27 5. Goal: Develop a level of awareness among the general public and businesses, particularly the
28 visitor industry, that results in calm and efficient evacuations, self-sufficient survival skills, and
29 willingness to abide by preventive or property protection requirements.
 - 30 6.1 Develop a broad-based public information program that utilizes a diversity of
31 communication media.
 - 32 6.2 Develop special public information programs targeted to vulnerable populations.
 - 33 6.3 Develop a community-based network that double-functions as the Community Emergency
34 Response Team and provides input into mitigation planning.

1 **Mauna Kea Watershed Management Plan (2010)**¹³¹: In relation to wildfire prevention, the plan has
 2 these objectives and recommendations:

3 **Objective 3C: Strategically control invasive plants to protect high quality native ecosystems and**
 4 **endangered species.**

5 Domestic cattle and sheep have been used effectively to **reduce wildfire grass fuels** in pastures and
 6 other grasslands on the island. Cattle have been used effectively to reduce fine fuels along roadsides.
 7 Sheep have been used to reduce grass fuels in a perimeter fuelbreak for Waiki'i Ranch. Grazing animals
 8 should be used only on pastures and other grasslands, not in the forest.

9 Prescribed fire can be used to remove or reduce stands of alien species or to reduce roadside stands of
 10 wildfire fuels. This method has been used on Mauna Kea to control gorse, but follow-up herbicide
 11 application is required. Burn planning must be done cooperatively, following established procedures and
 12 using best management practices.

13 **Management Goal 4: Prevent and minimize wildfires on Mauna Kea.**

14 The vegetated areas on Mauna Kea below 9,500-ft. elevation are of greatest concern with respect to
 15 fire. The tall, ungrazed grasslands on the windward side of Mauna Kea can also provide a fire risk. The
 16 fire season on the windward side is generally associated with extended drought conditions.

17 DLNR, DHHL, Hakalau Forest NWR, and PTA all have fire management plans (DLNR 1997; USFWS 2002;
 18 U.S. Army 2003; DHHL 2007), which identify infrastructure, equipment and personnel resources, outline
 19 fire response procedures, and provide guidelines for appropriate fire suppression activities. A new
 20 wildland fire management plan is under development for Pōhakuoloa Training Area, with an anticipated
 21 completion date toward the end of 2010, and a fire management plan is under development for the
 22 palila critical habitat area.

23 There are mutual aid agreements in effect between and among the County Fire Department, DLNR-
 24 DOFAW, National Park Service, and U.S. Army Support Command for wildland fire suppression. These
 25 provide the basis for requesting and coordinating assistance. Landowners also cooperate in fire-fighting
 26 efforts by providing equipment, and access to water and roads.

27 **Objective 4A: Install on-the-ground fuel management measures intended to reduce the number**
 28 **and/or severity of fires.**

29 **Recommended Actions**

- 30 ▪ Maintain and improve access roads around Mauna Kea to meet fire access and firebreak standards,
 31 and to minimize erosion potential, as described in the landowner fire management plans. These
 32 include the high priority roads on State land: R-1 (Mauna Kea Access Road), R-10 (Skyline Road), R-
 33 12 (Skyline to Pu'u o Kauha), R- 13 (R-1 to Pu'u o Kauha to Saddle Road), R-14 and R-15.
- 34 ▪ Maintain and improve lateral roads, often connecting to ranch roads, to provide firebreaks and
 35 alternative access routes in the event of a fire. Construct or re-open strategically-placed roads to act
 36 as access routes for ingress/egress during a fire.

131 <http://www.hawaii-county-cdp.info/hamakua-cdp/about-the-hamakua-cdp-planning-area/past-and-current-planning-activities-in-the-hamakua-cdp-planning-area/FINAL%20Mauna%20Kea%20watershed%20mgt%20plan%2015apr10.pdf/view>

- 1 ▪ Maintain and improve existing firebreaks, as necessary, by widening to firebreak standards,
2 installing water bars, and providing turn-out areas and parking.
- 3 ▪ Build and maintain additional firebreaks in fire-prone areas, as described in landowner fire
4 management plans, to help compartmentalize any fire starts and provide access for suppression.
- 5 ▪ Using the range of available tools to reduce hazard fuels, maintain and improve existing fuel breaks
6 on Mauna Kea, including but not limited to the fuel break on the boundary between DHHL and
7 Hakalau Forest NWR, the fuel break surrounding the main gorse infestation area, and the fuel
8 breaks described in the U.S. Army’s fire management plan for PTA.
- 9 ▪ Create additional fuel breaks in priority areas to protect adjacent rare plants, native ecosystems,
10 and critical habitats, particularly where fuel types, terrain features, ignition sources and weather
11 conditions increase wildfire risk.
- 12 ▪ Restructure fuels along Mana-Keanakolu Road to minimize the potential for roadside fire starts.

13 **Objective 4B: Reduce fuel loads in fire-prone areas, ensuring compatibility with other habitat and**
14 **watershed protection goals.**

15 **Recommended Actions**

- 16 ▪ Continue prescribed burning of gorse, in combination with timely herbicide applications, to reduce
17 biomass and stimulate gorse seed germination to deplete the gorse seed bank in gorse patches
18 outside the main infestation area.
- 19 ▪ Use cattle or other grazers to reduce fine fuel loads in approved areas and under strict management
20 guidelines to avoid conversion from one undesirable fuel to another and to protect native plants in
21 adjacent areas.
 - 22 ○ Use manual, mechanical and/or chemical treatments, as appropriate, to remove hazard
23 fuels in sensitive areas, and along roadways and other ignition corridors.
 - 24 ○ Implement innovative measures to eradicate gorse from the main gorse infestation area and
25 Wailuku River basin.

26 **Objective 4C: Develop water sources for fire-fighting purposes in fire-prone areas.**

27 **Recommended Actions**

- 28 ▪ Develop, enhance, and maintain water sources strategically distributed around Mauna Kea for fire-
29 fighting purposes, including access by fire trucks and for helicopter water drop operations.
- 30 ▪ Reline reservoirs on DHHL’s Humu’ula property.

31 **Objective 4D: Coordinate pre-suppression planning and fire response protocols among landowners.**

32 **Recommended Actions**

- 33 ▪ Develop a coordinated response plan to guide response in the MKWA area in the event of a fire.
- 34 ▪ Use mapping technologies to identify significant natural, cultural and economic resources within the
35 MKWA area, as well as fire suppression resources and equipment. Make these technologies
36 available to landowners and fire fighters.

37 **Objective 4E: Promote effective communication and public safety during extreme fire weather and**
38 **during fire-response events.**

1 **Recommended Actions**

- 2 ▪ Install signage, as appropriate and permissible, along major roadways warning of the fire hazard.
- 3 Consider including fire danger rating information as part of signage.
- 4 ▪ Develop a wildfire awareness program to educate users of Mana-Keanakolu Road about fire risks
- 5 and hazards.
- 6 ▪ Install milepost signs along Mana-Keanakolu Road to help citizens accurately report location of fire
- 7 ▪ Strategically site RAWs around the mountain to facilitate monitoring of fire weather conditions.
- 8 ▪ Effectively communicate to the public road closures and reason for road closures during extreme
- 9 fire conditions or fire-response event.

10 **Objective 4F: Manage access to fire-prone areas during extreme fire danger weather.**

11 **Recommended Actions**

- 12 ▪ Restrict access to fire-prone areas during extreme fire danger weather.
- 13 ▪ Install a system of gates on Mana-Keanakolu Road to manage access during times of extreme fire
- 14 danger.

15 **County Capital Improvements:**

- 16 ▪ \$250,000 Appropriated for Fire Safety Systems Improvements & Upgrades, Island-wide
- 17 ▪ \$570,000 Appropriated for Honoka’a Fire Station Replacement
- 18 ▪ \$500,000 Appropriated for Pa’auilo Fire Volunteer Garage

19 **Tools and Alternative Strategies**

20 **Community Emergency Response Teams (CERT)¹³²:** The County’s Civil Defense Agency administers the
 21 Community Emergency Response Team or CERT program and the County’s Fire Department conducts
 22 CERT training. CERTs are community-based, comprised of residents and businesspersons that have the
 23 local knowledge of their community and the fundamental skills to properly respond to an emergency.
 24 CERTs fall under the authority of and can be activated by Civil Defense and can be self-activated in an
 25 emergency until professional responders arrive. Because of the vulnerability of the Planning Area to
 26 become isolated from the closure of the Belt Highway, there is a significant need and relevance for CERT
 27 within the Planning Area.

28 **FEMA Pre-Disaster Mitigation Grant Program¹³³:** The Pre-Disaster Mitigation (PDM) program provides
 29 funds to states, territories, Indian tribal governments, communities, and universities for hazard
 30 mitigation planning and the implementation of mitigation projects prior to a disaster event. Hawai’i
 31 County Civil Defense applies for and manages these funds locally.

32 **Coastal Resilience Networks (CRest) Program¹³⁴:** NOAA’s Coastal Services Center, Pacific Services
 33 Center¹³⁵ offered the new, Coastal Resilience Networks (CRest) grant program in 2011. The program

132 <http://www.hawaiicounty.gov/civil-defense-cert>
 133 <http://www.fema.gov/pre-disaster-mitigation-grant-program>
 134 <http://www.csc.noaa.gov/psc/grants/crest.html>

1 funds projects that help communities become more resilient to the threats posed by coastal hazards
2 (which include storms, flooding, sea level rise, climate change, etc.).

3 Projects that connect existing federal, state, and local programs are very desirable, as are efforts that
4 engage the public and include one or more of the following: preparedness, recovery, risk and
5 vulnerability, adaptation, and under-served or under-represented populations. Eligible applicants
6 represent state, territorial, and local or county governments; nonprofit organizations; regional
7 authorities; and institutions of higher education.

8 Availability of CRest funds are dependent upon Congressional appropriations each year. Applicants can
9 request between \$100,000 and \$350,000 per year for a single project. The award period for funded
10 projects is between 1 - 3 years.

11 **Community Policing**¹³⁶: Community Police Officers are responsible for developing partnerships within
12 the community in an effort to create a safe and secure environment. This can be accomplished through
13 community mobilization, crime prevention efforts and problem solving (i.e., Neighborhood Watch,
14 Citizen Patrol, etc.). Through mobilization, Community Police Officers can facilitate a community's
15 efforts to create positive changes within their neighborhood. The Community Policing Coordinator for
16 Hāmākua, North Hilo, South Hilo is Lieutenant Darren Horio 961-2350.

17 **Neighborhood Watch Program**: Neighborhood Watch is a crime prevention program that stresses
18 education and common sense. It teaches citizens how to help themselves by identifying and reporting
19 suspicious activity in their neighborhoods. In addition, it provides citizens with the opportunity to make
20 their neighborhoods safer and improve the quality of life. Neighborhood Watch groups typically focus
21 on observation and awareness as a means of preventing crime and employ strategies that range from
22 simply promoting social interaction and "watching out for each other" to active patrols by groups of
23 citizens (Yin, et al., 1976). Currently, North Hilo has an active Neighborhood Watch Program.

24 Most neighborhood crime prevention groups are organized around a block or a neighborhood and are
25 started with assistance from a law enforcement agency. Volunteers who donate their time and
26 resources are typically at the center of such programs, since many do not have a formal budget or
27 source of funding. One study (Garofalo and McLeod, 1988) found that most Neighborhood Watches
28 were located in areas that contained high percentages of single-family homes, little or no commercial
29 establishments, and residents who had lived at their current address for more than five years. This study
30 also found that most of the programs used street signs to show the presence of the program to
31 potentially deter any would-be criminals.

32 All Neighborhood Watches share one foundational idea: that bringing community members together to
33 reestablish control of their neighborhoods promotes an increased quality of life and reduces the crime
34 rate in that area. As Rosenbaum (1988) put it ". . . if social disorganization is the problem and if
35 traditional agents of social control no longer are performing adequately, we need to find alternative
36 ways to strengthen informal social control and to restore a 'sense of neighborhood'". That's precisely
37 what Neighborhood Watch strives to do. In fact, from the earliest attempts to deal with the
38 neighborhood structure as it relates to crime (through the Chicago Area Project of the early 1900s), to
39 modern attempts at neighborhood crime prevention, collective action by residents has proved one of
40 the most effective strategies.

135 <http://www.csc.noaa.gov/psc/>

136 <http://www.hawaiipolice.com/community/community-policing#contact>

1 The reason for this effectiveness is rather simple: Involving community members in watch programs
2 decreases opportunities for criminals to commit crime rather than attempting to change their behavior
3 or motivation.

4 Today's Neighborhood Watch Program is an effective means of crime control and neighborhood
5 cohesiveness. While not all of the programs in place today go by the same name, they all accomplish the
6 same goal: to bring community members together to fight crime. As Minor aptly wrote, "Neighborhood
7 is the key to maintaining successful relationships."¹³⁷

8 Residents or businesses using the following steps can organize a **Neighborhood or Business Watch**
9 **Program:**

- 10 1. Contact between law enforcement (Community Policing) and the neighborhood or business begins
11 the process. The Community Police officer can provide information and offer guidance to all
12 interested parties on how to set up the program.
- 13 2. The group will be asked to conduct a survey as a means of determining community problems and/or
14 major issues of interest to the community.
- 15 3. The interested group is asked to host a meeting to:
 - 16 ▪ Review identified problems.
 - 17 ▪ Focus on crime issues in the neighborhood or business area.
 - 18 ▪ Help the community develop strategies to deal with identified problems or issues.
 - 19 ▪ Select a Coordinator and Block Captains.
 - 20 ▪ Schedule the next meeting and develop plans for future meetings.

21 **School Resource Officers**

22 The School Resource Officer (SRO) program was established on the Big Island in 2003. It is a
23 collaborative effort by law enforcement officers, educators, students, parents, and the community to
24 offer law-related educational programs in the schools in an effort to reduce crime, drug abuse, violence,
25 and provide a safe school environment.

26 The SROs deal with crime on campus, teach informative classes to students, provide law related
27 counseling, and are liaisons between the school and the Police Department. Most important, they are
28 positive role models.

29 These are the SROs and their assigned schools:

- 30 ▪ **Hilo Intermediate School**
31 Officer Bryan Tina
- 32 ▪ **Honoka'a Middle School**
33 Officer Aaron Yamanaka

34 **Emergency Services Analysis Table**

137 <http://www.usaonwatch.org/about/neighborhoodwatch.aspx>



1 Table 12. Emergency Services Analysis Table

| Challenges | Support/Rationale | CDP Strategy Direction |
|--|--|--|
| <p>Critical facilities need hardening</p> | <p>Plan Support: Multi-Hazard Mitigation Plan</p> <p>Policy Support:</p> <ul style="list-style-type: none"> ▪ General Plan 10.3.2(i) | <p>Policy: Prioritize and support relocation of Honoka‘a Fire Station to Hwy 19.</p> <p>Policy: Prioritize funding for Laupāhoehoe Fires Station Hardening</p> <p>Advocacy: Encourage State to prioritize CIP funding to Harden Hale Ho‘ola Hamakua</p> <p>Advocacy: Recommend DOE conduct shelter condition studies and prioritize funding for improvement</p> <p>Advocacy: Recommend DOE make improvements to Laupāhoehoe School in order to designate it as an official emergency shelter for the North Hilo Community</p> |
| <p>Coastal Development is vulnerable to coastal erosion and/or catastrophic bluff failure</p> | <p>Plan Support: Strengthen and support BMPS for construction, Coastal Setbacks – Hawai‘i ORMP; Facing Our Future; COH Multi-Hazard Mitigation Plan; North East Hawai‘i CDP 1979</p> <p>Policy Support:</p> <ul style="list-style-type: none"> ▪ General Plan : 5.3(a), 5.3(b), 5.3(k), 7.3(b), 8.3(c), 8.3(d), & 8.4, ▪ State: Coastal Zone Management - HRS Chapter 205A | <p>Policy: Land Use Policy Map</p> <p>Policy: County Policies related to Special Management Area Assessment in Planning Area</p> <p>Policy: County Policies related to Special Management Area Use Permit in Planning Area</p> <p>Policy: Strengthen shoreline setbacks</p> |
| <p>Lack of emergency evacuation plans for Waipi‘o Valley and Laupāhoehoe Point</p> | <p>Plan Support: Hawai‘i County Multi-Hazard Mitigation Plan</p> <p>Policy Support:</p> <ul style="list-style-type: none"> ▪ General Plan 10.3.2(k); 10.3.2(j) | <p>CBCM: Recommend residents of Waipi‘o Valley and Laupāhoehoe Point meet with Civil Defense to develop emergency evacuation plans</p> |

| | | |
|--|--|--|
| <p>Increased agricultural/building materials thefts in the Planning Area</p> | <p>Plan Support:</p> <p>Policy Support:</p> <ul style="list-style-type: none"> ▪ General Plan 10.3.2(g) | <p>CBCM: Encourage expansion of community policing programs (i.e. neighborhood watch, farm watch, etc.)</p> |
| <p>Honoka’a Fire Station is in need of relocation & replacement to due to hazard vulnerability, lack of capacity and ability to expand, and to increase response capability</p> | <p>Plan Support: Hawai’i County Multi-Hazard Mitigation Plan</p> <p>Policy Support:</p> <ul style="list-style-type: none"> ▪ General Plan 10.3.2(i) | <p>Policy: Prioritize CIP funding to replace and relocate the Honoka’a Fire Station to Hwy 19</p> |

1

2 **Healthcare and Social Services**

3 **Overview, Assets, and Challenges**

4 In 2009, the State of Hawai’i Department of Health prepared the Primary Care Needs Assessment Data
5 Book¹³⁸. The book compares health statistics across 28 primary care service areas in Hawai’i to assist
6 policymakers and health care providers in understanding the primary care needs of the community. As it
7 relates to the Planning Area, two of the primary care service areas (Hāmākua and Hilo) are within the
8 Hāmākua CDP boundary. In order to illustrate the relative need for health care services, the data book
9 measures the community’s health and socio-economic variables as indicators of need for primary
10 services. When both health and socio-economic risk indicators are combined, Hāmākua and Hilo primary
11 care service areas are considered service areas with high combined risk scores. Both service areas are
12 also federally designated “Medically Underserved Areas” (MUA) and “Medically Underserved
13 Population” (MUP).

14 **Challenges:**

- 15 ▪ The population of the Planning Area is aging, which increases the demand for elderly healthcare and
16 social services
- 17 ▪ It is expensive and difficult to attract/maintain social services in sparsely populated communities
- 18 ▪ Healthcare Industry has shortages statewide, especially with specialists, etc.,
- 19 ▪ Most comprehensive healthcare providers, including specialists, and eye and dental care
20 professionals, are located outside the Planning Area in larger urban areas like Hilo and Waimea.
- 21 ▪ Drug problems and drug-related crimes plague the Planning Area (for more information on crime
22 prevention, see the Emergency Services Section.

138 <http://hawaii.gov/health/doc/pcna2009databook.pdf>



1 **Overview of Facilities and Programs**

2 **Lokahi Treatment Center:** This program is community-based and "grass-roots" focused. The
3 community-based mission is to maximize the power of the people to advocate for treatment and
4 recovery in order to prevent harmful effects of substance abuse upon families, businesses, and the local
5 communities.

6 Programs include:

- 7 ▪ Alcoholics Anonymous
- 8 ▪ Narcotics Anonymous
- 9 ▪ Anger Management Classes
- 10 ▪ Domestic Violence Classes

11 Honoka'a Office: 808-775-7707, Pua'ala Niau, Counselor

12 **Brantley Center, Inc.:** The Brantley Center is a non-profit Community Rehabilitation Program for people
13 with disabilities located in Honoka'a. Their overall mission is to provide quality rehabilitation services
14 that empower people with disabilities to participate independently in their community.

15 Programs include:

- 16 ▪ Adult Day Health Program
- 17 ▪ Employment Rehabilitation Program

18 Address: 45-370 Ohelo St., Honoka'a, HI 96727, Phone: 808-775-7245, Email: info@bradleycenter.org,
19 Web: www.thebradleycenter.org

20 **The Arc of Kona:** The Arc of Kona is a private nonprofit organization for persons with disabilities, their
21 advocates, and families. The Arc of Kona is committed to helping persons with disabilities achieve the
22 fullest possible independence and participation in our society according to their wishes.

23 Types of Services include:

- 24 ▪ Adult Day Health
- 25 ▪ Personal Assistance/Habilitation
- 26 ▪ Training & Professional Consultations
- 27 ▪ Residential Program and Independent Living Assistance
- 28 ▪ Job Placement and Retention

29 Michele Ku, Director of Program Services – North Hawai'i Michele@arcofkona.org, Address: 45-539
30 Plumeria St. Honokaa HI 96727, Phone: 808-775-1090, Web: <http://www.arcofkona.org/index.html>

31 **Hāmākua Youth Center:**¹³⁹ a free after-school drop-in program for youth between the ages of 5-18.

139 <http://hamakuayouthcenter.wordpress.com/>

1 The Center provides tutoring, homework help, computer access, daily meals and cultural activities in a
 2 fun, safe, family-style environment. Programs include:

- 3 ▪ Tutoring/Homework Help- Offered Daily
- 4 ▪ Access to a Computer Lab
- 5 ▪ Healthy meal preparation
- 6 ▪ Emergency response skill education
- 7 ▪ Hula

8 Located in Honoka’a. Address: 45-3396 Mamane Street, Honoka’a, Hawaii 96727

9 **Nai’a Aloha Child, Youth, and Family Counseling:** Licensed psychotherapy including play therapy for
 10 children, youth, families and adults in Honoka'a. Mailing Address: P.O. Box 1377 Honoka'a HI 96727,
 11 Phone: 808-224-5008

12 **North Hawai’i Adult Mental Health Services:** Address: 45-3380 Mamane St, #4, Honokaa, HI 96727,
 13 Phone: 808-775-8835

14 **North Hawaii Regional Special Ed. Diagnostic Team:** Location: Honoka’a, Phone: 808-775-8895

15 **North Hawai’i Regional Special Ed. School Psychologist:** Location: Pa’auilo, Phone: 808-776-7726

16 **Salvation Army:** The Salvation Army is an international evangelical Christian religion that believes in
 17 preaching the Gospel of Christ and meeting the human needs without discrimination. They provide
 18 service for: substance abuse, emergency assistance, homeless, youth, and seniors. Address: 45-5111
 19 Rickard Place Honoka’a, HI 96727, Phone: 808-775-7346

20 **The Food Basket:** An island wide, supplemental food network that collects and distributes nutritious,
 21 high quality food to low income households, the working poor, the disabled, the ill, senior citizens, and
 22 children.

23 **Hale Ho’ola Hāmākua (HHH):** originally known as Honoka’a Hospital, has served the healthcare needs of
 24 the communities of Hāmākua, North Hawai’i and South Kohala since 1951. In November 1995, a new 50-
 25 bed facility was opened above the old hospital, to provide long-term-care services. The facility was
 26 renamed Hale Ho’ola Hāmākua (Haven of Wellness in Hāmākua) in 1997 to reflect its new focus (Hawaii
 27 Health Systems Corporation 2006).

28 HHH employs a staff of 90 of which a significant number are residents of the area who were former
 29 employees or related to employees of the now defunct Hāmākua Sugar Co. Situated next to HHH is
 30 Hāmākua Health Center, the successor to the plantation-operated Hāmākua Infirmary, which continues
 31 to provide outpatient services to the community in a building owned and leased from HHH. HHH was
 32 converted as a Critical Access Hospital on December 2005, which resulted in bed configuration changes
 33 and the provision of new Emergency Room (ER) and expanded ancillary services (Hawaii Health Systems
 34 Corporation 2006).

35 Services provided by HHH include (Hawaii Health Systems Corporation 2006):

- 36 ▪ 4 Acute/Long Term Care Beds
- 37 ▪ 46 Skilled Nursing/Intermediate Care Beds
- 38 ▪ Emergency Room Services, 24hours/7 days per week, on call within 30 minutes

- 1 ▪ Laboratory Services
 - 2 ▪ Radiology Services
 - 3 ▪ Dietary /Food Services
 - 4 ▪ Social Work Services
 - 5 ▪ Auxiliary and Community Volunteer Services.
- 6 Other medical facilities that serve the Planning Area’s population include North Hawai’i Community
7 Hospital (Waimea), Waiakea Health Center (Hilo) and Hilo Medical Center (aka: Hilo Hospital).
- 8 **Nurses R’ Us:** Professional Home Healthcare: Registered Nurses and Certified Nurse Assistants licensed
9 in Hawai’i. Physician referrals only; initial assessment by appointment.
- 10 Address: 45-3490 Mamane Street, Honoka’a, HI 96727 Phone: 808-775-9322

11 **Table 13. Hāmākua Planning Area Food Pantry Locations**

| Location | Schedule | Contact Information |
|---|---|---------------------|
| Immaculate Heart of Mary Church 27-186 Ka’apoko Homestead Rd, Pāpa’ikou | Thursday 11am-12pm Excludes 1 st two Thursdays of month | 808-964-1240 |
| Hāmākua Coast Assembly of God 28-1104 Old Māmalahoa Hwy, Pepe’ekeo | The Last Sunday of the month, 11am-12pm | 808-964-5888 |
| St. Anthony’s Church 35-2095 Old Māmalahoa Hwy, Laupāhoehoe | Wednesdays, 1:30-2:30 Last two Wednesdays of the Month ¹⁴⁰ | 808-962-6538 |
| The Salvation Army Corner of Māmane Street & Rickard Place, Honoka’a | Tuesdays, 9am-12pm | 808-775-7346 |

12 **Overview of Elderly Services**

13 **Aging Population:** The Planning area has the highest percentage of people over the age of 65 in the
14 County (17%) compared to the countywide age distribution pattern for persons over the age of 65
15 (14.5%). With projected growth expected to be the greatest in households between 55 to 74 years of
16 age in the next five years, growth in this sector will be needed to meet the service demands of the
17 region’s aging population. Several types of care are typically available to seniors:

- 18 ▪ In-home assistance includes home chore services and meals (for those ill or disabled) provided by
19 the County’s Coordinated Services for the Elderly (CSE). Home healthcare services by private
20 providers are also available for those who can afford or have long-term care coverage for those
21 services.
- 22 ▪ A licensed residential care home provides a choice for those needing assistance with two or more of
23 the daily care skills that would qualify for Medicare, Medicaid, or long-term care insurance

140 Identification and proof of income required

1 payments. As of November 2013, there were 10 licensed adult residential care homes (ARCH) in The
 2 Planning Area.

3 ▪ An assisted living facility is a larger facility providing similar services as an ARCH with additional
 4 amenities and programs for fitness and entertainment. Currently, there is only one assisted living
 5 facility in the County located in Kona.

6 ▪ The highest level of assistance are those requiring skilled nursing. The fortunate have family who
 7 become trained to enable the elder to live at home. The Planning Area has a long-term care facility
 8 in the Hale Ho’ola Hāmākua Hospital.

9 CSE provides transportation for those unable to use conventional transportation (ill or disabled). For 20
 10 those who are not ill or disabled, Hawai’i County Economic Opportunity Council (HCEOC) provides 21
 11 paratransit services throughout the Planning Area on contract with the County Mass Transit Agency. 22

12 **Elderly Activities Division, County of Hawai’i:** This division provides a wide range of services and
 13 activities for senior citizens and serves as the umbrella agency for various County-operated aging
 14 programs.

15 **Table 14. Planning Area Senior Centers**

| Location | Schedule |
|--|--------------------------|
| Pāpa’ikou Community Center 27-228 Maluna Place, Pāpa’ikou | Thursdays 8:30am-12pm |
| Kulai’mano Community Center 28-2892 Alia Street, Pepe’ekeo | Thursdays 9am-12pm |
| Hakalau Gym Group meets at Kula’imano Center, Pepe’ekeo¹⁴¹ 28-2892 Alia Street, Pepe’ekeo | Tuesdays 9am-12pm |
| Honomū Gym 28-1641 Government Main Road, Honomū | Mondays 9am-12pm |
| Laupāhoehoe Point Gym 36-1041 Laupāhoehoe Point Rd., Laupāhoehoe | Fridays 9am-12pm |
| Pa’auilo Community Center 43-977 Pa’auilo Hui Road, Pa’auilo | Tuesdays 8:30am-12pm |
| Hale Hau’oli Hāmākua 45-540 Koniaka Place, Honoka’a | Wednesdays 9am-12pm |

16

17 **Programs:** Program Directors: Phone/Fax

18 ▪ **Coordinated Services for the Elderly (CSE)** - Coran Kitaoka, 1055 Kino’ole St., Suite106, Hilo, HI
 19 96720961-8777/Fax: 961-8704

141 The location for Hakalau is changed due to the fact that Hakalau Gym is condemned until further notice.

- 1 ▪ **Elderly Recreation** – Roann Okamura, 127 Kamana St., Room 1, Hilo HI 96720 961-8710/Fax: 961-
2 8921
- 3 ▪ **Nutrition** - Joan Kawakone, 1055 Kino`ole St., Suite102, Hilo HI 96720 961-8726/Fax: 961-8709
- 4 ▪ **RSVP** - Eddie Yokoyama, 127 Kamana St., Room 5, Hilo HI 96720, 961-8730/Fax: 961-8921
- 5 ▪ **Senior Employment** – Clyde Yoshida, 1055 Kino`ole St., Suite 107, Hilo HI 96720 961-8750/Fax: 961-
6 8752
- 7 ▪ **Special Programs** – (Vacant) 74 -5044 Ane Keohokalole Hwy, Kailua-Kona 323-4329/Fax: 327-3666

8 **Affordable Senior Housing:** The Planning Area has four affordable rental facilities. Three of these are for
9 lower-income elderly (target income of 50% of median): Hale Hau`oli in Honoka`a (40 units), Pāpa`aloha
10 Elderly Housing (10 units), and Kula`imano Elderly Housing in Pepe`ekeo (50 units). Currently, there are
11 waiting lists for most of these facilities which is an indication of the demand for this type of housing.

12 **Hawai`i County Office of Aging**¹⁴²: The Office of Aging develops a comprehensive system of services for
13 older persons in Hawai`i County. Staff engages in program and systems planning, conducts needs
14 assessments, writes grants, administers contracts, develops training programs, manages a senior citizen
15 database, and performs advocacy functions.

16 Major services funded through the Office of Aging include: Caregiver Support, Case Management, Chore,
17 Counseling, Employment, Information and Assistance, Legal, Nutrition, Outreach, Personal Care, Respite,
18 Transportation, Volunteer, Healthy Aging, Elder Abuse and Neglect Awareness/Prevention, and the
19 administration of the Aging and Disability Resource Center Phone: (808) 961-8600 TYPE: County Fax:
20 (808) 961-8603 Email: hcoa@hawaiiantel.net

21 The Office of Aging also administers the **Family Caregiver Support Program** for those 60 years or older
22 unpaid caregivers of someone who is intellectually or developmentally disabled and grandparents caring
23 for grandchildren under the age of 19 years.

24 The Program provides training and counseling for caregivers, support groups, a resource center, and in-
25 home services to support caregiver`s ability to care for a loved one at home. Services include:
26 counseling, respite care, homemaker services, chore service and assisted transportation. Deidre Sumic,
27 ADRC Resource Specialist, (808) 961-8626

28 **Committee on Aging, County of Hawai`i**¹⁴³: This committee is an advocacy and advisory committee to
29 Hawai`i County Office of Aging, and the Mayor. It assists in establishing objectives in planning,
30 coordinating, and evaluating programs on aging. (Eligibility is 55+) Office of Aging Staff, 808-961-8600
31 Website:

32 **Coordinated Services for the Elderly**¹⁴⁴: This agency provides various support services for ages 60+ or
33 disabled (-60 years old) such as information and assistance, transportation, in-home services, and the
34 County Senior ID card. This agency serves at the Big Island Senior Companion station for Hawai`i Island.
35 Transportation services require 24hr advance notice and priority is given to those in most need and for
36 medical requests.

37 Branch Offices:

142 <http://www.hcoahawaii.org>

143 www.hcoahawaii.org

144 <http://co.hawaii.hi.us/parks/ead/cse.htm>

1 ▪ North Hilo (Pāpa’aloa Housing) 35-1981 Pāpa’aloa Elderly Housing Complex, Pāpa’aloa, 808-962-
2 2101.

3 ▪ Honoka’a (Hale Hau’oli Center) 45-540 Koniaka Place, Honoka’a, 808-775-7503.

4 **Elderly Recreation Services**¹⁴⁵: This County program provides recreational, cultural, leisure opportunities
5 and sports activities to individuals 55 years + which promotes maximum independence, optimum health,
6 personal dignity and self-enrichment. Phone: (808) 961-8710 Fax: (808) 961-8921 Email:
7 ers@co.hawaii.hi.us

8 **Nutrition Program**¹⁴⁶: This County provides low cost, nutritionally balanced meals to seniors living in
9 Hawai‘i County. In addition, the Congregate Meals program provides other supportive services,
10 including educational, health, and leisure activities. Transportation may also be provided in select
11 districts.

12 The Nutrition Program consists of two separate services: Congregate Meals and Home Delivered Meals
13 (Meals on Wheels). Both services provide lunch Monday through Friday (in most districts), to persons 60
14 years and older. The suggested contribution per congregate meal is \$2.00; the suggested contribution
15 per home delivered meal is \$2.50. Congregate meal sites in the Planning Area are located in Honoka’a,
16 Pāpa’aloa, Pa’auilo, and Pepe’ekeo. Phone: (808) 961-8726 Fax: (808) 961-8709, Email:
17 nutritionprogram@co.hawaii.hi.us

18 **Honomū Adult Day Center**¹⁴⁷: The Honomū Adult Day Center offers a home-like, safe and supportive
19 daytime environment for seniors and younger adults who are physically and/or mentally challenged and
20 for persons with Alzheimer’s disease. This life-enhancing program serves as a cost-effective, community-
21 based alternative to nursing home care or premature institutionalization. The Honomū Adult day center
22 is located in the Hilo Coast United Church of Christ Fellowship Hall
23 28-1630 Old Māmalahoa Highway, Honomū, Hawaii 96728 Phone: 808-963-6362.

24 **Adult Residential Care Home (ARCH)/Expanded ARCH**: The State Licensing Section of the Office of
25 Health Care Assurance is responsible for promulgating licensing rules and developing standards as
26 required to ensure quality of care for certain community based facilities which must be licensed by the
27 State, but not certified for Medicare participation. These facilities include adult residential care homes
28 (ARCH), expanded care ARCH, special treatment facilities (STF), developmentally disabled domiciliary
29 homes (DDDH) and assisted living facilities.

30 For ARCH Facilities, residents require minimal assistance with activities of daily living (ADL) as in bathing,
31 changing, walking, eating, getting out of bed; total capacity of 1 – 5 residents.

32 ARCH Facilities are located in the following towns within the Planning Area:

- 33 ▪ Wainaku
- 34 ▪ Kaiwiki (x 2)
- 35 ▪ Pauka’a (x 2)
- 36 ▪ Pāpa’ikou

145 <http://co.hawaii.hi.us/parks/ead/ers.htm>
 146 <http://co.hawaii.hi.us/parks/ead/hcnp.htm>
 147 <http://www.hawaiiislandadultcare.org/Honomu%20Adult%20Day%20Center.html>

1 ▪ Pepe'ekeo (x 2)

2 ▪ Honoka'a (x 2)

3 **General Plan Policies**

4 ▪ 10.5.2 (a) Encourage the development of new health care facilities or the improvement of existing
5 health care facilities to serve the needs of Hāmākua, North and South Kohala, and North and South
6 Kona.

7 ▪ 10.5.2(d): Encourage the State to continue operation of the rural hospitals.

8 ▪ 10.5.2(e): Encourage the establishment or expansion of community health centers and rural health
9 clinics.

10 **Previous Planning**

11 **Hawai'i County Office of Aging: Area Plan on Aging, Planning and Service Area – IV (2011-2015):** The
12 Hawai'i County Office of Aging (HCOA) is responsible for assessing the needs of the county's older adult
13 population, determining the kinds and amounts of services required to meet those needs, monitoring
14 the provision of services, and evaluating the efficiency and effectiveness of service delivery. This plan
15 addresses issues and areas of concern of the elderly population of the Big Island and how HCOA plans to
16 meet the elderly service needs through the Aging Services Network.

17 The Plan also provides the results of the HCOAs provider survey. Network providers and key informants
18 were asked to rank the greatest areas of unmet needs, the Providers ranked Transportation highest,
19 with Personal Care and Caregiver services ranking second and third, respectively. Exclusive of
20 Transportation, In-Home services ranked highly among this group overall.

21 The Providers identified Transportation as the greatest barrier to accessing and/or receiving services in
22 the County. Access to Information and Service Availability were considered important barriers as well.

23 The majority of respondents identified transportation, access to information, senior centers, in-home
24 services, and nutrition as top priorities. Other issues that were identified as important included: elderly
25 housing, adult day care, long-term care, nutrition, legal and chronic disease management programs and
26 services.

27 **State Capital Improvement Projects**

28 ▪ Brantley Center, Inc., Hawai'i; Plans, design, construction for renovations of existing facilities in
29 Honoka'a - \$30K:

30 **Tools and Alternative Strategies**

31 **Patient-Centered Medical Home**¹⁴⁸: The medical home model is a way to improve health care by
32 transforming how primary care is organized and delivered. Building on the work of a large and growing
33 community, the Agency for Healthcare Research and Quality (AHRQ)¹⁴⁹ defines a medical home not
34 simply as a place, but as a model of the organization of primary care that delivers the core functions of
35 primary health care.

36 The medical home encompasses five functions and attributes:

148 http://pcmh.ahrq.gov/portal/server.pt/community/pcmh__home/1483/PCMH_Defining%20the%20PCMH_v2

149 <http://www.ahrq.gov>

- 1 1. Comprehensive Care
- 2 2. Patient-Centered
- 3 3. Coordinated Care
- 4 4. Accessible Services
- 5 5. Quality and Safety

6 **Resources Match:** Resources Match is an interactive tool allowing organizations to provide their clients
 7 with accurate referrals to various resources in their communities. It uses individual socio-economic
 8 profiles to find appropriate resources, prints the list of matching resources, refers eligible clients to
 9 organizations, completes applications online for select programs, and produces reports on client
 10 referrals and outcomes. An extensive list of Hawai'i County organizations use Resources Match,
 11 including several operating in the Planning Area: Hāmākua Health Center Inc., Hāmākua Incubator
 12 Kitchen and Crafts Inc., Hāmākua Youth Foundation Inc, Hilo-Hāmākua Community Development
 13 Corporation, Pā'auhau Village Community Association, Pa'auilo Community Alumni, Pa'auilo Mauka
 14 Kalōpā Community Association, Pauka'a Community Association, Rural South Hilo Community
 15 Association and the Wainaku Kaiwiki Community Association.

16 **Healthcare and Social Services Analysis Table**
 17 **Table 15. Healthcare and Social Services Analysis Table**

| Challenges | Support/Rationale | CDP Strategy Direction |
|--------------------------------------|--|--|
| Seniors lack ability to age in Place | Plan Support: <ul style="list-style-type: none"> ▪ Hawai'i County Office of Aging: Area Plan on Aging, Planning and Service Area Policy Support: <ul style="list-style-type: none"> ▪ General Plan 10.5.2 (a); | Strategies for expanding healthcare and senior services will be found in the Economy Section Senior housing strategies are addressed in the Housing Section |

18
 19 **Education and Libraries**

20 **Overview, Assets, and Challenges**

21 **DOE Schools:** The State of Hawai'i Board of Education divides the island into ten complexes, and three
 22 of these complexes fall wholly or partially within the Planning Area – including Honoka'a Laupāhoehoe,
 23 and Hilo (see figure 5-6 of the Hāmākua Community Profile)¹⁵⁰. The DOE schools within the Planning
 24 area are:

- 25 ▪ Honoka'a Elementary/Intermediate, and High
- 26 ▪ Pa'auilo Elementary and Intermediate
- 27 ▪ Laupāhoehoe Charter School

150 http://www.hawaii-county-cdp.info/hamakua-cdp/draft-hamakua-cdp_documents/Hamakua%20Profile2012view.pdf/view

1 ▪ Kalaniana'ole Elementary and Intermediate (Pāpa'ikou)

2 ▪ Ha'aheo Elementary (Wainaku)

3 **Private Schools**

4 ▪ Kamehameha Schools Pre-School in Pa'auilo

5 **North Hawai'i Education and Research Center (NHERC)**¹⁵¹: is a branch of UH-Hilo founded in 2006 and
6 located in the former hospital in Honoka'a. This facility and connection to the University of Hawai'i
7 system is a unique and tremendous asset to the rural region. The center offers both credit and non-
8 credit courses on site and through distance learning to serve college students, advanced placement (AP)
9 high school students, adult learners, trade union members, seniors, and displaced workers. NHERC plays
10 a key economic development role in terms of workforce development with in-service training for
11 professionals, agricultural extension support services and training, and computer classes. Additionally,
12 the center is an important community-gathering place hosting special events, programs, conferences,
13 retreats and town meetings.

14 Various educational services provided by NHERC include:

15 ▪ Rural Outreach Services-- The Rural Outreach Services initiative is a public-private partnership of
16 agencies supported by the DLIR Workforce Development Division, University of Hawai'i at Hilo
17 NHERC, Hāmākua Partners in Eldercare, Hawai'i, County's Kapulena Lands project, and the Depart-
18 ment of Education's East and West Hawaii Community School for Adults;

19 ▪ Personal Development & Lifelong Learning-- including courses on healthcare issues, arts, language,
20 and other cultural enrichment courses;

21 ▪ Professional Development-- including grant writing, business computer applications, and entrepre-
22 neurial small business development;

23 ▪ Agricultural Education-- including agricultural extension services, and hosting Practical Agriculture
24 Courses in partnership with HHDCDC;

25 ▪ Running Start Program-- enabling qualifying High School students to take college courses in
26 Honoka'a;

27 ▪ Computer Lab for UH students and community use;

28 ▪ Hāmākua Heritage Center-- home to a growing collection of historical photos and stories from
29 Hāmākua's Native Hawaiian and Sugar Plantation era residents chronicling the history of the region.

30 **Libraries**

31 **Hawai'i State Public Library System:** The Hawai'i State Public Library System operates two libraries in
32 the Planning Area – one in Honoka'a and one on the campus of Laupāhoehoe Charter School. In
33 addition to books and other media, the libraries have computers with Internet access available for public
34 use.

35 **Assets:**

151 www.hilo.hawaii.edu/academics/nherc/

- 1 ▪ North Hawai'i Education and Research Center (NHERC) is a branch of the University of Hawai'i at
- 2 Hilo located in Honoka'a that serves Hāmākua residents with University credit courses and
- 3 professional and personal development courses.
- 4 ▪ During the 2012-13 School year, Laupāhoehoe began its first year as a Charter School with a mission
- 5 of being a community partner.
- 6 ▪ Resource sharing between municipal facility use (DOE and County of Hawai'i) and the community is
- 7 already a long-standing model enjoyed by several communities (e.g., Kalaniana'ole
- 8 School/Pāpa'ikou Gym; Laupāhoehoe School/Pool/Library, Pa'auilo School/Pa'auilo Gym, etc.,)
- 9 ▪ Kamehameha Schools Pre-school in Pa'auilo

10 **Challenges:**

- 11 ▪ Kalaniana'ole School is functioning with under half its intended capacity
- 12 ▪ The rural nature of the planning area makes school transportation, including walking to and from
- 13 school, challenging, and sometimes dangerous
- 14 ▪ Resource sharing of facilities between DOE and the community/County can be challenging due to
- 15 legal (liability) impediments, jurisdictional issues, and inter-agency coordination.
- 16 ▪ NHERC's facilities need improvements to their Culinary Arts and Nursing buildings to expand college
- 17 offerings in Honoka'a

18 **General Plan Policies & Courses of Action**

19 The Hawai'i County General Plan provides the following direction on education:

20 **Public Facilities – Education Goals**

- 21 ▪ 10.1.2(a): Encourage the provision of public facilities that effectively service community and visitor
- 22 needs and seek ways of improving public service through better and more functional facilities in
- 23 keeping with the environmental and aesthetic concerns of the community.
- 24 ▪ 10.1.3(a): Continue to seek ways of improving public service through the coordination of service and
- 25 maximizing the use of personnel and facilities.
- 26 ▪ 10.1.3(b): Coordinate with appropriate State agencies for the provision of public facilities to serve
- 27 the needs of the community.
- 28 ▪ 10.1.3 (c) Develop short and long-range capital improvement programs and operating budgets for
- 29 public facilities and services.

30 **Public Facilities – Education Policies:** Educational policies relate to the provision of facilities rather than

31 programs, which are the province of the State. It is nevertheless recognized that the facilities and

32 programs are the tools necessary to improve total educational service.

- 33 ▪ 10.2.2(b): Encourage combining schoolyards with county parks and allow school facilities for
- 34 afterschool use by the community for recreational, cultural, and other compatible uses.
- 35 ▪ 10.2.2(c): Encourage joint community-school library facilities, where a separate community library
- 36 may not be feasible, in proximity to other community facilities, affording both pedestrian and
- 37 vehicular access.

1 **Public Facilities – Education Courses of Action**

2 **Rural South Hilo**

- 3 ▪ 10.2.4.2.2(c): Provide pedestrian walkways to and around all school complexes.
4 ▪ 10.2.4.2.2(e): Encourage continual improvements to existing educational facilities.

5 **North Hilo**

- 6 ▪ 10.2.4.3.2(a): Improve pedestrian and vehicular access to the Laupāhoehoe and Hāmākua School
7 complexes.
8 ▪ 10.2.4.3.2(b): Encourage continual improvements to existing educational facilities.

9 **Hāmākua**

- 10 ▪ 10.2.4.3.3(a): Encourage continual improvements to existing educational facilities.
11 ▪ 10.2.4.3.3(b): Encourage traffic re-routing to resolve school traffic problems.
12 ▪ 10.2.4.3.3(c): Implement the Honoka’a school campus master plan.
13 ▪ 10.2.4.3.3(d): Encourage expansion of the present library facility and services

14 **Capital Improvement Projects**

15 **State Capital Improvements**

16 The State has appropriated \$76,100,000 in funding for various current and upcoming projects at
17 Planning Area schools (note: some of these projects may have been completed by the time of this
18 document’s printing):

- 19 ▪ Large capacity cesspool removal: Ha’aheo, Laupāhoehoe, Pa’auilo El/Inter., Honoka’a El., and
20 Honoka’a High/Inter., at the total costs of \$1,863,000. These projects are complete and no further
21 large capacity cesspools remain in use in area schools.
22 ▪ Library improvements: Ha’aheo El., and Kalaniana’ole El/Inter., at \$5,000,000 each.
23 ▪ ADA Transition Accessibility Improvements: Pa’auilo El/Inter., and Ha’aheo El., at \$375,000 each.
24 ▪ Covered play courts: Ha’aheo El., and Kalaniana’ole schools at \$1,500,000 each.
25 ▪ Cafeteria Improvements: Ha’aheo El, at \$4,000,000
26 ▪ Four Classroom Building:
27 ○ Ha’aheo El., at 2,500,000.00
28 ○ Honoka’a El., at \$5, 000,000
29 ▪ Air Condition Installation:
30 ○ Ha’aheo El., at \$3,500,000
31 ○ Kalaniana’ole El/Inter., at \$4,000,000
32 ○ Laupāhoehoe Charter at \$8,000,000
33 ○ Pa’auilo El/Inter., at \$4,000,000

- 1 ○ Honoka’a High/Inter., at \$10,000,000
- 2 ▪ Architectural Barrier Removal (in conformance with ADA):
- 3 ○ Kalaniana’ole El/Inter., at \$671,000
- 4 ○ Honoka’a El., at \$550,000
- 5 ▪ Special Education Trailer (aka: SPED Trailer)
- 6 ○ Pa’auilo El/Inter., at \$375,000
- 7 ○ Honoka’a High/Inter., at \$350,000
- 8 ▪ Administration Building: Honoka’a Elementary at \$6,000,000
- 9 ▪ Classroom Building: Honoka’a High/Inter., at \$7,000,000
- 10 ▪ Drop-off/Pick-up Area & Teacher Parking: Honoka’a El., at \$500,000
- 11 ▪ Sidewalk Installation From Building A to Building B: Honoka’a High/Inter., at \$50,000
- 12 ▪ Widen Covered Walkway Between Building A & B; Retaining Wall Building J: Kalaniana’ole El/Inter.,
- 13 at \$200,000, and \$900,000 respectively
- 14 ▪ Electrical Upgrade: Pa’auilo El/Inter., at \$400,000
- 15 ▪ Athletic Facility Improvements: Honoka’a High School, \$1 million
- 16 ▪ Renovations for Nursing & Culinary buildings, North Hawai’i Education and Research Center,
- 17 \$600,000

18 **Tools and Alternative Strategies**

19 **Friends of the Library of Hawai’i**¹⁵²: Friends of the Library of Hawai’i promotes and supports the fifty
 20 public libraries that make up the Hawai’i State Public Library System. The Friends primary objectives are
 21 to: maintain free public libraries in Hawai’i, promote extension of library services throughout the State,
 22 and increase the facilities of the public library system by securing materials beyond the command of the
 23 ordinary library budget.

24 Friends of the Library of Hawai’i acts as the statewide umbrella organization for the affiliated local
 25 Friends groups at the State of Hawai’i’s Public Libraries. The Affiliates Committee provides resources to
 26 the Affiliates in the form of: affiliate matching grants, an annual affiliate conference, and
 27 training/technical support. Friends of the Hāmākua Libraries is an affiliate group that encompasses both
 28 the Honoka’a Public Library and Laupāhoehoe Public Library.

29 **Charter Schools**¹⁵³: In Hawai’i, charter schools are public schools funded on a “per pupil” allocation
 30 separate from the Department of Education. They are state-legislated, legally independent, outcome-
 31 based public schools operating under contract with the State Public Charter School Commission (PCSC).
 32 In contrast to traditional public schools, independent charter schools self-govern, manage their own
 33 budgets, and are responsible for hiring and firing their own personnel.

152 <http://www.friendsofthelibraryofhawaii.org/>
 153 <http://www.hcsao.org>

1 Traditional schools can decide to convert into charter schools for a variety of reasons, but key drivers are
2 the flexibilities and autonomies available under the charter model. Conversion provides increased
3 flexibility in the areas of curriculum, instruction, operations, governance and finance in exchange for a
4 chance to improve student achievement, demonstrate continuous growth, and have additional
5 accountability¹⁵⁴. Other factors that can serve as impetus to Charter conversion relate to traditional
6 schools that are struggling under academic performance pressures and diminishing enrollment.

7 There are currently 32 charter schools in Hawai'i, 14 of which are on Hawai'i Island.

8 Communities interested in starting a charter school must apply to the PCSC. Because the PCSC is newly
9 created pursuant to Act 130/2012, the application, process, or timeline have not yet been established.

10 The only charter school in the Planning Area (as of this writing) is Laupāhoehoe Charter School, which
11 recently converted to charter for the 2012-13 academic year. The school's mission is:

12 *To emphasize hands on learning and academic success where every student is known and valued,*
13 *using community partnerships and resources while instilling traditional cultural values.*¹⁵⁵

14 Laupāhoehoe Charter School prioritizes partnering with local organizations and businesses and national
15 agencies (e.g., USDA, US Forest Service) to provide a well-rounded educational experience and ground
16 the school strongly within the community. However, it is noted that the charter conversion process for
17 Laupāhoehoe School was controversial within the community and served to be a challenging transition
18 from the traditional DOE school model.

19 **Improving Transportation Options for Students:**

20 ▪ **Improving Safety:** In the past, elementary school children could often walk to and from a
21 neighborhood school that was close to their home. With the consolidation and closure of several
22 schools over time and the greater distances students have to travel, most students are now bussed
23 or driven to school. One of the community priorities for improving transportation safety is
24 improving transportation safety for students.

25 The Pa'auilo and Laupāhoehoe communities are aided by highway pedestrian overpasses. However,
26 Pa'auilo Elementary School is cited in the State Department of Transportation Statewide Pedestrian
27 Master Plan as an Area of Concern. It notes that students lack a dedicated and intuitive way to walk
28 or bike to school from the pedestrian bridge, and that the area lacks signs indicating to motorists
29 that the area is a school zone are missing. Link to Hawai'i Pedestrian Plan

30 Kalaniana'ole School is located mauka of the highway, and some students must cross the 45mph
31 Belt Highway without the aid of a pedestrian overpass or crossing guards. The Department of
32 Transportation recently installed two flashing speed limit signs in that area of Highway 19, one
33 North of the main Kalaniana'ole School intersection and one South of Mill Road. While the flashing
34 signs may help mitigate speeding, that section of Highway 19 is rated for 45 miles per hour and
35 remains a dangerous road to cross for youngsters and adults.

36 ▪ **Safe Routes to School (SRTS)**¹⁵⁶ is a national program and international movement to create safe,
37 convenient, and fun opportunities for students to walk, bike, and skate to and from school. The

154 http://www.calcharters.org/fact_sheet_Charter_Conversion_Myths_Reality.pdf

155 <http://www.laupahoehoecharterschool.com/>

1 SRTS movement became a federal mandate in 2005 with the passage of the Safe, Accountable,
2 Flexible, Efficient Transportation Equity Act, and since then nearly \$800 million has been allocated to
3 encourage more biking and walking by improving safety conditions around schools and offering
4 educational programs.

5 Working with **People’s Advocacy of Trails, Hawai’i**¹⁵⁷, Pa’auilo school and community stakeholders
6 surveyed parents to determine how kids got to and from the school and some of the impediments
7 to walking/biking. Chief among the parent’s concerns were distance, speed of traffic, amount of
8 traffic, and weather/climate. Based on these concerns and other information gathered, the planning
9 team drafted a SRTS plan in 2010 and has been working on prioritizing solutions to those concerns.
10 Pedestrian safety improvements in the Pa’auilo area is one of only three Hawai’i island projects
11 selected for State DOT Statewide Pedestrian Master Plan funding in 2011 based on the work done
12 through the SRTS planning process.^{158 159}

13 Currently the Safe Routes to School Program is prioritizing schools in the state for awarding grants
14 for pedestrian improvements, but so far only two schools in Maui have received infrastructure
15 grants to make school improvements through that program. In 2008, PATH was awarded a Safe
16 Routes to School non-infrastructure grant to aid the development of the West Hawai’i Safe Routes
17 to Schools Program.

18 **After-School Transportation Options:** Another factor in improving transportation options for students is
19 the accessibility of using the County of Hawai’i Mass Transit system (aka: Hele-On Bus) getting to or
20 from school. A need has been identified for students involved in after-school programs who need
21 transportation home later than the traditional departure times of the school buses. Coordination
22 between after-school programs and the Hele-On bus schedule has helped, but school schedules should
23 continue to be considered as alterations to the bus schedule are planned, and in determining the need
24 for enhancements to the routes and their frequency. For more on Mass Transit improvements, see the
25 [Transportation section](#).

26 **Resource Sharing Between Public Entities:** Due to the Planning Area’s rural nature and its geographic
27 distances between places, the sharing of public facilities between agencies and the community benefits
28 residents who may otherwise not have access to these resources. The terms shared-use, joint-use, or
29 resource-sharing all refer to more than one entity sharing valued facilities or programmatic resources
30 across traditional jurisdictional boundaries.

31 Why is joint use a Community Need? The California-based organization of Joint Use explains the need
32 this way:

33 *The research is clear: the more active children are, the healthier they will be now and when they*
34 *grow up. Yet certain places make physical activity harder instead of easier. Place matters since*
35 *experts now know that where we live, work and play — the physical environment itself —*
36 *determines, to a large degree, whether we will be healthy.*

156 www.saferoutespartnership.org/national
157 www.pathhawaii.org
158 Pages 50-51. <http://www.hawaiicountycdp.info/hamakua-cdp/hamakua-cdp-strategies-under-consideration>
159 <http://hawaii.gov/dot/highways/srts>

1 *Too often, kids find the gate to their school's blacktop or basketball court locked after school hours,*
2 *locking them out of opportunities to be active. Closing off recreational facilities after school leaves*
3 *many children and families struggling to incorporate physical activity into their daily routines. They*
4 *may live in an area without a nearby park or be unable to afford exercise equipment or a gym*
5 *membership.*

6 *Joint use agreements can fix these problems. Joint use makes physical activity easier by providing*
7 *kids and adults alike with safe, conveniently located and inviting places to exercise and play. Besides*
8 *making sense from a health perspective, joint use agreements make sense financially because they*
9 *build upon assets a community already has. Sharing existing space is cheaper and more efficient*
10 *than duplicating the same facilities in other parts of the community. [www.jointuse.org]*

11 Examples of this type of resource sharing are prevalent in Hāmākua, for example, between State
12 agencies, Laupāhoehoe Charter School has a joint-use relationship with the Laupāhoehoe Public Library
13 located on the school's campus.

14 Also, in addition to after-school activity programs being held in community centers throughout the
15 region, in locations where the gymnasiums and swimming pools are located in close proximity to
16 schools, the County recreation specialists work in cooperation with the school to help provide physical
17 education opportunities during school sessions. This either involves the Recreation Technician being
18 invited to enter the school campus to provide physical education to a specific class, or it may involve
19 classes of students walking to the County facility.

20 Currently, this resource-sharing is done on a limited basis and at the request of the school
21 administration or individual teachers. Particularly in regards to the schools using the swimming pool
22 facilities in Laupāhoehoe or Honoka'a, there are legal entanglements relating to liability issues that can
23 be cumbersome for teachers to navigate. However, due to DOE budget cuts and a shortage of teachers
24 who are trained in physical education, this resource-sharing between schools and County becomes all
25 the more crucial in maintaining and encouraging physical activity in our young people.

26 Other obstacles of resource-sharing outside of liability issues generally relate to concerns over higher
27 maintenance and operational costs, and a silo approach to managing public resources. Hāmākua school
28 administrations and County facility management are not immune to these concerns, and sometimes
29 these obstacles preclude cooperation between entities. Any endeavors to support resource-sharing and
30 increase accessibility of these resources would benefit the community.

31 Some other communities are finding creative ways to bridge the distance between school facility usage
32 and community needs. Many national and local programs are looking for opportunities to support
33 resource-sharing that will contribute to youth physical activities.

34 Resources for furthering the shared use of school and community facilities:

- 35 ▪ **Safe Routes to School**¹⁶⁰ works toward shared use agreements as part of their fight against
36 childhood obesity
- 37 ▪ **Change Lab Solutions - Law and Policy Change for the Common Good**¹⁶¹ provides resources for
38 creating legal shared use agreements in their efforts to fight childhood obesity

160 <http://www.saferoutespartnership.org/state/bestpractices/jointuse>

- 1 ▪ **Funding Precedents**¹⁶²: some states may be able to receive cost benefits for joint use facilities. For
 2 example, California’s Office of Public School Construction (OPSC) granted almost \$190 million to
 3 schools to build nearly 250 joint use facilities.

4
 5 **Education and Libraries Analysis Table**

6 **Table 16. Education and Libraries Analysis Table**

| Challenges | Support/Rationale | CDP Strategy Direction |
|--|--|---|
| The rural nature of the planning area makes school transportation, including walking to and from school, challenging, and sometimes dangerous | <p>Plan Support: Safe Routes to School Program</p> <p>Policy Support:</p> <ul style="list-style-type: none"> General Plan 10.2.4.2.2(c); 10.2.4.3.2(a); 10.2.4.3.3(b) | <ul style="list-style-type: none"> Advocacy/CBCM: Encourage DOE, PTA, and other school groups to plan and implement a safe routes to school program |
| Resource sharing of facilities between DOE and the community/County can be challenging due to legal (liability) impediments, jurisdictional issues, and inter-agency coordination. | <p>Policy Support:</p> <ul style="list-style-type: none"> General Plan 10.1.3(a); 10.1.3(b); 10.2.2(b); 10.2.2(c) | <ul style="list-style-type: none"> Advocacy/CBCM: Encourage DOE, County of Hawai’i and community groups to work together to expand facilities resource sharing opportunities/programs |
| NHERC’s facilities need improvements to their Culinary Arts and Nursing buildings to expand college offerings in Honoka’a | <p>Plan Support:</p> <ul style="list-style-type: none"> State CIP <p>Policy Support:</p> <ul style="list-style-type: none"> General Plan 10.2.4.3.3(a) | <ul style="list-style-type: none"> Advocacy: Advocate to the Governor and State Legislature to budget additional funds to improve their facilities |

7
 8 **Parks and Recreation**
 9 **Overview, Assets, and Challenges**

10 County parks are typically beach parks or facilities for active recreation (e.g., playfields, gymnasiums,
 11 swimming pools). State and Federal parks are typically oriented toward passive recreation activities cen-
 12 tered on a valued natural or cultural resource. The plantations built and eventually turned over to the

161 <http://changelabsolutions.org/publications/model-JUAs-national>

162 http://citiesandschools.berkeley.edu/reports/CC&S_PHLP_2008_joint_use_with_appendices.pdf



1 County several gymnasiums and playfields throughout the Planning Area. There are also three heavily
 2 used County beach parks at Honoli‘i, Kolekole, and Laupāhoehoe Point which serve as the only public
 3 shoreline access points along the Hāmākua coast.

4 The General Plan sets forth a hierarchy of parks based on the intended population or area to be served:
 5 neighborhood park (playfield, playground equipment, courts, up to 4 acres, intended to serve the imme-
 6 diate neighborhood); community park (neighborhood park facilities plus gymnasium, swimming pool, 4-
 7 8 acres, intended to serve a broader community approximately 1-mile radius in urban areas or larger
 8 area in rural areas); district park (community park facilities plus multi-purpose recreation building, 10-30
 9 acres, intended to serve the entire district); and regional park (district park facilities plus auditorium,
 10 spectator sports facilities, approximately 50 acres, intended to serve several districts). There are no
 11 regional parks in the Planning Area—the Ho‘olulu regional park in Hilo serves the Planning Area.
 12 Honoka‘a Park is a district park. There are nine community parks, ten standalone facilities (e.g.,
 13 gymnasium, swimming pool, tennis court, rodeo), two neighborhood parks, and the Waipi‘o Lookout,
 14 which is considered a passive recreational facility (see Community Profile, Figure 5-5).

15 The Hawai‘i State Parks system includes three parks within the Planning Area: ‘Akaka Falls State Park,
 16 Mauna Kea State Park, and Kalōpa State Recreation Area. Kalōpa has cabins for overnight accommoda-
 17 tions. Hawai‘i Volcanoes National Park, the largest National Park in the State, reaches across the peak of
 18 Mauna Loa into the very southwest corner of the Planning Area.

19 The majority of County-owned recreation facilities (Gyms, Playgrounds, Ball Fields, Community Centers,
 20 and Beach parks) were built and maintained by the sugar plantations and turned over to the County
 21 when the plantations closed. Because of this heritage, the **Planning Area is fortunate to have the most**
 22 **facilities per capita of any area on the island.** The convenience of having such facilities in proximity to
 23 the community plays an essential role for youth development, senior activities, and community
 24 gathering. However, over the past several years, many of these recreation facilities have fallen into
 25 disrepair. Refer to the table below for an assessment of current conditions at County recreation
 26 facilities throughout the Planning area.

27 Note: this section focuses primarily on public parks and recreation, not on private recreation resources.
 28 Also, for more information on hunting/fishing, please see the ‘Āina chapter of the analysis under the
 29 Wao and Public Access sections¹⁶³.

30 **Table 17. County Recreation Facilities & Conditions Table**¹⁶⁴

| District | Location & Name | Size (Acres) | Facility Type | Condition | Planned Improvements |
|----------|----------------------------|--------------|--------------------------------|-----------------------------------|----------------------|
| S. Hilo | Kaiwiki; Wainaku Gym | - | Gym | Good | |
| S. Hilo | Kaiwiki; Kaiwiki Park | 5 | Playfield/Restrooms & Pavilion | Playfield is just an empty field; | |

163 <http://www.hawaii-county-cdp.info/hamakua-cdp/draft-hamakua-cdp-documents/documents/Natural%20Cultural%20Resource%20Analysis-Online.pdf>

164 There are also private community center facilities in: Pā‘ahau, Haina, and Kukuihaele.

| | | | | | |
|---------|----------------------------------|------|--|---|---|
| | | | | facility is maintained at a basic level | |
| S. Hilo | Honoli'i; Honoli'i Beach Park | 2.8 | Beach park/Restrooms/Pavilion | Adequate | Siting of park (downslope of beach bluff) likely makes full ADA compliance impossible |
| S. Hilo | Pāpa'ikou; Frank Santos Park | 11 | Playfield/Pavilion/Restrooms | Fair | |
| | | | Community Center | Poor; aging facility needs maintenance & updates | |
| | | | Gym | Good | |
| S. Hilo | Pepe'ekeo; Kulai'mano Park | 28.9 | Community Center & Ball Park/Restrooms | Excellent; (this is a newer facility) | 2013 ADA Improvements to Restrooms |
| S. Hilo | Pepe'ekeo Playground | 4.9 | Playfield; basketball courts | This is a field and old basketball courts; basic maintenance performed through the Friends of the Park program by Pepe'ekeo Community Association | |
| S. Hilo | Honomū Park | 10 | Gym & recreation center | Poor; possible hazardous materials and leaking roof; gym must close when it's raining | |
| | | | Playfield/playground | Good; playground equipment is relatively new | |

| | | | | | |
|---------|--|-----|---|--|----------------------------------|
| | | | | and well maintained | |
| S. Hilo | Kolekole Beach Park | 5.5 | Beach Park/ Pavilion/ Restrooms & Campsites | Good (Restrooms are being repaired as of Nov. 2013) | ADA Improvements slated for 2013 |
| S. Hilo | Wailea/ Hakalau; Hakalau Veterans Park | 6.1 | Gym | Hazardous Materials, not maintained or open for use | |
| | | | Playfield | Good | |
| | | | Tennis/basketball courts | Poorly maintained, cracked courts | |
| S. Hilo | Hakalau Beach Park | 3.2 | Portable Toilets and picnic tables | Good; This park was donated to COH and is not yet part of P&R Depts., park inventory; park is maintained through the Friends of the Park program by the Pakalove organization ¹⁶⁵ | |
| N. Hilo | Nīnole; Waikaumalo Park | 4.3 | Playfield/Restrooms/Pavilion | Good | |
| N. Hilo | Pāpa'aloa | 5 | Gym & Annex | Poorly maintained; hazardous materials; sections of gym cordoned off | |
| | | | Tennis Courts | Fair | |

165 <http://www.epa.gov/region9/brownfields/land-revitalize/pdf/r9-fs-hakalau-sugar.pdf>

| | | | | | |
|---------|------------------------------|------|---|---|--|
| | | | Playfield | Fair | |
| N. Hilo | Laupāhoehoe | 2.7 | Swimming Pool | Good | Community has expressed interest in heating the pool via solar power |
| N. Hilo | Laupāhoehoe Point Beach Park | 24.1 | Playfield/Pavilion/Beach Park/ Campsite | Good | |
| | | | Boat Ramp | Closed; dangerous | |
| N. Hilo | Laupāhoehoe Gym | .5 | Gym | Fair | |
| N. Hilo | O'ōkala Park | 23.3 | Gym & Playfield | Closed; Extremely poor condition; | |
| Hāmākua | Pa'auilo Park | 3.6 | Gym & Annex | Good | |
| | | | Playfield; Pavilion; Restrooms | Good | |
| Hāmākua | Haina Park | 3.6 | Playfield; Restrooms | Fair | |
| Hāmākua | Honoka'a Park | 27.7 | Gym | Good | |
| | | | Playfield; Restrooms | Good | |
| | | | Swimming Pool | Good | |
| Hāmākua | Honoka'a Rodeo Arena | -- | Rodeo Arena & Restrooms | Coming Improvements include: new judges stand with office and storage space; covered bleachers; | Upcoming ADA restrooms Improvements |
| Hāmākua | Kukuihaele; Park | 4 | Playfield | Portable Toilets being used (?), otherwise a bare field minimally | |

| | | | | | |
|---------|-----------------------------------|---|--------------------------------------|---|--|
| | | | | maintained | |
| Hāmākua | Kukuihaele; Waipi’o Lookout | 1 | Restrooms; Pavilion; Lookout area | Fair; Restrooms are heavily used and could be expanded | Siting of park likely makes full ADA compliance impossible |

1

2 **Table 18. State Recreation Facilities & Conditions Table**

| District | Location & Name | Size (Acres) | Facility Type | Condition |
|----------|---------------------------------|--------------|---|---|
| RSH | ‘Akaka Falls State Park | 65.4 | Hiking path; Restrooms; Educational display; Lookout | Good; recent improvements to the trail & handrails were made in 2009. |
| Hāmākua | Kalōpa State Recreation Area | 100 | Hiking; Horseback; Campsites; Cabin Rental; Pavilions; Restrooms; Nature Park | Good |
| Hāmākua | Mauna Kea State Recreation Area | 20.5 | Hiking; Cabin Rentals; Campsites; Restrooms; | Good |

3

4 **Cemeteries:** The County of Hawai‘i cemeteries are managed by the Department of Parks and Recreation.
5 There are several County cemeteries in the Hāmākua Planning Area, a few private cemeteries, and
6 several small private community, or family, cemeteries.

- 7 ▪ **‘Alae Cemetery** - The largest cemetery in the County, Alae Cemetery is located on Highway 19
8 between Wainaku and Pauka‘a. The cemetery was formerly 20.5 acres and recently expanded to
9 29.7 acres, nearly doubling its capacity. This new expansion is expected to meet the needs of the
10 community for the next half century.
- 11 ▪ **Kihalani Cemetery** - Kihalani Cemetery is a County cemetery located in Laupāhoehoe, directly above
12 Laupāhoehoe Charter School. It is the only County cemetery in North Hilo.
- 13 ▪ **Kainehe Cemetery** - Kainehe is a small County cemetery located in Kukaiau, in the Hāmākua District.
- 14 ▪ **Honoka‘a Cemetery**- a County cemetery located in Honoka‘a, Hāmākua District.
- 15 ▪ **Kukuihaele** – a small County cemetery located in Kukuihaele, Hāmākua District.
- 16 ▪ **Mauna Kea Memorial Park**- a privately owned and operated cemetery located on Ka‘ie‘ie Road, in
17 Pāpa‘ikou, Rural South Hilo.

18 **Other Assets**

- 19 ▪ Many communities participate in facility/resource-sharing. [See Education Section.](#)

1 ▪ The Planning area is rich with natural beauty and has many opportunities for outdoor recreation

2 **Challenges:**

3 County Facilities:

4 ▪ The County Parks and Recreation Department is challenged in bringing the park facilities in its
 5 inventory into compliance with the Americans with Disabilities Act of 1990 (ADA). ADA projects are
 6 occupying a majority of the department’s budget allocations.

7 ▪ Many of the maintenance problems in these aging facilities involve hazardous material mitigation,
 8 which is dangerous and expensive to remedy.

9 ▪ The Planning Area has, in many areas, a dwindling and an aging population – thereby leading to less
 10 usership of the existing recreation facilities. This leads to a few subsequent challenges:

11 ○ Smaller populations and lower usership make it difficult to prioritize small communities with
 12 new facilities/programs and improvements to existing facilities; small communities end up
 13 competing with larger communities for the same pot of funding.

14 ○ The aging population leads to less usership of facilities in the younger ages, which leads to
 15 even less likelihood of prioritization for adding/improving younger age-specific recreation
 16 like playground equipment

17 ▪ The Planning Area has limited trails for biking and hiking in proximity to towns or around existing
 18 parks. Suggestions to use old plantation cane haul roads as public trails has garnered interest, but
 19 since these roads remain in private ownership, the County has little influence over their usage.

20 ▪ The **Laupāhoehoe Boat Ramp** – This boat ramp is the only public boat ramp facility in the Planning
 21 Area. The closest public boat launch areas are located in Hilo and Kawaihae. The boat ramp is an
 22 important asset to subsistent fisher people and recreational boaters. Originally constructed by the
 23 U.S. Army Corps of Engineers, the Laupāhoehoe boat ramp is managed by the County of Hawai’i
 24 Parks & Recreation Department. Due to damage caused by heavy wave activity, the ramp floor has
 25 steel rebar protruding from crumbling concrete, making it hazardous for boaters and especially
 26 hazardous for swimmers (swimming is officially not an allowed use of the ramp, but the ramp
 27 continues to be a popular local swimming spot). The boat ramp has been officially closed since June
 28 2009 to protect public safety. Parks and Recreation makes minor repairs to the rebar protrusions
 29 when they are reported and local residents have, at times, taken it upon themselves to make repairs
 30 and continue to use the ramp on a limited basis and at their own risk. It is commonly thought that
 31 the location of the ramp is part of the problem and until the ramp is relocated to its original position
 32 and orientation in the bay, the problems of significant wave erosion will continue to manifest
 33 themselves. The County has been assessing the ramp’s condition since 2009 in an attempt to
 34 develop a plan for restoring the ramp to a usable/safe condition. Currently there are no funds
 35 allocated for the repairs of this project and the report on the County’s assessment of the ramp has
 36 not been made public.

37 **General Plan Goals, Policies & Courses of Action**

38 **Health Facilities (Cemeteries) Courses of Action**

39 **South Hilo**

40 ▪ 10.5.4.2.3(b): Expansion of existing cemeteries or creation of new sites shall be undertaken.

1 **North Hilo**

- 2 ▪ 10.5.4.3.3(a): Maintenance of cemeteries shall be improved.

3 **Hāmākua**

- 4 ▪ 10.5.4.4.2(a): Maintenance of the cemeteries shall be improved.

5 **Recreation – Goals**

- 6 ▪ 12.2(a): Provide a wide variety of recreational opportunities for the residents and visitors of the
7 County.

- 8 ▪ 12.2(b): Maintain the natural beauty of recreation areas.

- 9 ▪ 12.2(c): Provide a diversity of environments for active and passive pursuits.

10 **Recreation - Policies**

- 11 ▪ 12.3(a): Strive to equitably allocate facility-based parks among the districts relative to population,
12 with public input to determine the locations and types of facilities.

- 13 ▪ 12.3(b): Improve existing public facilities for optimum usage.

- 14 ▪ 12.3(c): Recreational facilities shall reflect the natural, historic, and cultural character of the area.

- 15 ▪ 12.3(d): The use of land adjoining recreation areas shall be compatible with community values,
16 physical resources, and recreation potential.

- 17 ▪ 12.3(e): Develop short and long-range capital improvement programs and plans for recreational
18 facilities that are consistent with the General Plan.

- 19 ▪ 12.3(f): The "County of Hawaii Recreation Plan" shall be updated to reflect newly identified
20 recreational priorities.

- 21 ▪ 12.3(g): Facilities for compatible multiple uses shall be provided.

- 22 ▪ 12.3(h): Provide facilities and a broad recreational program for all age groups, with special
23 considerations for the handicapped, the elderly, and young children.

- 24 ▪ 12.3(i): Coordinate recreational programs and facilities with governmental and private agencies and
25 organizations. Innovative ideas for improving recreational facilities and opportunities shall be
26 considered.

- 27 ▪ 12.3(j): Develop local citizen leadership and participation in recreation planning, maintenance, and
28 programming.

- 29 ▪ 12.3(k): Adopt an on-going program of identification, designation, and acquisition of areas with
30 existing or potential recreational resources, such as land with sandy beaches and other prime areas
31 for shoreline recreation in cooperation with appropriate governmental agencies.

- 32 ▪ 12.3(l): Public access to the shoreline shall be provided in accordance with an adopted program of
33 the County of Hawai'i.

- 34 ▪ 12.3(m): Develop a network of pedestrian access trails to places of scenic, historic, natural or
35 recreational values. This system of trails shall provide, at a minimum, an island-wide route
36 connecting major parks and destinations.

- 1 ▪ 12.3(n): Establish a program to inventory ancient trails, cart roads and old government roads on the
- 2 island in coordination with appropriate State agencies.
- 3 ▪ 12.3(o): Develop facilities and safe pathway systems for walking, jogging, and biking activities.
- 4 ▪ 12.3(p): Develop a recreation information dissemination system for the public's use.
- 5 ▪ 12.3(q): Revise the ordinance requiring subdivisions to provide land area for park and recreational
- 6 use or pay a fee in lieu thereof.
- 7 ▪ 12.3(r): Develop and adopt an Impact Fees Ordinance.
- 8 ▪ 12.3(s): Consider alternative sources of funding for recreational facilities.
- 9 ▪ 12.3(t): Develop best management practices for the development of golf courses in coordination
- 10 with developers, State Department of Health, and other government agencies.
- 11 ▪ 12.3(u): Provide access to public hunting areas.

12 **Recreation - Courses of Action**

13 **South Hilo**

- 14 ▪ 12.5.2.2(e): Develop urban commercial areas with landscaped parks for passive recreation.
- 15 ▪ 12.3(f): Expand the depth of coastal recreation areas. Park areas should be connected with trails to
- 16 increase public access.

17 **North Hilo**

- 18 ▪ 12.5.3.2(a): Implement the Laupāhoehoe Point Beach Park master plan.
- 19 ▪ 12.5.3.2(b): Improve the boat launching facilities at Laupāhoehoe Peninsula by encouraging the
- 20 Army Corps of Engineers to extend the breakwater.

21 **Hāmākua**

- 22 ▪ 12.5.4.2(a): Construct multipurpose rooms adjacent to the gymnasium in Honoka’a Park to
- 23 accommodate community meetings and functions.

24 **Previous Planning**

25 **State Comprehensive Outdoor Recreation Plan (SCORP) 2008 Update¹⁶⁶:** The SCORP focuses on

26 identifying and addressing the shifting needs and challenges relating to outdoor recreation resources for

27 our way of life and the future of our State’s economy. The purpose of SCORP are to: 1) guide the use of

28 Land and Water Conservation (LWCF) funds for State and County recreation agencies by identifying

29 public and agency preferences and priorities for the acquisition and development of outdoor recreation

30 facilities; and, 2) identify outdoor recreation issues of statewide importance and those issues that can be

31 addressed by LWCF funding.

32 The SCORP identifies several issues that correspond to the Planning Area and are reasons to put a high

33 priority on parks and outdoor recreation, including:

166 <http://state.hi.us/dlnr/reports/scorp/SCORP08-1.pdf>

- 1 ▪ **Aging Population:** The population is aging due to declining birth rates and longer life expectancies.
2 The population of school age children (5-17) is declining. The population of those 65 years and older
3 is rising. As the population ages, the user preferences for recreation facilities change as well. For
4 example, an aging population is less likely to demand more youth-oriented facilities, such as little
5 league ballfields or skateparks. Rather they demand facilities that provide less strenuous activities
6 such as walking, golfing, and fishing¹⁶⁷.
- 7 ▪ **Visitors:** Because visitors are drawn to Hawai'i's natural scenery and outdoor recreational
8 opportunities, an increasing visitor population affects the demand on the outdoor recreation
9 resources. A benefit of the visitor population is that these non-residents help pay for outdoor
10 recreation facilities and programs through their spending and taxes.
- 11 ▪ **Public Health:** The prevalence of obesity continues to be a health concern for adults, children, and
12 adolescents. Physical inactivity and unhealthy eating contribute to obesity and a number of chronic
13 diseases, including some cancers, cardiovascular disease, and diabetes (Leavitt 2008, as quoted in
14 SCORP, page 9). Promoting regular physical activity and healthy eating and creating an
15 environment that supports these behaviors are essential in addressing the obesity problem. As of
16 2005, only 29% of middle school students and 30% of high school students in Hawai'i met the
17 recommendations for daily physical activity. On average, from 2003-2005, 49% of adults in Hawai'i
18 did not meet the recommendations for daily physical activity.

19 The Center for Disease Control (CDC) has begun to rally support for parks and open space, seeing
20 them as way to encourage a physically active lifestyle and stem the national tide of obesity.
21 Research shows that when people have access to a park, they are more physically active (Sherer
22 2006, SCORP pg. 10). In addition, a statewide study found that counties with greater recreation
23 opportunities (e.g., existence of parks, facilities, recreation lands, bikeways, etc.) had higher rates of
24 physical activity, lower health care expenditures, and lower obesity rates (Rosenberger, Sneh,
25 Phipps, Gurvitch 2005, SCORP pg. 10).

26 The State Dept. of Health (DOH) also encourages a physically active lifestyle through its *Start Living*
27 *Healthy*¹⁶⁸ statewide health promotion campaign. Funded through the Tobacco Settlement funds,
28 this multimedia educational campaign, with partnerships in both the private and public sectors, is
29 designed to provide the people of Hawai'i with easy to understand information on healthy living.

30 In the SCORP action plan, actions relevant to the Planning Area include:

31 5.1.2 Management of Recreation Resources: Establish management strategies and practices to improve
32 the quality of recreation resources and provide safe and well-maintained facilities.

- 33 1. "Fix what we have first" before funding new land acquisition and park development.
34 2. Provide a standard of level maintenance for facilities despite reductions in manpower and
35 equipment.
- 36 a. Increase funding and staffing for maintenance of State and County parks and recreation
37 facilities.
38 b. Facilitate volunteer groups and community organizations to maintain recreation resources,
39 and to produce and promote best management practices (BMPs) for different recreation
40 users.

167 <http://state.hi.us/dlnr/reports/scorp/SCORP08-1.pdf>, page 7

168 <http://www.healthyhawaii.com/index.php>

- 1 5.1.3 Meeting Needs of Recreation Users: Provide residents and visitors with a variety of recreational
2 opportunities, resources, and facilities.
- 3 1. Increase the number and range of resources and facilities to support expanded participation in
4 ocean and shoreline recreation activities.
- 5 a. Purchase, lease, or otherwise acquire additional beach areas and rights-of-ways.
6 b. Upgrade harbor facilities and add more boat slips.
7 c. Develop additional boat ramps and launching facilities.
8 d. Plan and develop facilities and programs to provide more recreational fishing and diving
9 opportunities.
10 e. Develop more beach camping areas.
11 f. Provide more lifeguards and safety measures, such as educational signage about shoreline
12 hazards.
13 g. Provide more parking, restrooms, and shower facilities at heavily-used beach parks, harbors,
14 and shoreline areas.
- 15 2. Increase the number and range of resources and facilities to support and expand recreation
16 opportunities in mauka and natural upland areas.
- 17 a. Plan and develop more mauka multi-use trails.
18 b. Plan and develop campsites and other recreational amenities in mauka areas
19 c. Open more public hunting areas, improve access to hunting areas, and provide more
20 hunting opportunities.
21 d. Address issues with OHV (off highway vehicle, aka: ATV) use by increasing enforcement,
22 creating special areas and more trails for OHVs, promoting responsible OHV user ethic, and
23 increasing fees to fund OHV areas.
24 e. Revise State and County camping permit reservation systems and make them accessible
25 online.
- 26 3. Increase the number and range of resources and facilities to support expanded participation in
27 walking, jogging, and bicycling as healthy activities and transportation by developing a
28 comprehensive network of safe and well-maintained linear paths and lanes.
- 29 a. Support implementation of the updated Bike Plan Hawai'i (2003) and other regional bike
30 plans by accommodating plans for lanes that cross through County and State parks and
31 recreation areas.
32 b. Develop networks of non-vehicular linear paths within urban and residential areas, linking
33 communities
34 c. Improve sidewalks within neighborhoods by planting shade trees, installing lighting, and
35 removing litter and glass.
- 36 4. Increase the number and range of open space and field resources and facilities to support expanded
37 participation in passive and active recreation activities.
- 38 a. Provide more playing fields and upgrade existing fields for both youth and adult sports
39 leagues.
40 b. Partner with the Hawai'i Department of Education (DOE) to make better use of existing DOE
41 facilities when not in use for physical education programs or scholastic league events.

- 1 c. Encourage assistance for maintenance of active playfields from athletic leagues and
2 volunteers by providing equipment and/or supplies or through 'adopt-a-park' programs.
- 3 d. Work with community association and organized athletic leagues to identify areas in need of
4 additional playing fields and courts
- 5 e. Install lighting at fields and courts to allow for night play.
- 6 f. Develop more tennis courts.
- 7 g. Develop more sport shooting and archery ranges.
- 8 h. Provide more playground facilities.
- 9 i. Provide more areas for passive recreation activities, such as picnicking and sunbathing, and
10 improve existing areas by replacing damaged tables, planting additional shade trees,
11 repairing/renovating or building new restrooms, and maintaining landscaped areas.
- 12 j. Develop more off-leash dog parks, and provide more areas where owners are allowed to
13 take their dogs on-leash.
- 14
- 15 5. Provide all residents and visitors, regardless of age, ability, or socio-economic status with
16 opportunities to participate in a range of outdoor recreation activities.
 - 17 a. Bring existing recreation resources into compliance with the newest accessibility guidelines
18 as published by the U.S. Access Board in July 2004, when possible and use guidelines for
19 developing any new facilities.
 - 20 b. Work with private sector, both non-profit and for-profit organizations, to provide recreation
21 opportunities to members of the community with special needs.
 - 22 c. Establish links with existing community and advisory groups and establish procedures for
23 these groups to advise on recreation matters.
- 24
- 25 6. Minimize conflicts between multiple activities and user groups competing for the same recreation
26 resources, including conflicts between visitors and residents, between youth and adult leagues, or
27 between various trail and ocean users.
 - 28 a. Proactively plan for user conflicts, by annually collecting public use data from recreation
29 areas, monitoring use trends, arranging meetings with various users to resolve conflicts
30 involving shared resources and either updated rules and regulations and/or providing more
31 recreation areas consistent with user growth
 - 32 b. Promote the sharing of facilities and resources among recreation providers, both public and
33 private.
 - 34 c. Determine which activities are compatible and which areas are appropriate for multiple
35 uses. Set aside single-use areas for those activities that are not compatible and may pose a
36 safety risk to other recreation users.
 - 37 d. Provide signage and other sources of information about user rights-of-way on multi-use
38 trails
 - 39 e. Encourage commercial operators to work with community representatives to come to an
40 understanding about each other's needs and find solutions to conflicts over use of limited
41 resources.

42 5.1.4 Access to Recreation Resources: Remove and/or reduce constraints to recreation access and
43 implement management strategies that expand, rather than limit, recreation opportunities and areas.

- 1 1. Improve access to shorelines and public forest areas by protecting existing accesses, creating new
 - 2 accesses, reestablishing access to areas that are currently blocked or restricted by private
 - 3 landownership and/or development.
 - 4 a. Give priority to acquiring public access to and along shoreline and mauka (with wilderness
 - 5 access) recreation areas.
 - 6 b. Prevent blocking of existing legal public access paths, and enforce public access
 - 7 requirements for new subdivisions.
 - 8 c. Provide directional and entry signage to public recreation areas.
 - 9 d. Continue and increase use of easement to protect areas of high public value from
 - 10 development and ensure public access.
 - 11 e. Provide management assistance to private landowners that allow recreational access on
 - 12 their lands.
 - 13 f. Coordinate with private landowners, the DLNR Land Division, and the Dept. of Hawaiian
 - 14 Homelands to assure access through leased lands to Forest Reserve areas.
 - 15 g. Review existing laws, rules, and regulations and recommend amendments, if necessary, to
 - 16 ensure public access for recreational uses as well as cultural practices and subsistence
 - 17 gathering, hunting, and fishing.
 - 18 2. Provide an equitable distribution of recreation resources throughout the State.
 - 19 a. Plan and develop parks for high density and growing population areas
 - 20 b. Develop trail networks that offer easy access from urban/suburban areas to rural areas.
 - 21 c. For heavily used areas where there is not enough parking, more should be provided or
 - 22 alternative solutions should be exPELORed.
 - 23 3. Eliminate physical barriers that prevent individuals with disabilities or limited mobility from
 - 24 participating in recreation programs and using outdoor resources and facilities.
 - 25 a. Assure that all new facilities meet the Uniform Federal Accessibility Standards for
 - 26 handicapped access.
 - 27 b. Increase funds available for retrofitting of existing parks and recreation facilities, as
 - 28 mandated by the Federal and State laws.
 - 29 c. Design recreation programs that accommodate the needs of the disabled, and partner with
 - 30 private non-profit and for-profit organizations to run programs.
- 31 5.1.5 Funding: Actively identify and research available funding sources, and allocate funds equitably to
- 32 maximize recreation benefits and alleviate needs for the variety of recreation users throughout the
- 33 State.
- 34 1. ExPELORe mechanisms for recreation agencies to enhance revenues to assist with operations and
 - 35 management of recreation resources and facilities.
 - 36 a. Establish more user fees to supplement regular appropriates. Collect fees for amenities,
 - 37 such as coin boat washes, coin hot showers, vending machines. The user fees should be
 - 38 placed in a special fund to directly benefit he resource by assisting with operation and
 - 39 maintenance costs.
 - 40 b. Establish more park concession opportunities provided the money from leases and sales be
 - 41 placed in a special fund to directly benefit the resource by assisting with operations and
 - 42 maintenance costs.



- 1 c. Create a professionally managed statewide endowment for acquisition, capital outlay, and
2 maintenance.
- 3 d. Continue the allocation of \$1 million annually to support State Parks and Na Ala Hele from
4 the Transient Accommodations Tax (TAT) Trust Fund and consider earmarking revenues
5 from other sources for recreation purposes.
- 6 e. Establish impact fees paid by developers to cover costs associated with new growth, and to
7 support acquisition, development, and/or maintenance of parks, open space, and public
8 access.
- 9 f. ExPELORe more external funding opportunities or cost-sharing among multiple government
10 agencies.
- 11 g. ExPELORe sponsorship opportunities where a private party or corporation can build a facility
12 in exchange of naming the facility after the donor, or having a sign at the park
13 acknowledging the donor.
- 14 h. Collect HI5 recyclables at parks and put money back into park.
- 15 2. ExPELORe non-revenue sources for supporting acquisition, recreation programs, and maintenance
16 of recreation resources.
 - 17 a. Establish conservation easements and land trusts as alternatives to direct land acquisition.
 - 18 b. Establish a private, non-profit foundation to expand public agency capabilities to provide
19 recreational services.
 - 20 c. Lease public land to private entities to provide public recreational services.
 - 21 d. Utilize more group and individual volunteers for community work days, renovation and
22 development projects, and maintenance.
 - 23 e. Expand the ‘adopt-a-park’, ‘adopt-a-beach’ and ‘adopt-a-trail’ programs to increase public
24 involvement in caring for recreation facilities.
 - 25 f. Partner with other public agencies to gain access to other types of external grants that
26 indirectly tie into recreation.
 - 27 g. Request funds for bikeway development by aggressively seeking available funding for
28 bikeway/greenway projects.

29 **Northeast Hawai‘i CDP (1979):** Several of the goals and actions outlined in this COH CDP have been
30 implemented. A few examples are: create a Honoka‘a Playground and Rodeo Arena, create a
31 Laupāhoehoe Swimming Pool, Ballfield improvements in Pāpa‘ikou and Pepe‘ekeo, Development of
32 Kula‘imano Park, etc.

33 **Capital Improvement Projects**

- 34 ▪ Funds appropriated for Laupāhoehoe Boat Ramp Improvements
- 35 ▪ Funds appropriated for Kula‘imano Park Expansion

36 **ADA Parks 4 Year Plan for Completion:**¹⁶⁹

- 37 ▪ Kula‘imano Park & Community Center, 2012 Actual Cost \$262,747
- 38 ▪ Pāpa‘aloha Park, 2014, Estimated Cost \$750,000

169 <http://records.co.hawaii.hi.us/Weblink8/browse.aspx?dbid=1&startid=65081>

- 1 ▪ Laupāhoehoe Senior Center, 2012 Estimated Cost \$250,000
- 2 ▪ Pa‘auilo Park, 2013 Estimated Cost \$550,000
- 3 ▪ Kolekole Beach Park, 2014 Estimated Cost \$75,000 (nearly complete)
- 4 ▪ North Hilo Senior Center
 - 5 ○ 2012 Estimated Design Cost \$50,000;
 - 6 ○ 2013 Estimated Construction \$150,000
- 7 ▪ Honoka‘a Rodeo Arena
 - 8 ○ 2012 Estimated Design Cost \$75,000
 - 9 ○ 2013 Estimated Construction Cost \$325,000

10 **Potential Recreation Facility Improvement Projects**

11 The following is a list of projects and potential projects that either are in early stages, or that the
 12 community has shown interest in:

- 13 ▪ Honoka‘a Skate Park (Note: the County has purchased materials and community members are
 14 working on building a community skate park)
- 15 ▪ Public Park on County Land next to the Laupāhoehoe Post Office
- 16 ▪ Trail to Laupāhoehoe Point using old Laupāhoehoe Point road
- 17 ▪ Solar heating for the Laupāhoehoe Swimming Pool
- 18 ▪ New Playground for Honoka‘a Park
- 19 ▪ Re-roof Honomū Gym
- 20 ▪ Hazardous Materials Remediation at Pāpa‘aloha

21 **Tools and Alternative Strategies**

22 **Na Ala Hele Statewide Trail and Access System:** First established in 1988, this program is part of DLNR’s
 23 Division of Forestry and Wildlife and is responsible for the planning, development, acquisition,
 24 management and maintenance of trails and accesses, statewide. Its purposes, authorities and
 25 responsibilities are detailed in HRS Chapter 198D. The program is required to inventory “all trails and
 26 accesses in the State.” The program is responsible for managing and maintaining only those trails and
 27 accesses that are approved by the Board of Land and Natural Resources to become a part of the
 28 statewide trail and access system. Trails/accesses in the CDP Planning Area under the jurisdiction of Na
 29 Ala Hele include several coastal trails in Onomea, Kaluakauka Trail, Humu‘ula Trail and the Muliwai Trail.

30 **County Cooperative Park Management Programs:** The County uses three tools to collaborate with
 31 community groups in the management of County parks:

- 32 ▪ **Friends of the Park Agreements:** This program enables the community to make improvements,
 33 beautify, or assist with maintenance at County parks. The County retains full control and supervision

1 over the work and any ongoing programs, and the community has no exclusive rights to the use of
 2 the facility. Basic Image, Inc., (aka: Pakalove)¹⁷⁰ a not-for-profit 501(3)(c) organization dedicated to
 3 preservation of Hawaii's heritage and natural resources, has oversight of four adopted parks
 4 through the County of Hawaii's Friends of the Parks program, including two in the Planning Area
 5 (Honoli'i Beach Park and Hakalau Beach park).

- 6 ▪ **County Cooperative Agreement:** This program enables the community to make improvements as
 7 well as manage the facility. The County must still approve the improvements, but the County takes a
 8 back seat to the community in the planning and operations. An example is the Cooper Center in
 9 Volcano Village.
- 10 ▪ **Lease:** This program enables the community to take full control of the facility to the extent of the
 11 terms of a lease agreement. Depending on the lease agreement, the County may have minimal
 12 funding and liability obligations, with the community assuming those responsibilities.

13 **Parks and Recreation Analysis Table**

14 **Table 19. Parks and Recreation Analysis Table**

| Challenges | Support/Rationale | CDP Strategy Direction |
|---|---|---|
| ADA Projects are occupying a majority of Parks and Recreation Capital Improvement Budget | Plan Support: <ul style="list-style-type: none"> ▪ Safe Routes to School Program ▪ State Comprehensive Outdoor Recreation Plan (SCORP) 2008 Update ▪ ADA Parks 4 Year Plan for Completion Policy Support: <ul style="list-style-type: none"> ▪ GP | Policy: Encourage Parks and Recreation to combine ADA improvements with other needed facilities improvements |
| Aging facilities with hazardous materials mitigation needs | Plan Support: <ul style="list-style-type: none"> ▪ CIP Policy Support: <ul style="list-style-type: none"> ▪ General Plan 12.3 (b) | Policy: Prioritize capital improvement funds for hazardous materials abatement |
| Relative smaller population of the Planning Area may lead to prioritization of P&R funding to more densely populated | Plan Support: <ul style="list-style-type: none"> ▪ State Comprehensive Outdoor Recreation Plan | CBCM: Encourage community groups to work with P&R through County Cooperative Park Management Programs |

170 <http://www.pakalove.org/>

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|--|--|---|
| communities | (SCORP) 2008 Update Policy Support: <ul style="list-style-type: none"> ▪ General Plan 12.2 (a); (c) ▪ General Plan 12.3 (a) (c) (e) (f) (g) (h) (q) (r) (s) | |
| Few playground options for younger age groups | Plan Support: <ul style="list-style-type: none"> ▪ State Comprehensive Outdoor Recreation Plan (SCORP) 2008 Update Policy Support: <ul style="list-style-type: none"> ▪ General Plan 12.2 (a) (c); 12.3(h) | Policy: Prioritize funds for age appropriate recreational equipment at existing parks/facilities |
| The Planning Area has limited trails for biking and hiking in proximity to towns or around existing parks. | Plan Support: <ul style="list-style-type: none"> ▪ State Comprehensive Outdoor Recreation Plan (SCORP) 2008 Update Policy Support: <ul style="list-style-type: none"> ▪ General Plan 12.3 (c) (d) (k) (l) (m) (n) (o) (q) (r) (s) (u) (f) (i) | Advocacy: Advocate with DOA to include community recreational use of cane haul roads when renewing agricultural leases CBCM: Encourage community groups to work with State and Private landowners to create, open, and maintain additional trails for non-motorized recreation |
| The only public boat ramp in the Planning Area has been closed to use since 2009 due to damages | Plan Support: <ul style="list-style-type: none"> ▪ CIP ▪ Northeast Hawai'i CDP ▪ State Comprehensive Outdoor Recreation Plan (SCORP) 2008 Update Policy Support: <ul style="list-style-type: none"> ▪ General Plan 12.5.3.2(a); 12.5.3.2(b); | Policy: Prioritize CIP funding for the renovation and construction of a new boat ramp |



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REGIONAL SETTLEMENT PATTERNS & DIRECTING FUTURE GROWTH

This section begins with a brief overview of Hāmākua’s historic and current settlement patterns including analyses of the towns, villages, and rural homestead areas which contain the Planning Area’s population. It continues to provide a discussion of trends impacting future growth, including the community’s preferred future growth patterns, summaries of Hāmākua’s related values, priorities, and objectives, and the benefits of traditional village development. The section concludes with summaries of existing County policy, previous planning, and analysis tables describing possible strategy directions.

Learning From The Past: Understanding Regional Settlement Patterns

Historic Settlement Patterns

Understanding land use in in the Planning Area begins with an examination of human settlement patterns in the region. Various patterns were identified, beginning with the earliest organizations of society on the island.

Pre-Contact:

“For generations following initial settlement, communities were clustered along the watered, ko’olau (windward) shores of the Hawaiian Islands. Along the ko’olau shores, streams flowed, rainfall was abundant, and agricultural production became established. The ko’olau region also offered sheltered bays from which deep sea fisheries could be easily accessed. Also, near-shore fisheries, enriched by nutrients carried in the fresh water running from the mountain streams, could be maintained in fishponds and coastal fisheries. It was around these bays such as at Hilo, and on the sheltered peninsula of Laupāhoehoe, that clusters of houses where families lived could be found (cf. McEldowney 1979). In these early times, the residents generally engaged in subsistence practices in the forms of agriculture and fishing (Handy and Handy, 1972:287). By the 1400s, upland regions to around the 3,000 foot elevation were being developed into areas of residence and a system of agricultural fields. By the 1500s to 1600s, residency in the uplands was becoming permanent, and there was an increasing separation of royal class from commoners. During the latter part of this period, the population stabilized, and a system of land management was established as a political and socio-economic factor (see Kamakau, 1961; Ellis, 1963; Handy, Handy & Pukui, 1972; Tomonari-Tuggle, 1985; and Cordy, 2000).”¹⁷¹

According to archeologist, Ross, Cordy:

“Hāmākua, although rural today, was long a powerful, religious, economic, and demographic center on Hawai’i Island. It was here that the complex political system arose which successfully dominated Hawai’i island and the entire archipelago. Waipi’o served as the royal center of the Pili family line and the Hawai’i polity in the A.F 1400s and 1500s.”¹⁷²

Due to its political prominence, extensive Ahupua’a (123 of the island’s 242 Ahupua’a lie within the Planning Area) and abundant natural resources, Hāmākua was a renowned population and economic center pre-contact.

171 Malay & Malay. “HILO PALIKŪ – HILO OF THE UPRIGHT CLIFFS: A Study of Cultural-Historical Resources of Lands in the Laupāhoehoe Forest Section, Ahupua’a of the Waipunalei-Mauluanui Region, North Hilo District, Island of Hawai’i
172 Cordy, Ross. “A Regional Synthesis of Hāmākua District , Island of Hawai’i.” 1991



1 “In the years of the late 1700s and early 1800s, general depopulation hit Hāmākua like the rest of
2 the islands...Emigration seems to have played a role in Hāmākua’s depopulation. Without a port for
3 western ships, Hāmākua never became a focus for trade, and people were drawn away to the port
4 towns...”¹⁷³

5 **Homesteads:** There are several “homestead” settlements in the Planning Area created and conveyed
6 under the Land Act of 1895. This homesteading program converted public land to private use as places
7 to live and provide a livelihood open to any citizen.¹⁷⁴

8 The Land Act of 1895 dates back to the Republic of Hawai‘i. The small group of westerners who
9 engineered the overthrow of the Kingdom in January 1893 established the Provisional Government. The
10 Legislature of the Provisional Government passed a law in March 1894 to convene a Constitutional Con-
11 vention to adopt a Constitution to form the Republic of Hawai‘i. The Constitution of 1894 was declared
12 to be the law of the land by proclamation, and Sanford B. Dole became the President of this Republic.
13 The Republic functioned for four years until annexation under the administration of U.S. President
14 William McKinley, who signed the Joint Resolution of Annexation on July 7, 1898. Under the 1894
15 Constitution, the Republic took possession of the Crown Lands (which in 1894 consisted of about
16 971,463 acres), lumped them together with the Government Lands (which were alienable), and
17 authorized the sale of Crown Lands, thereby reversing the Act of January 3, 1865 that had rendered
18 Crown Lands inalienable (Van Dyke 2007).

19 President Dole believed that the best approach for Hawai‘i would be to promote “the development of a
20 hardy, intelligent, peaceful agricultural population” by “the opening up of public lands to settlers.”¹⁷⁵ In
21 August 1895, Dole signed the Land Act of 1895 establishing a program to encourage homesteading
22 patterned after American family farming. After annexation, President McKinley appointed Dole as
23 Governor of the Territory of Hawai‘i (The Organic Act of April 30, 1900 created the Territory of Hawai‘i),
24 a role he served until 1903.

25 Under the 1895 Act, homesteaders had three options: 999-Year Homestead Lease (rescinded in 1951),
26 Right of Purchase Lease (21-year contract in which the holder had the option of buying at any time after
27 the third year), and Cash Freehold Agreement (four payments of 25% each to acquire the parcel at the
28 end of the third year).

29 Today, those lands that were originally divided into homestead lands show the strongest population
30 growth in the Planning Area. See homestead section below [Add link] for a more in-depth analysis of
31 these areas.

32 **The Rise of Sugar:** The most prominent agricultural crop associated with the Planning Area is sugar.
33 Small, start-up plantations took root in the mid-1830’s. But it wasn’t until 1876 when Hawai‘i signed a
34 reciprocity treaty with the United States that tariffs were lifted and the sugar economy began. Hāmākua
35 had a late start in sugar relative to the other parts of the island due to the challenge of the high cliffs
36 and rough seas to bring in supplies and ship out the sugar and molasses.

37 In the Rural South Hilo area, five plantations started that eventually merged into Hilo Coast Processing
38 Company: Pāpa’ikou, Onomea, Pepe’ekeo, Honomū, and Hakalau. In the North Hilo and Hāmākua
39 districts, seven plantations formed that eventually merged into Hāmākua Sugar Company: Kaiwiki Sugar

173 Cordy, Ross. “A Regional Synthesis of Hāmākua District, Island of Hawai‘i.” 1991

174 Note: This should not be confused with the lots made available to persons of Hawaiian ancestry under the Hawaiian Homes Commission Act of 1921

175 Van Dyke 2007, quoting from Sanford B. Dole, “The Political Importance of Small Land Holdings in the Hawaiian Islands” (paper presented to the Honolulu Social Science Association, March 23, 1891).

1 Company (1869), Hāmākua Mill Company (established 1877 at Pa’auilo), Honoka’a and Pā’auhau Sugar
2 Companies (1878), Pacific Sugar Mill Company in Kukuihaele (1879), Laupāhoehoe Sugar Company
3 (1880), and Kūka’iau Plantation Company (1887).

4 During this time, land in the Planning Area was acquired and consolidated by the sugar companies; labor
5 was imported from China, Korea, Japan, Portugal, Puerto Rico and the Philippines; and plantation
6 villages and smaller camps to house the growing worker population were established. Plantation villages
7 typically included housing, an infirmary, school, and recreational facilities. Commercial enterprises and
8 religious facilities grew in association with the villages, including mom and pop stores, theatres,
9 hongwanji missions, and churches. The sugar industry also necessitated new infrastructure to transport
10 the raw material from fields to mill and eventually to steam ship. The infrastructure included extensive
11 flume systems, narrow gauge railways, bridge trestles spanning major gulches, and landings for ships at
12 the base of sea cliffs. Sugar was the dominant agricultural crop in the Planning Area until global
13 competition overcame the Hawaiian sugar industry and by 1994, the last sugar plantation in Hāmākua
14 closed.

15 During the 1950s and 1960s, the plantation began to phase out outlying plantations towns in order to
16 return those areas into sugar production and provide housing (in fee simple) to employees in existing
17 and newer urban centers where higher levels of services existed. This was done to reduce plantation’s
18 costs and mitigate problems with the EPA relative to sewage disposal permits, the Clean Drinking Water
19 Act, and to eliminate and reduce planation’s costs.

20 Several of these towns are what planners consider “Traditional Neighborhood Development” (TND)
21 community types. TNDs have a compact design that provides easy access to schools, restaurants,
22 shopping, health care, entertainment, and other amenities of community life – often without having to
23 drive a car. TNDs are typically flexible enough to support a variety of economic and social conditions
24 while protecting the surrounding environment.

25 **Post Sugar:** After the close of the sugar plantations, the economy and land use of the Planning Area
26 dramatically changed. Residents lacked work in the area with over 12,000 workers losing their jobs,
27 plantation-owned housing was in jeopardy of being sold off or falling into disrepair and social services
28 such as medical facilities and recreational facilities once subsidized by the plantations were closed.

29 Additionally, over 43,000 acres of land was taken out of sugar production. This created a situation
30 where much of the land surrounding towns and villages was put up for sale. Land speculators bought
31 and developed larger tracts into rural, residential subdivisions. In addition, previously cultivated
32 homestead areas were now available for purchase. Due to this shift, population growth and residential
33 development has taken place generally outside of the urban town and village areas.

34 The following sections will discuss assets and challenges related to our current regional settlement
35 patterns and provide more detail into specific towns, villages, and rural homestead areas.

36 **Population Growth & Distribution:**

37 According to the U.S. Census Bureau, the Planning Area’s population grew by 13% between 1990 and
38 2010¹⁷⁶ (see “Table 18: Population Growth in the Hāmākua CDP Planning Area”).

176For purposes of this analysis, we used a 20 year time period to capture relative population before and after closure of the plantations).

1 The Planning Area has Nine Census Designated Places (CDPs), which generally encompass higher density
 2 settlement areas (towns and villages)¹⁷⁷. Population growth within these CDPs was relatively flat with
 3 only 3% increase over that 20-year period with three of the 9 CDPs losing population (Honomū: -1%,
 4 Pāpa'ikou: -16%, and Pauka'a: - 15%).

5 In contrast, the area outside of the CDPs showed a 42% increase in population during the same period.
 6 The majority of that growth has taken place in the rural homestead areas when close to 2,000 lots were
 7 taken out of sugar cultivation and made available for sale after the closure of the sugar plantations in
 8 the mid 1990's. Today, 27% of the Planning Area's population lives on a homestead lot.

9 **Table 20. Population Growth in the Hāmākua CDP Planning Area**

| Census Designated Place (CDP) | 1990 Census | 2000 Census | 2010 Census | 1990-2010 - % Change | % of Planning Area Population |
|-------------------------------|-------------|-------------|-------------|----------------------|-------------------------------|
| Kukuihaele | 296 | 317 | 336 | 14% | 2.4 |
| Honoka'a | 2,137 | 2,233 | 2,258 | 6% | 16.4 |
| Pa'auilo | 574 | 571 | 595 | 4% | 4.3 |
| Laupāhoehoe | 434 | 473 | 581 | 34% | 4.2 |
| Honomū | 512 | 541 | 509 | -1% | 3.7 |
| Pepe'ekeo | 1,621 | 1,697 | 1,789 | 10% | 13.0 |
| Pāpa'ikou | 1,556 | 1,414 | 1,314 | -16% | 9.5 |
| Pauka'a | 501 | 495 | 425 | -15% | 3.1 |
| Wainaku | 1,179 | 1,227 | 1,224 | 4% | 8.9 |
| Outside of CDPs | 3,379 | 3821 | 4,784 | 42% | 34.4 |

10
 11 Because of the range of factors that influence population growth, it is difficult to predict whether these
 12 trends will continue. However, given the fact that housing and land costs have increased, jobs within
 13 the Planning Area continue to be scarce, development within towns/villages is constrained by
 14 infrastructure limitations, the agricultural areas surrounding towns and villages are likely to continue to
 15 grow at a quicker pace than the urban areas in Hāmākua.

16 On the conservative side, the State of Hawai'i Department of Business, Economic Development and
 17 Tourism expects the County's population to increase at a compound annual growth rate of 1.3 percent.

177 The CDPs do not encompass Haina and a portion of land mauka of the highway in Honoka'a; All of 'O'ōkala; All of Pāpa'aloa; All of Nīnole; All of Wailea/Hakalau; Pepe'ekeo Point area; and the urban area between Paukaa and Pāpa'ikou.)

1 Assuming the Planning Area’s proportion of the County’s population continues to be 7.5%, the planning
2 area’s estimated 2035 resident population would be 20,878 persons.¹⁷⁸

3 **Regional Settlement Pattern Assets and Challenges**

4 **Assets**

- 5 ▪ Historic settlements, agricultural and ranch lands, mauka forests, and shorelines that exemplify rural
6 character and lifestyle
- 7 ▪ Agricultural tradition
- 8 ▪ ‘Ohana traditions that encourage extended-family support for schools, churches, and community
9 organizations
- 10 ▪ Many towns were built in the plantation era and are comprised of densely populated, mixed-use,
11 walkable neighborhoods
- 12 ▪ Several towns/villages have town cores with the potential for revitalization
- 13 ▪ Many of the existing town cores have historic buildings with attractive architectural character
- 14 ▪ Most towns have community centers, parks, and recreational facilities

15 **Challenges**

- 16 ▪ Lack of infrastructure (particularly water availability) is a major impediment to developing greater
17 density and directing growth within the towns and villages
- 18 ▪ The General Plan LUPAG map growth boundary (Low-Density Urban designation) allows for
19 expansion well beyond the existing town area and SLU urban boundaries and encompasses large
20 acreage of prime agricultural lands.¹⁷⁹
- 21 ▪ LUPAG, Zoning, and State Land Use Designations are inconsistent in many towns and villages
- 22 ▪ Population growth within town and villages is stagnant, and in some cases, towns have lost
23 population (3% growth over 20 years); Conversely, growth is taking place outside of the towns and
24 villages on agriculturally zoned lands (41% growth over 20 years)
- 25 ▪ Land and housing costs are generally unaffordable to many in the Planning Area
- 26 ▪ County unable to provide comprehensive town level community plans for each of the Planning
27 Area’s Towns and Villages through CDP

28 **Town Level Analysis**

29 For the purposes of the following town level analysis, the definition of “town” is meant to include any
30 area that has an underlying State Land Use Urban designation. Not all settlements with this designation
31 are considered traditional towns/villages as they lack a town center, commercial district, recreational
32 facilities, and other characteristics that make up traditional towns/villages. For example, this includes

178 These projections assume an increase in growth every year in every area, however, as we have seen some CDPs have lost population between census periods.

179 ALISH Prime & Land Study Bureau (LSB) B rated lands



1 the first set of settlement areas, Wainaku/Kaiwiki/Pauka‘a, which are more residential bedroom
 2 communities in nature due to their close proximity to Hilo.

3 In addition, this town analysis does not include legal, nonconforming subdivisions which in many cases
 4 have town type characteristics, but lack the underlying SLU urban designation, these include: Portion of
 5 Haina Camp, Pā‘auhau Village, Nakalei Camp, Kaohe Tract Subdivision, Milo Subdivision and Niu Camp in
 6 ‘O‘ōkala, periphery portions of Wailea and Honomū, portions of Andrade Camp and Kula‘imano
 7 Homesteads in Pepe‘ekeo, and periphery portions of Pāpa‘ikou, Pauka‘a, and Kaiwiki.

8 Finally, these analyses can be used as a starting point for communities who wish to partner with the
 9 County to develop a Town Revitalization Plan.

10 **Wainaku/Kaiwiki/Pauka‘a Analysis**

11 **Table 21. Wainaku/Kaiwiki/Pauka‘a Assets and Challenges**

| | |
|--|--|
| Character | <p>At the outskirts of the City of Hilo, the Wainaku, Kaiwiki, and Pauka‘a are bedroom extensions of Hilo. These settlements are predominantly residential with no distinct town or village character of their own. There is no existing town/commercial core, nor is one needed, due to this area’s proximity to Hilo.</p> <p>Wainaku/Kaiwiki - 2010 population of 1,224</p> <p>Pauka‘a - 2010 population of 425</p> |
| Neighborhoods | <p>Kaiwiki – Mostly single-family residential zoning (RS) with minimum lot sizes from 7,500 to 15,000 square feet.</p> <p>Wainaku – Mostly single-family residential zoning (RS) with minimum lot sizes from 7,500 to 10,000 square feet.</p> <p>Pauka‘a - Mostly single-family residential zoning (RS) with minimum lot sizes from 15,000 to 20,000 square feet makai of the highway and 7,500 and 15,000 square feet mauka.</p> <p>The area makai of Hwy 19 in Wainaku and Pauka‘a and a portion of the Honoli‘i gulch encompassing Kahoa St. is in the Special Management Area (SMA)</p> |
| Transportation facilities: road standards, connectivity, transit, active transport | <p>Kaiwiki - Wainaku II Plantation camp mauka of Wainaku Street off of Kaiwiki Road with narrow paved streets looping through neighborhoods and meeting back with Kaiwiki Road. Camp roads are walkable with small blocks, however, Kaiwiki Rd., due to grade and limited site distances, would not be good for biking. No transit stops.</p> <p>Wainaku: Lots primarily served by the Wainaku St. and narrow camp roads off of Wainaku St. which are generally walkable and bikeable.</p> <p>Pauka‘a: Mauka lots primarily served by Kahoa St., Kulana St. and mauka makai roads. Makai Lots are served by Paukaa Dr. and Kuikahi St. Most of these roads are narrow, rural village road standard accommodating multi-modal traffic and calm vehicle speeds. Walkable and bikable.</p> |
| Potable Water | <p>Kaiwiki: Served by the Hilo water system. Water service is typically available for up to 3 units per pre-existing lot of record. Service is typically available for subdivision and ‘ohana dwellings lots, but not for rezones/SLU Boundary</p> |

| | |
|---|---|
| | <p>amendments.</p> <p>Wainaku: Served by the Hilo water system. Water service is typically available for up to 7 units per pre-existing lot of record makai of the Ha'aheo Reservoir and south of the Honoli'i Stream. Service is typically available for subdivision and 'ohana dwellings lots, but not for rezones/SLU Boundary amendments.</p> <p>Pauka'a: Served by the Pauka'a-Pāpa'ikou Water System. Water service is typically available for up to 7 units per pre-existing lot of record (north of Honoli'i Stream) and new lots created by subdivision, but no service to new lots created by rezoning.</p> |
| Wastewater | There is no centralized wastewater treatment system. All lots use individual cesspools or septic systems. The entire Planning Area is located in a non-critical wastewater area, so cesspools are permitted on a minimum lot area of 10,000 s.f. |
| Emergency Services | There is a no fire station or police substation; service response is from Hilo. |
| Other facilities & Services: health, social, education, libraries | <p>Wainaku - Ha'aheo Elementary School is located mauka of Wainaku Street</p> <p>Kaiwiki – The Wainaku Gym and Kaiwiki Park</p> <p>'Alae Cemetery and Honoli'i Beach Park between Wainaku and Pauka'a</p> |
| Planned and in-progress Capital Improvements | <ul style="list-style-type: none"> ▪ Funds have been appropriated for Kaiwiki Road repair ▪ Funds have been appropriated for replacing the Maili Stream Bridge on Kaiwiki Road just mauka of Wainaku Camp II ▪ Expansion of the 'Alae Cemetery recently completed |
| Commercial Districts/Town Core | There is no LUPAG Medium Density Urban or existing commercial zoning to define a current or planned town core. |
| Agriculture Operations | Macadamia Nuts, Tropical Fruits, and Truck Crops surround these neighborhoods. Value added agricultural processing facility proposed in lands mauka of Honoli'i. |
| Industrial Districts | The Old Wainaku Mill site, makai of Hwy 19 is now the location of the Wainaku Executive Center Mill has general Industrial Zoning but is located just outside of Planning Area. |
| Potential Brownfields | Sites with pesticide contamination. |
| Infill Options | <p>Kaiwiki/Wainaku: On RS parcels with an existing dwelling, an 'ohana unit requires a public or private sewage disposal system and an approved public or private water system.</p> <p>Via subdivision of parcels under existing zoning and without any water system</p> |

| | |
|-----------------------|--|
| | <p>improvements, approx. 88 additional buildable lots could be created.</p> <p>Pauka'a: On RS parcels with an existing dwelling, an 'ohana unit requires a public or private sewage disposal system and an approved public or private water system.</p> <p>Via subdivision of parcels under existing zoning and without any water system improvements, approx. 57 additional buildable lots could be created.</p> |
| Extension Options | <p>Wakinaku/Kaiwiki: The current LUPAG Low Density Urban designation extends well beyond the current State Land Use Urban District encompassing significant acreage of agriculturally zoned and used lands. However, existing infill potential in the Urban areas will easily accommodate growth projections through 2035. Therefore, expansion outside of SLU Urban district is inappropriate.</p> <p>Pauka'a: The current LUPAG Low Density Urban designation extends well beyond the current State Land Use Urban District encompassing significant acreage of agriculturally zoned and used lands. However, existing infill potential in the Urban areas will easily accommodate growth projections through 2035. Therefore, expansion outside of SLU Urban district is inappropriate.</p> |
| Associated Homesteads | Kaiwiki 1&2 – 165 A-5a, A-10a, and Open Zoned Lots |

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Figure 13. Wainaku/Kaiwiki Community Basemap

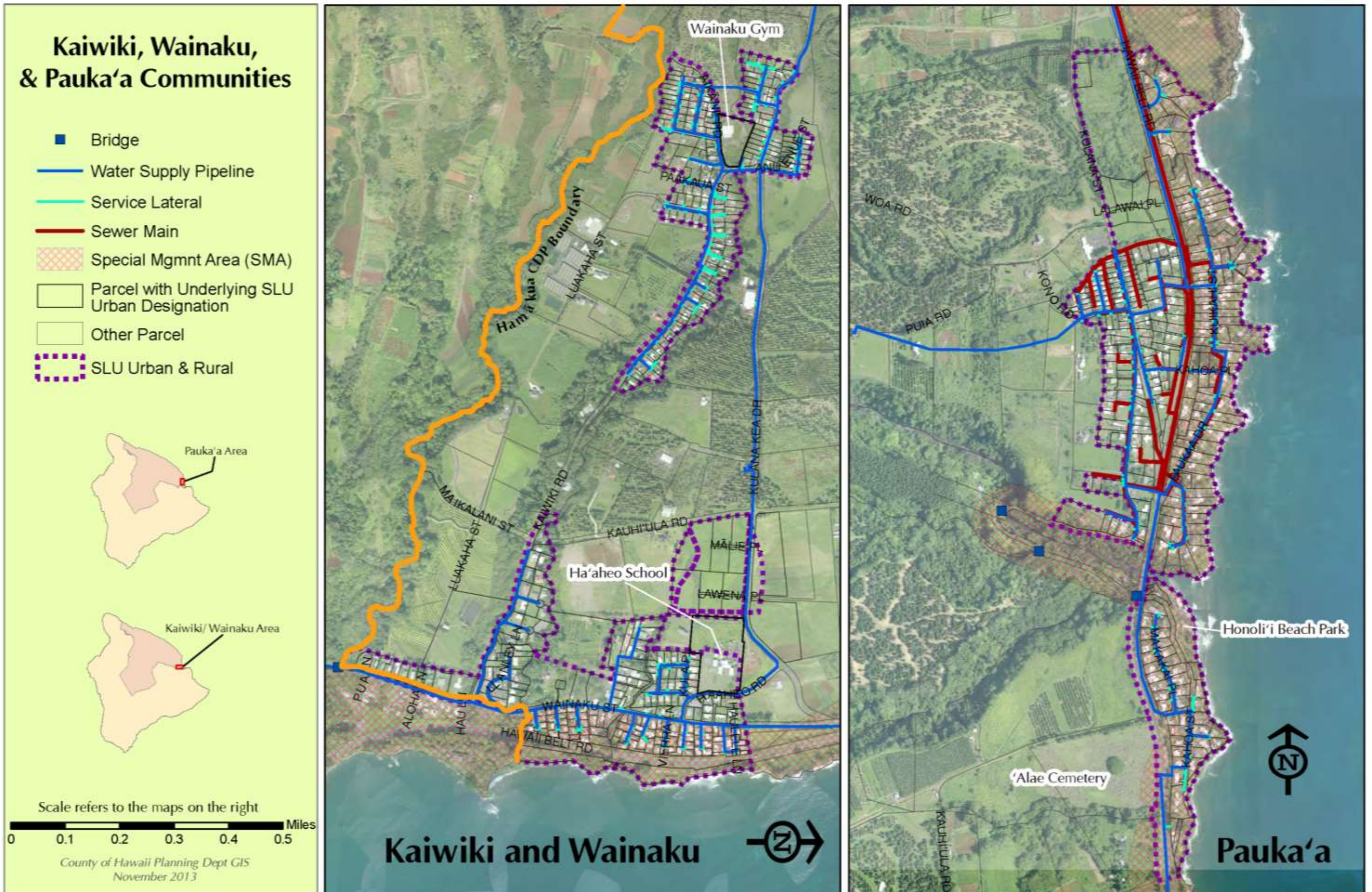


Figure 14. Wainaku/Kaiwika LUPAG & Zoning Map

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Kaiwika and Wainaku Communities

LUPAG
(Land Use Pattern Allocation Guide)

- Conservation
- Important Ag. Lands
- Low Density Urban
- Medium Density Urban
- Open Area
- Resort Node
- Urban Expansion

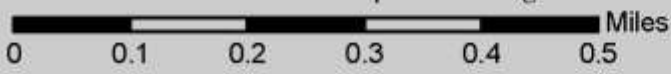
ZONING
(Permitted Use)

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| A-20a | OPEN |
| A-3a | RA-1a |
| FA-5a | RS-10 |
| MG-1a | RS-15 |
| MG-5a | RS-7.5 |



Kaiwika / Wainaku Area

Scale refers to the maps on the right



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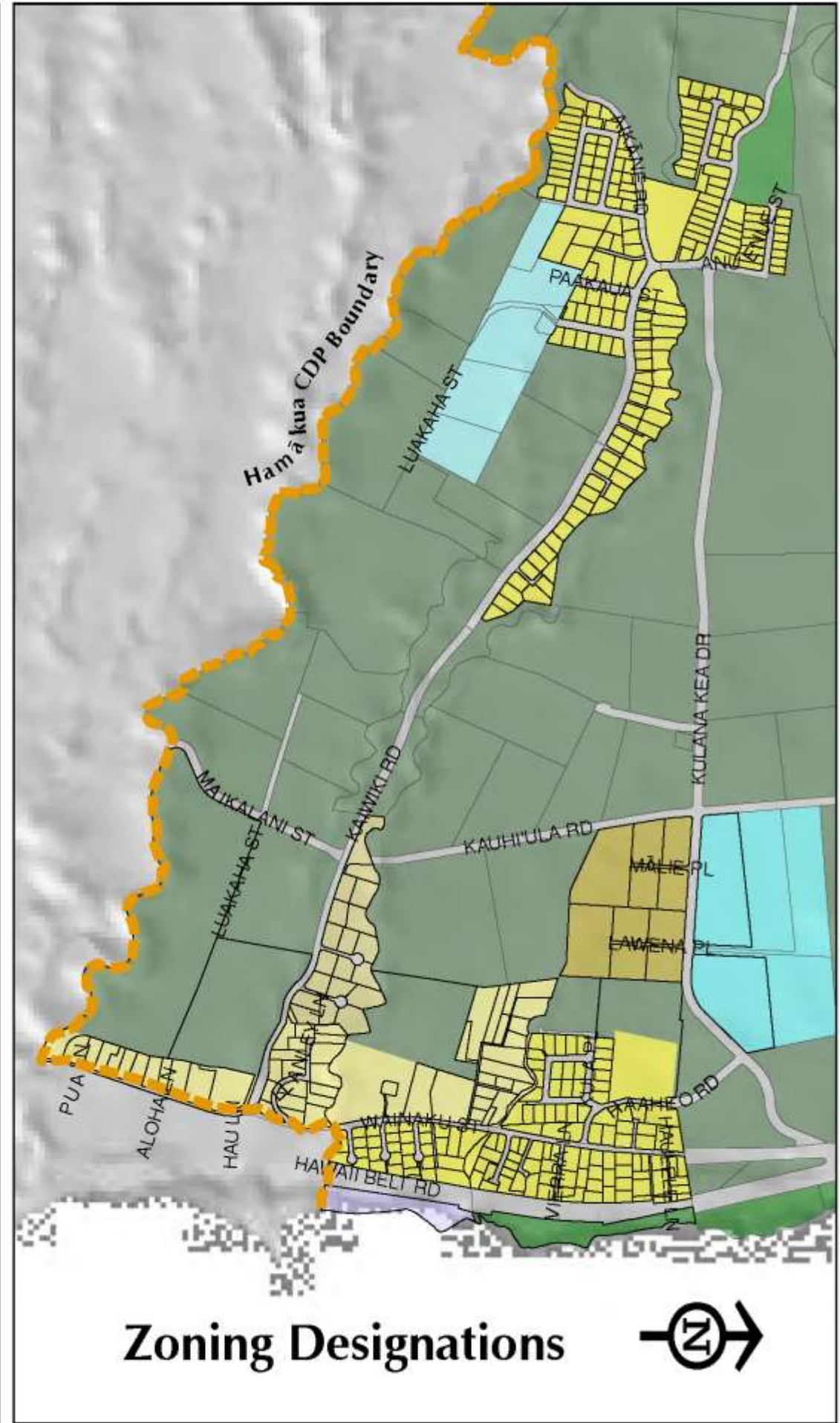
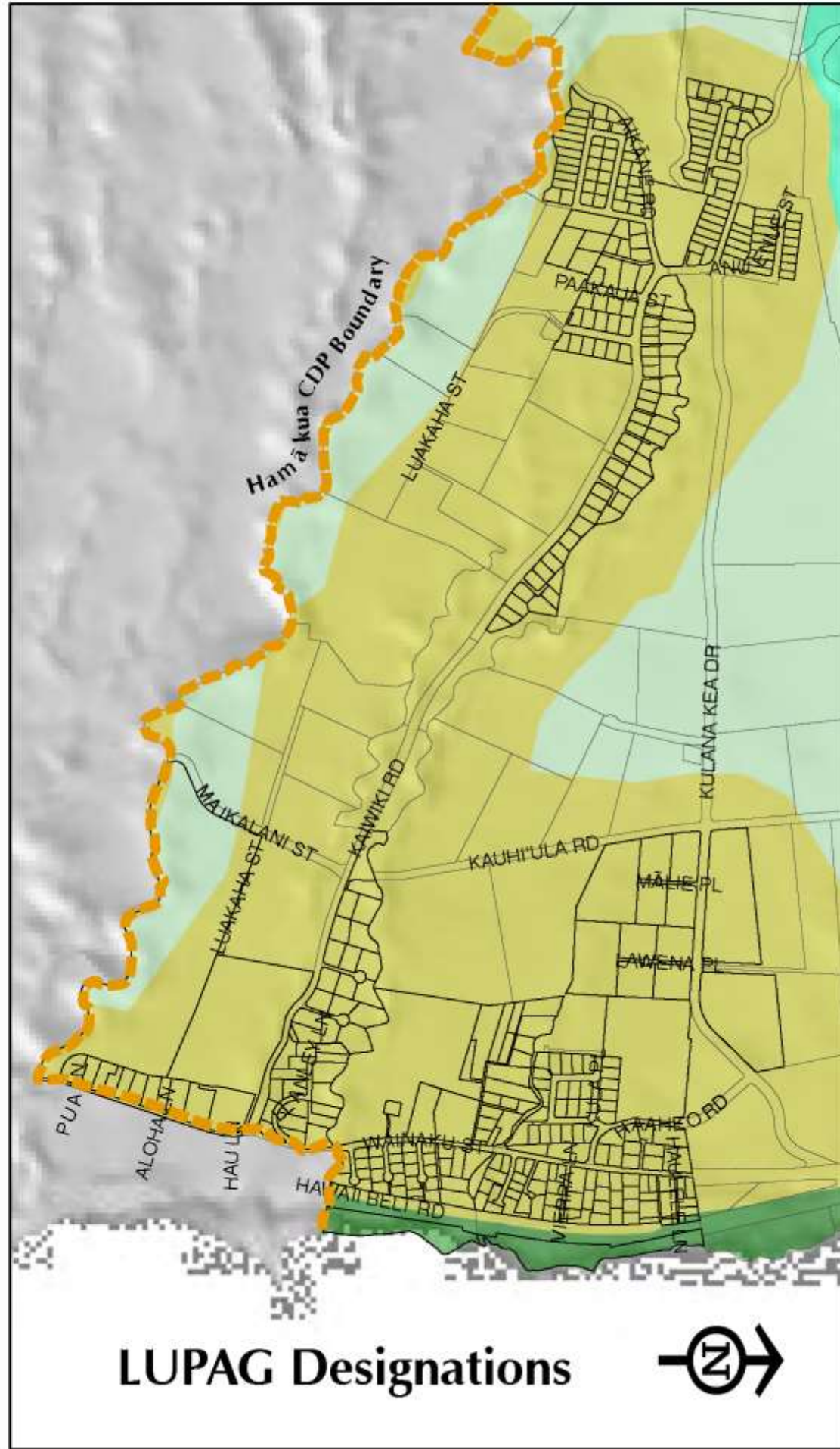


Figure 15. Pauka'a Basemap

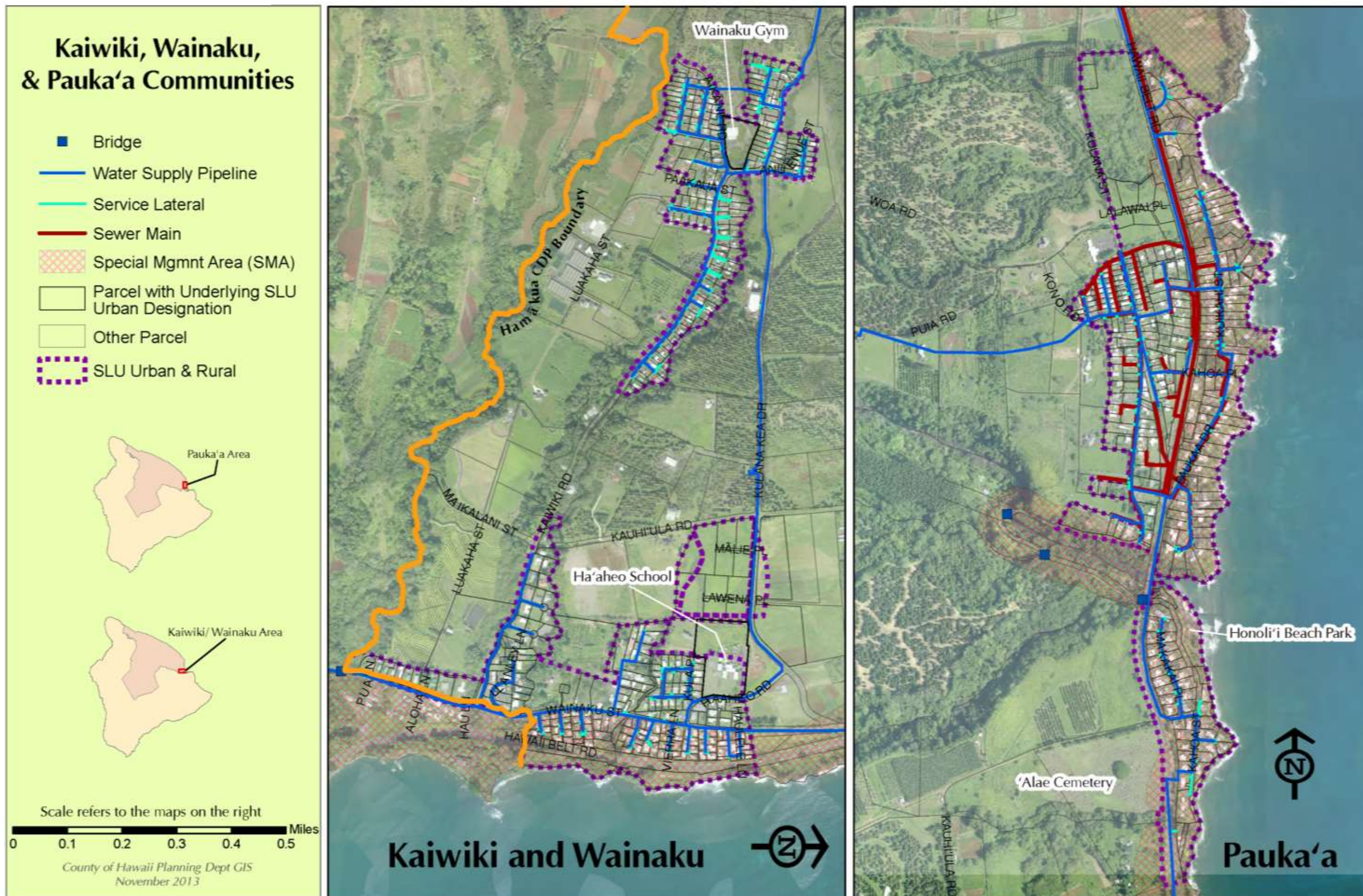
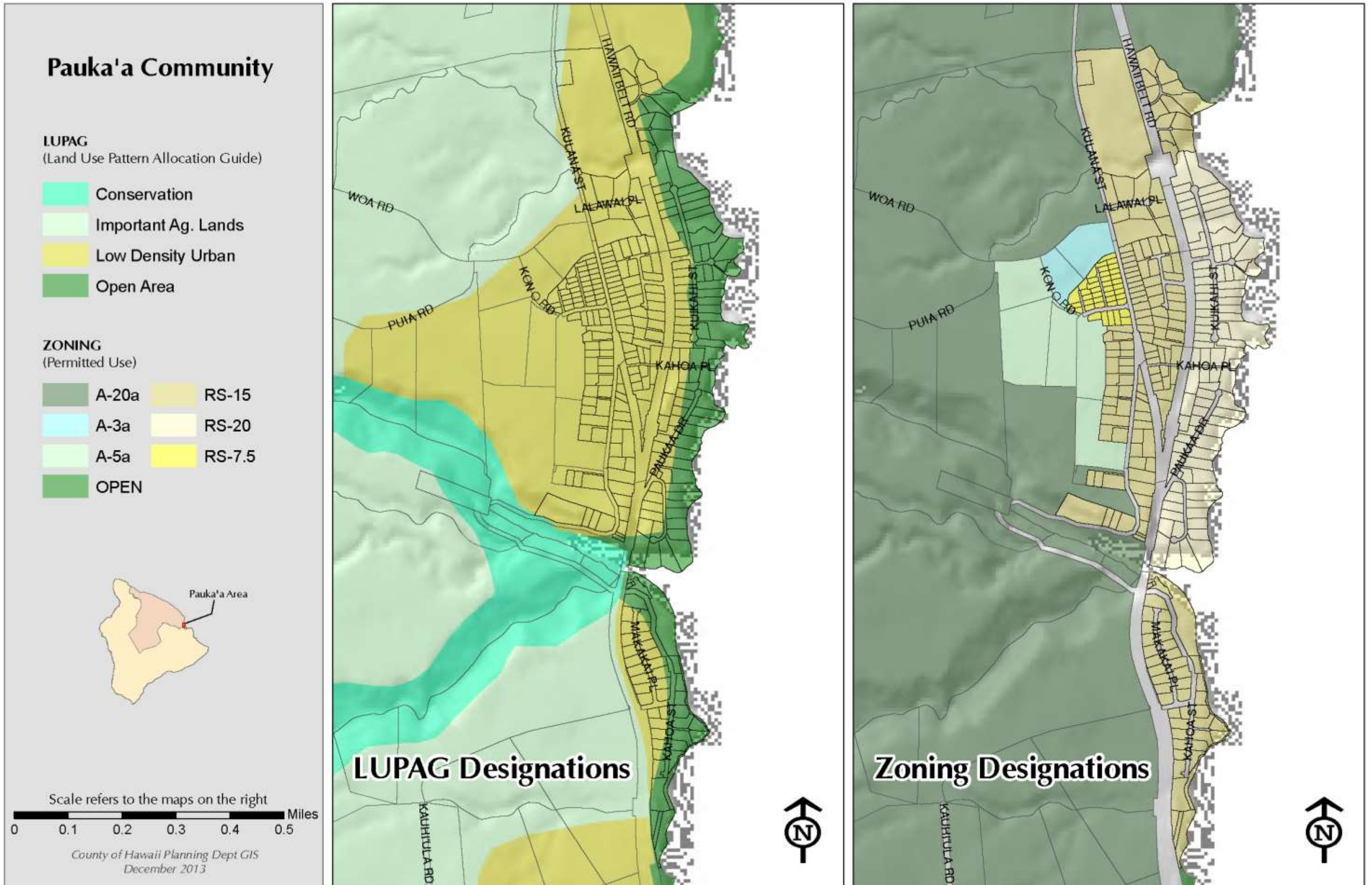


Figure 16. Pauka'a LUPAG & Zoning Map



1 Pāpa'ikou Analysis

2 Table 22. Pāpa'ikou Assets and Challenges

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| Character | Rural plantation town surrounded by working agricultural lands developed by absorbing former residents of smaller plantation camps nearby. Town has a strong sense of place and historic buildings. (2010 population of 1,314). |
| Neighborhoods | Residential neighborhoods mostly mauka and makai of the highway bookended by the commercial area on the Hilo side and the Kalaoa Camp Road on the Hāmākua side. Single family residential zoning (RS) with minimum lot sizes of 7,500 and 20,000 square feet. |
| Transportation facilities: road standards, connectivity, transit, active transport | Settlements straddle highway 19 and display a mix of street patterns including curvilinear, grid type, and homestead roads. Most of these roads are narrow, rural village road standard accommodating multi-modal traffic and calm vehicle speeds. Walkable and bikable with the majority of neighborhoods within ½ mile of the town center and facilities, and many within a ¼ mile of the town center. Transit stops along HWY 19 for bus service. The Old Māmalahoa Highway offers an alternative to HWY 19. |
| Potable Water | Served by the Pauka'a-Pāpa'ikou Water System. Water service is typically available for up to 7 units per pre-existing lot of record, new lots created by subdivision, but no service to new lots created by rezoning. |
| Wastewater | Pāpa'ikou has a centralized wastewater treatment system—the County Pāpa'ikou Wastewater Treatment Plan. The WWTP has a capacity of 0.35 mgd and existing average flow of 0.1 mgd. |
| Emergency Services | There is no fire station or police substation; service response is from Hilo. |
| Other facilities & Services: health, social, education, libraries | Prince Jonah Kuhio Kalaniana'ole Elementary and Intermediate School; Pāpa'ikou Gym, Community Center, and Park; Post Office; Transfer Station. |
| Planned and in-progress Capital Improvements | <ul style="list-style-type: none"> ▪ Funds appropriated for Pāpa'ikou WWTP Dewatering |
| Commercial Districts/Town Core | Commercial Village Zoning (CV) located along the intersection of HWY 19 and Mill Road and extending mauka across Old Māmalahoa Highway. This is where the majority of the commercial activity takes place with Pinky's, the FCU, Post Office, former Baker Tom's, and the Plantation Museum are located. A second area of CV zoning is located Hāmākua Side of the Pāpa'ikou Gym and across the Old Māmalahoa Highway, these areas, however are vacant or residential uses. The General Plan Medium Density Urban intends to encompass commercial zoning but misses some of the existing commercial zoned area. |
| Agriculture | Macadamia Nuts, Tropical Fruits, pasture and Truck Crops surround the town. |



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| Operations | |
| Industrial Districts | Although listed by the general plan as an industrial area, the former Pāpa'ikou Mill Site has been re-zoned to Agricultural zoning and the mill building is in the process of being dismantled. There is no industrial zoning within Pāpa'ikou Town. |
| Potential Brownfields | Base yards, mill sites, sites with pesticide contamination. |
| LUPAG/Zoning /SLU Interface | Low Density Urban expands the beyond the existing State Land Use Urban and existing Residential zoning. Existing Residential zoning includes approximately 40 acres of vacant, un-subdivided land mauka of the Pāpa'ikou gym, however approx. 34 of those acres are in SLU Ag and would require a SLU boundary amendment to subdivide to zoning. |
| Infill Options | <p>Residential: On RS parcels with an existing dwelling, an 'ohana unit requires a public or private water sewage disposal system and an approved public or private water system.</p> <p>Via subdivision of parcels under existing zoning and without any water system improvements, approx. 503 additional buildable lots could be created.</p> <p>Commercial: The capacity of existing commercially-zoned areas far exceeds commercial development. Portions of existing commercial development often have vacancies, and several commercially-zoned parcels are not developed for commercial use.</p> |
| Extension Options | <p>Mauka and to the Hilo side of Pāpa'ikou Gym and Park, there are two large parcels, and smaller portions of two additional parcels which are in the State Land Use Agricultural District, but are residentially zoned (RS-7.5) and are designated Low-Density Urban by the LUPAG Map. These parcels appear to be in productive agricultural use. In order to develop these parcels consistent with their zoning, the owners would have to petition the State Land Use Commission to place the parcels in the SLU Urban District.</p> <p>The current LUPAG Low Density Urban designation extends mauka and makai of town, well beyond the current State Land Use Urban District encompassing significant acreage of agriculturally zoned and used lands. However, existing infill potential in the Urban areas will easily accommodate growth projections through 2035. Therefore, expansion outside of SLU Urban district is inappropriate.</p> |
| Associated Homesteads | Kaapoko – 13 A-10a zoned lots; Ka'ie'ie 1&2 – 56 A-5a, A-10a and A-20a Zoned lots |

Figure 17. Pāpa'ikou Community Basemap

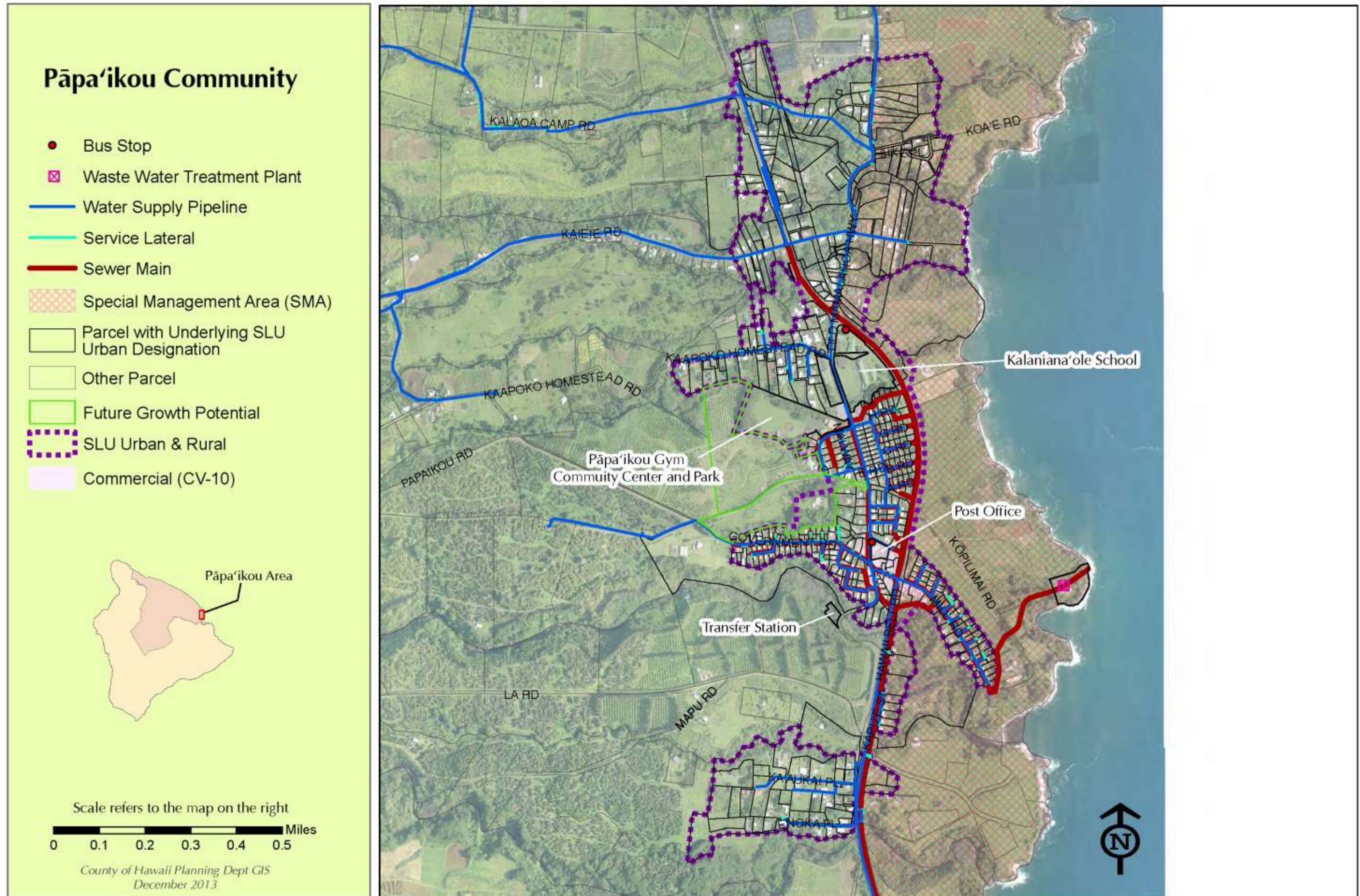


Figure 18. Pāpa'ikou LUPAG and Zoning Map

Pāpa'ikou Community

LUPAG
(Land Use Pattern Allocation Guide)

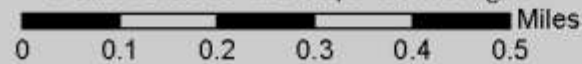
- Important Ag. Lands
- Industrial
- Low Density Urban
- Medium Density Urban
- Open Area

ZONING
(Permitted Use)

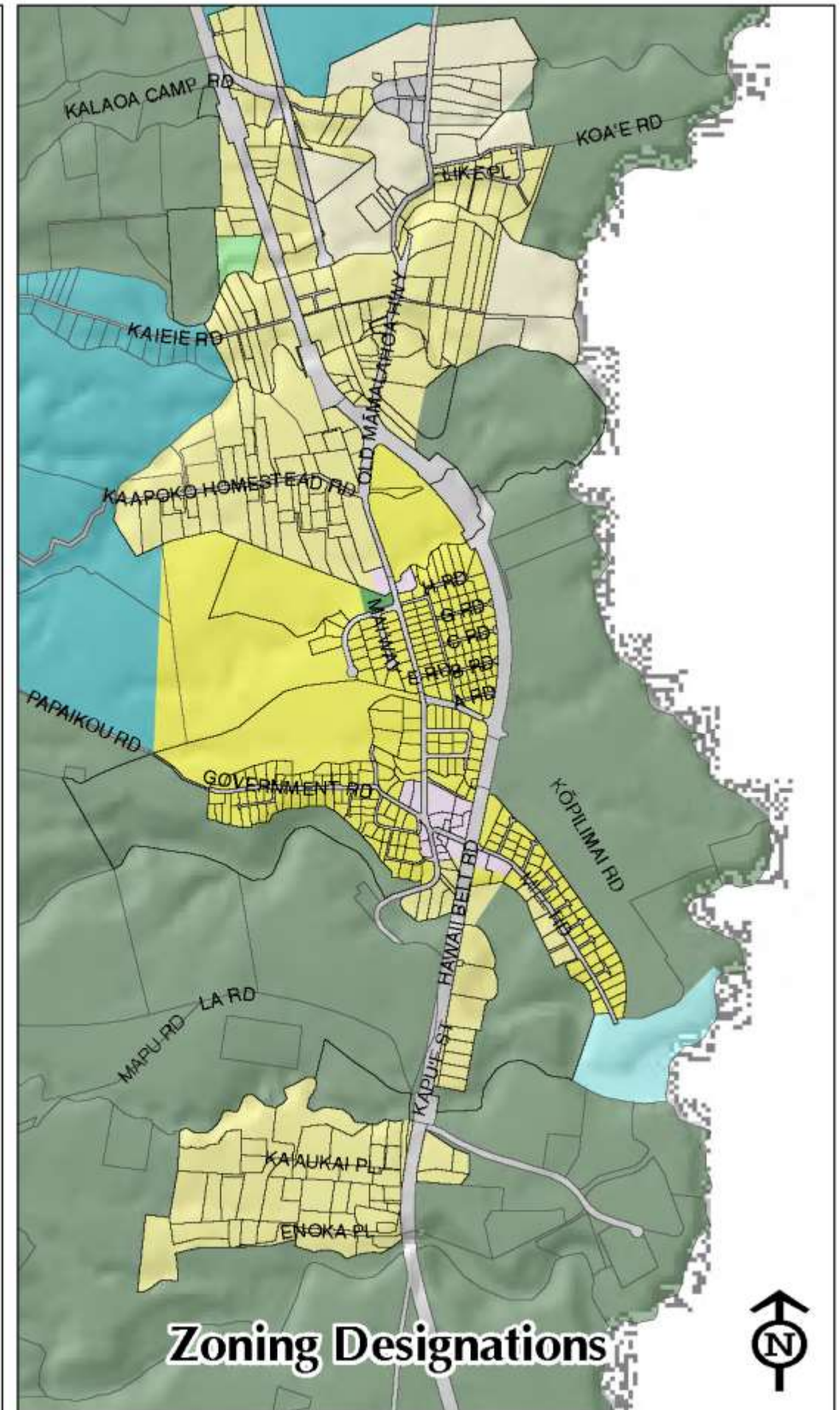
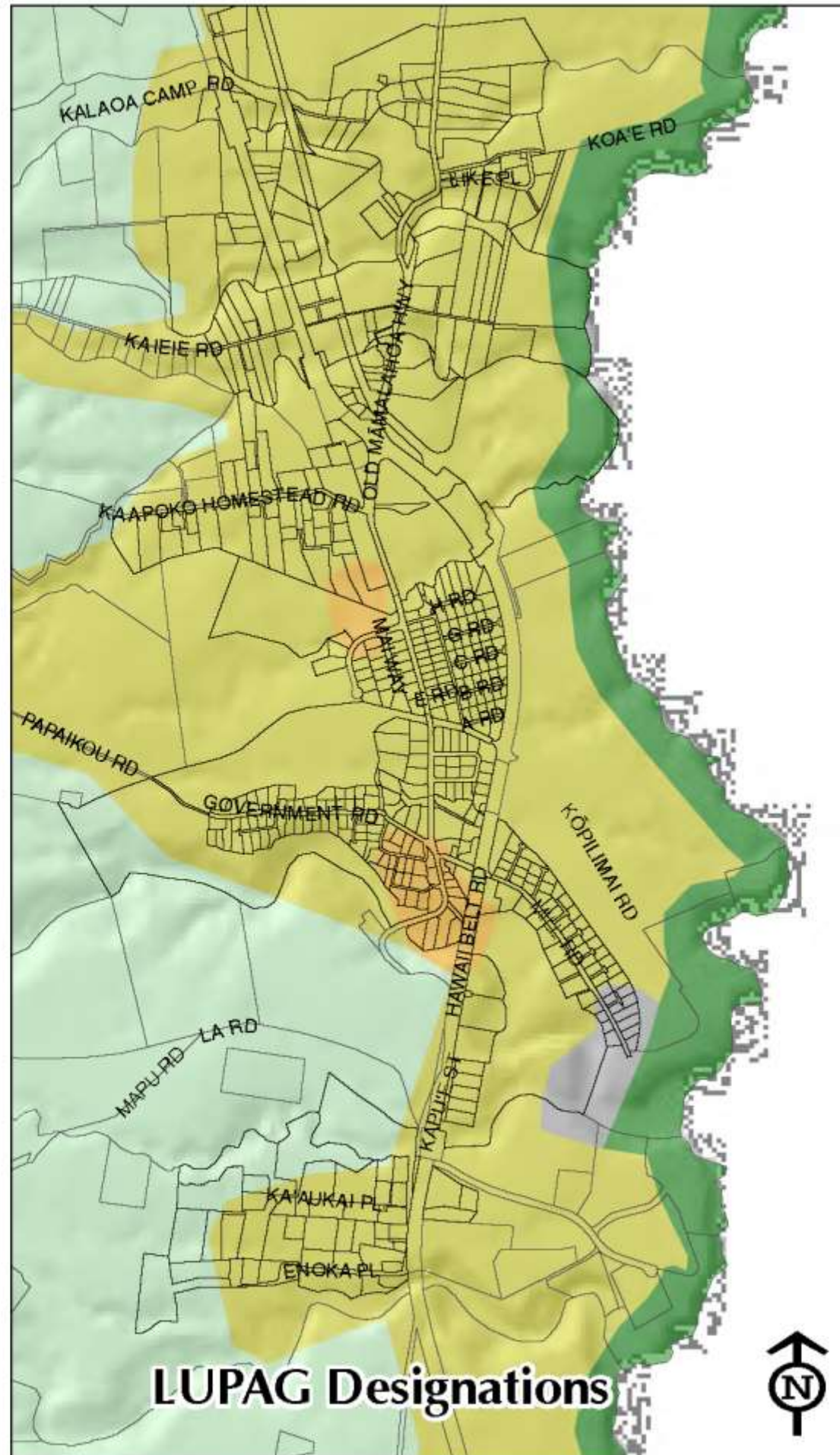
- | | |
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| A-10a | OPEN |
| A-1a | RS-10 |
| A-20a | RS-20 |
| A-3a | RS-7.5 |
| CV-10 | |



Scale refers to the maps on the right



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1 **Pepe'ekeo Analysis**

2 **Table 23. Pepe'ekeo Assets and Challenges**

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| Character | Second largest town in the Planning Area developed in the 1970's and 80's as a planned subdivision to consolidate outlying camps and to provide improved housing. Houses were built by C. Brewer Support Housing and sold in fee to plantation workers. (2010 population of 1,789). |
| Neighborhoods | Residential neighborhoods mauka and makai of the Hwy 19 with Single family residential zoning (RS) with minimum lot sizes of 7,500 and 10,000 s.f.. Mauka of Hwy 19 and to the Northern end of town there are 5 lots zoned Multiple family residential (RM) with a minimum of 3,500 s.f. for each dwelling unit or for each separate rentable unit. At the Hilo side of town, there are larger-lot, agriculturally zoned parcels with a minimum lot size of 1 acre. Makai of town in the vicinity of Pepe'ekeo Point, there are several parcels that are either fully or partially zoned RS minimum lot sizes of 7,500 s.f. |
| Transportation facilities: road standards, connectivity, transit, active transport | Compact TND with a rectilinear grid pattern straddling Highway 19. Network of interconnected streets distributes traffic and provides multiple routing choices. Walkable and bikable: small blocks, and all neighborhoods within ½ mile of town center and facilities, with most within ¼ mile. Transit stop's by the Senior Housing and along highway by Post Office. |
| Potable Water | Served by the Kula'imano Water System. Water service is typically available for one unit per pre-existing lot of record. Water is not typically available for new lots created by subdivision, 'ohana units, and changes of zone or SLU Boundary Amendments. |
| Wastewater | Pepe'ekeo has a centralized wastewater treatment system—the County Kula'imano Wastewater Treatment Plant. With a capacity of 0.5 mgd and existing average flow of 0.1 mgd, the system could adequately accommodate a future growth. |
| Emergency Services | There is a volunteer fire station and a police substation. |
| Other facilities & Services: health, social, education, libraries | Kula'imano Park and Community Center, Post Office, county senior housing, Pepe'ekeo Park along the Old Māmalahoa Highway |
| Planned and in-progress Capital Improvements | <ul style="list-style-type: none"> ▪ Funds appropriated for Kula'imano Park Expansion ▪ Funds appropriated for Kula'imano WWTP Dewatering |
| Commercial Districts/Town Core | The General Plan Medium Density Urban encompasses the existing commercial and RM zoning (Senior and Public housing). There is also a separate Medium Density node on A-1a zoning along the Belt Highway 19 at the Hilo-side of the town. |



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| | <p>Commercial Village Zoning (CV) located mauka of HWY 19 and on either side of Ka'akepa Rd. (2 large vacant parcels), and extending up Ka'akepa Rd. (encompassing the FCU, Kula'imano CC/Park, and the Fire Station/Police Sub-Station). One of the lots has a single-family dwelling on it.</p> <p>In addition, makai of the highway at the corner of Kula'imano Rd. and the Old Māmalahoa Hwy is the Low Store (although this is located on agriculturally zoned land, it is grandfathered as a pre-existing use. And at the intersection of Kula'imano Homestead Rd. and Old Māmalahoa Hwy.</p> |
| Agriculture Operations | Macadamia Nuts, Tropical Fruits, Pasture and Truck Crops surround the town. |
| Industrial Districts | Currently portions of five lots have General Industrial (MG) zoning with a minimum lot size of 5 acres, mainly focused around the Old Pepe'ekeo Sugar Mill which is being renovated for biomass burning electrical generation. In addition, there is one MG zoned lot mauka of the Mill on Sugar Mill Rd. which is currently being used as a base yard. |
| Potential Brownfields | Base yards, mill sites, sites with pesticide contamination. |
| LUPAG/Zoning /SLU Interface | General Plan Medium Density Urban encompasses the existing commercial and RM zoning. There is also a separate Medium Density on A-1a zoning along the Belt Highway at the Hilo-side of the town. The Low Density Urban encompasses the A-1a zoned lands and expands the makai area beyond the existing Residential to include some A-2a, A-3a, A-5a, and A-20a lands which are all prime ag lands. The General Plan Industrial does not fully encompass the existing Industrial-zoned lands. |
| Infill Options | <p>Residential: Under existing zoning and without any water system improvements there are 38 vacant parcels available for development of one single-family dwelling per parcel with the current water limitation.</p> <p>On those parcels, approximately 36 more units could be developed with upgrades to the DWS water system (assuming 7 units per pre-existing lot of record).</p> <p>Throughout Pepe'ekeo, many lots, most of which already have dwellings, are eligible for subdivision under existing zoning. Approximately 36 additional buildable lots could be created with upgrades to the DWS water system that allow for full subdivision (assuming 7 units per pre-existing lot of record).</p> <p>Lot (3) 2-8-007:065 is vacant and zoned for Multiple Family Residential (RM) and has the land area for an additional 70 dwelling units or rental units.</p> <p>In addition, HICDC is in the process of consolidating and re-subdividing lots (3)2-8-007:092 & (3) 2-8-007:093 into a 42-lot, self-help housing subdivision. The developers will be paying to upgrade the water and sewer infrastructure to allow</p> |

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| | <p>this to happen.</p> <p>Commercial: The capacity of existing commercially-zoned areas far exceeds commercial development. Portions of existing commercial development are vacant, and several commercially-zoned parcels are not developed for commercial use.</p> <p>Industrial: The capacity of existing industrial-zoned areas is sufficient for current levels of industrial development.</p> |
| Extension Options | The current State Land Use Urban district and the LUPAG Low Density Urban designation include portions of parcels mauka of town and makai of town in the vicinity of Pepe'ekeo Point that have split residential and agricultural zoning. In order to subdivide and develop these lots, additional water expansion/improvements (either municipal or private) would be needed. |
| Associated Homesteads | Kula'imano Homesteads – 56 A-1a, A-3a, and A-5a Zoned lots (outside of urban area); Kapaukuea Homesteads – 27 A-10a Zoned lots |

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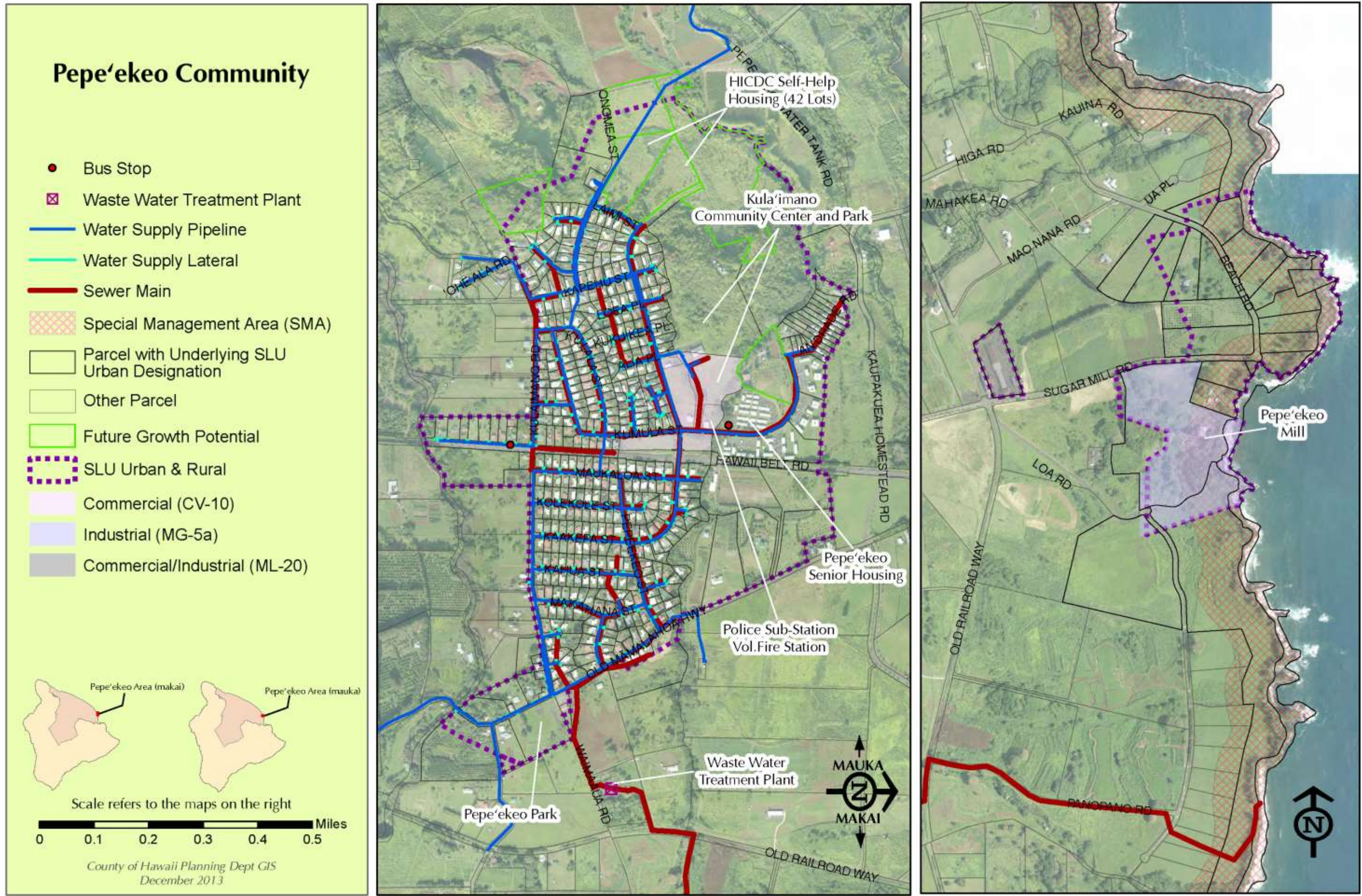
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Figure 19. Pepe'ekeo Community Basemap



Pepe'ekeo Community

- Bus Stop
- ⊠ Waste Water Treatment Plant
- Water Supply Pipeline
- Water Supply Lateral
- Sewer Main
- ▨ Special Management Area (SMA)
- Parcel with Underlying SLU Urban Designation
- Other Parcel
- ▭ Future Growth Potential
- ⋯ SLU Urban & Rural
- Commercial (CV-10)
- Industrial (MG-5a)
- Commercial/Industrial (ML-20)



Scale refers to the maps on the right

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Figure 20. Pepe'ekeo LUPAG Map

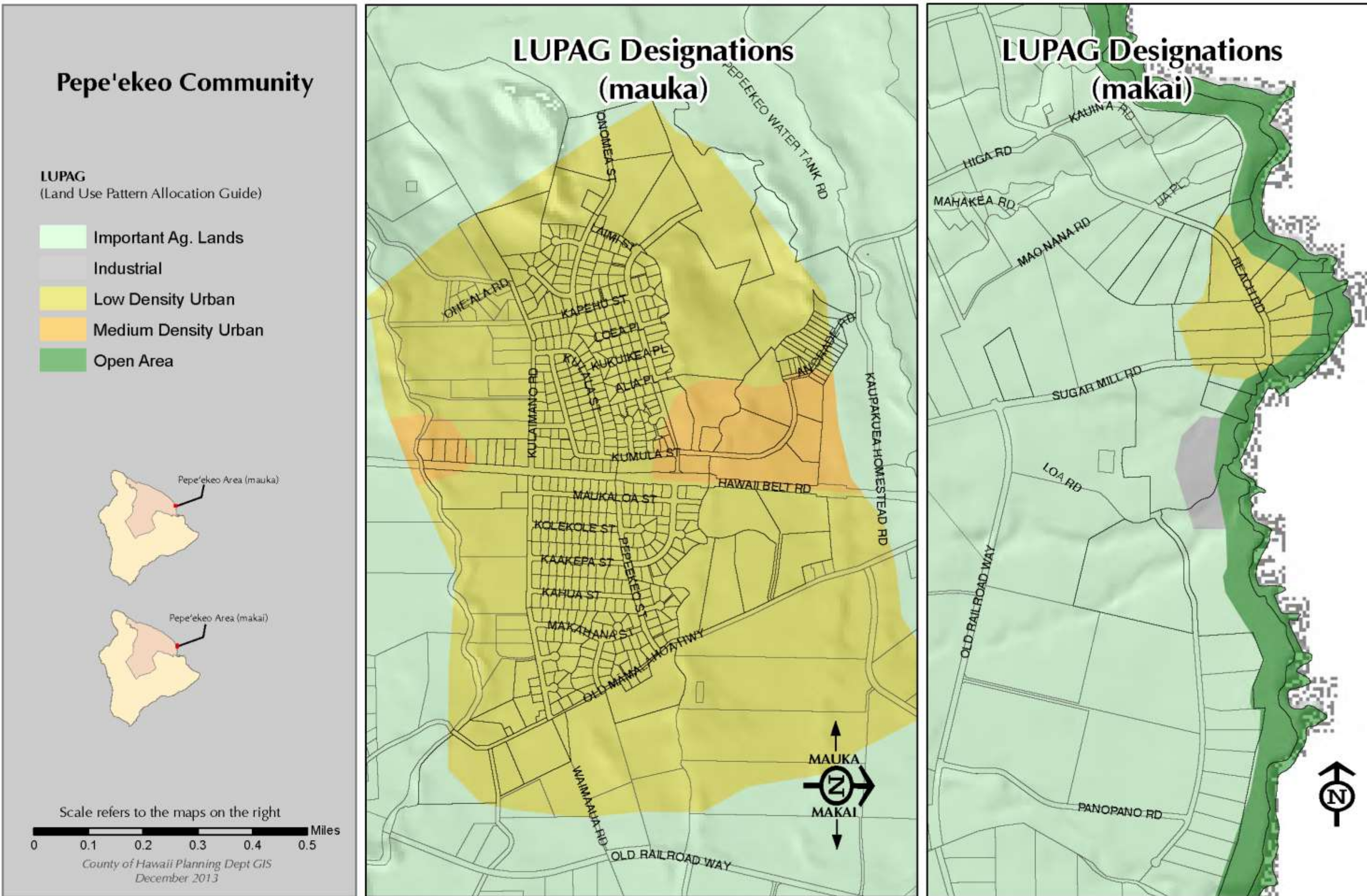
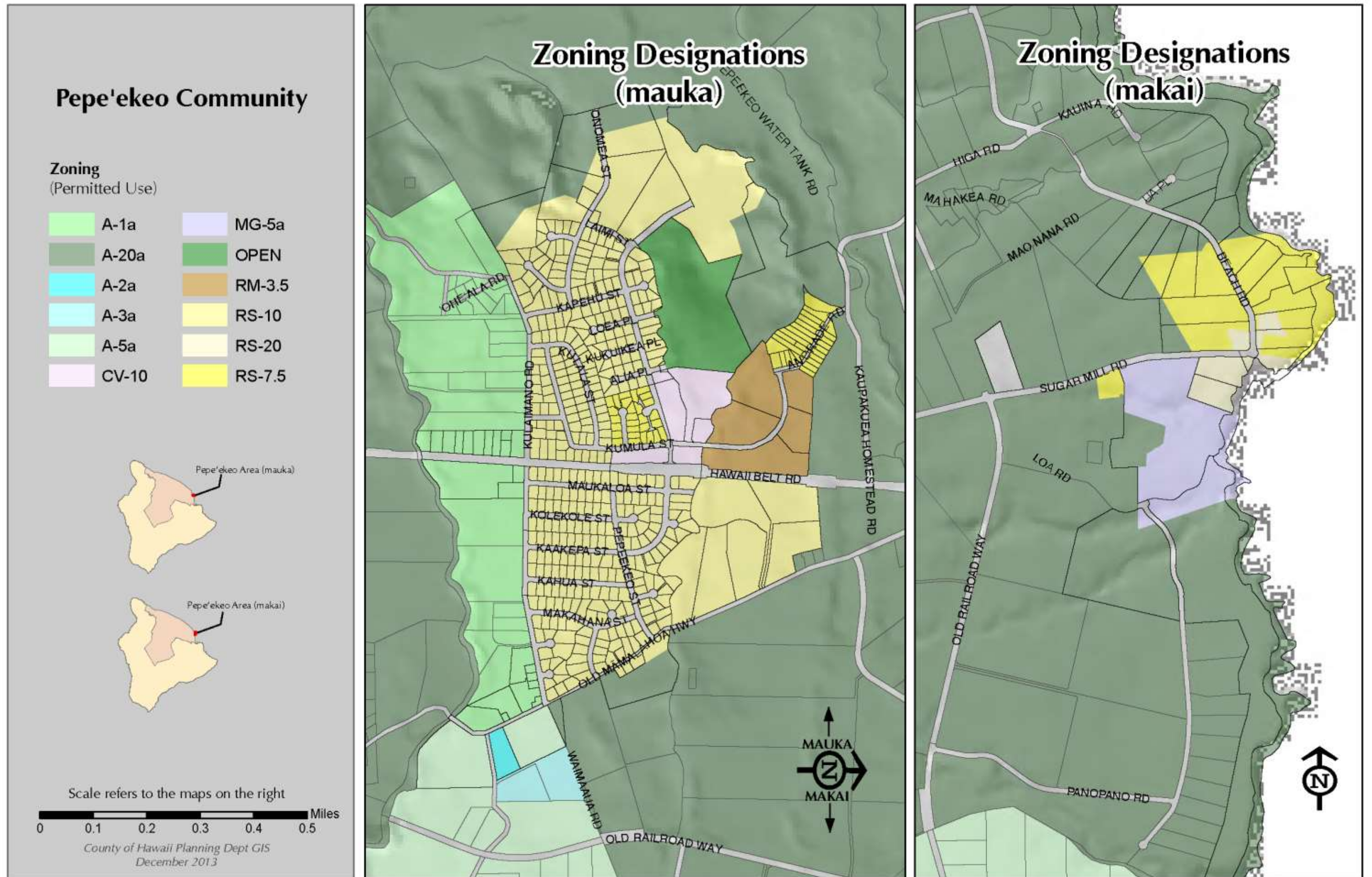


Figure 21. Pepe'ekeo Zoning Map



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1 **Honomū Analysis**

2 **Table 24. Honomū Assets and Challenges**

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| Character | Classic rural plantation town surrounded by working agriculture and open pasture, with a strong town center with Historic Building and sense of place. Gateway community to ‘Akaka Falls State Park. (2010 population of 509). |
| Neighborhoods | Residential neighborhoods begin mauka of the highway on both sides of Honomū Road and continuing mauka of the Old Māmalahoa Highway between the Poheehee Stream Gulch and ‘Akaka Falls Road. Single family residential zoning (RS), with minimum lot sizes of 7,500 and 10,000 square feet. |
| Transportation facilities: road standards, connectivity, transit, active transport | Curvilinear street pattern begins mauka of HWY 19 and feeds into disconnected residential neighborhoods served by cul-de-sac roads on the Hilo side and serves residential lots off of Honomū road on the Hāmākua side of the road. The Old Māmalahoa Hwy serves as Main Street in downtown Honomū and connects to ‘Akaka Falls Road which is a State Highway. Mauka of downtown, a network of interconnected streets serves the camp settlements and provides multiple routing choices. Narrow village road standards accommodate multi-modal traffic and calm vehicle speeds. Walkable and bikeable: small blocks and all neighborhoods are within ½ mile of town center and facilities, with most within ¼ mile. Bus service routs up to the downtown Honomū. The Old Māmalahoa Highway serves as an alternative to Hwy 19. |
| Potable Water | Served by the Honomū Water System. Water service is typically available for up to seven dwelling units per existing lot based on existing zoning. Service is also typically available for subdivision, and changes of zone. |
| Wastewater | There is no centralized wastewater treatment system. All lots use individual cesspools or septic systems. The entire Planning Area is located in a non-critical wastewater area, so cesspools are permitted on a minimum lot area of 10,000s.f. For any commercial expansion, if the size of the commercial lots cannot accommodate onsite septic systems, then a collective offsite septic or wastewater package plant may be needed. |
| Emergency Services | There are no fire or police stations; the closest are in Pepe’ekeo. |
| Other facilities & Services: health, social, education, libraries | County gym and park; Post Office; Adult daycare center. |
| Planned and in-progress Capital Improvements | Funds are appropriated to replace the ‘Akaka Falls Road waterline. |
| Commercial Districts/Town Core | Village Commercial (CV) district along the Old Māmalahoa Highway on the makai side of the road. Commercial serves both residents on visitors alike. Private revitalization of the historic boardwalk and structures are currently underway. |



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| | General Plan Medium Density Urban intends to encompass commercial zoning but misses the area located on the mauka side of the road when all the commercial zoning is makai. |
| Agriculture Operations | Macadamia Nuts, Tropical Fruits, Truck Crops, and pasture surround the town. DHHL has 766 acres mauka of Honomū available for Homestead Supplemental Agriculture. |
| Industrial Districts | There is no industrial zoning in Honomū. |
| Potential Brownfields | Sites with pesticide contamination. |
| LUPAG/Zoning /SLU Interface | Low Density Urban expands into prime agricultural land beyond existing residential zoning. The existing Residential zoning includes several acres of vacant land mauka of the Honomū Gym, however, the majority of that acreage is located in the SLU Ag designation and would require an SLU boundary amendment to subdivide to zoning. |
| Infill Options | <p>Residential: On RS parcels with an existing dwelling, an ‘ohana unit requires a public or private water sewage disposal system and an approved public or private water system.</p> <p>Via subdivision of parcels under existing zoning and without any water system improvements, approx. 133 additional buildable lots could be created.</p> <p>Commercial: The capacity of existing commercially-zoned areas far exceeds commercial development.</p> |
| Extension Options | <p>The current Residential Zoning (RS-7.5) and the LUPAG Low Density Urban designation include TMKs (3)2-8-013:070 & (3)2-8-013:070 which consist of approximately 23 acres mauka of the Honomū Gym. Access to these parcels is from the ‘Akaka Falls Rd. and water is available for some development. In order to develop these parcels with a higher density than 1 unit per acre, the landowners would have to petition for a SLU boundary amendment from Agricultural to urban.</p> <p>Other Residentially zoned parcels outside of the SLU urban district include:</p> <ul style="list-style-type: none"> ▪ (3)2-8-013:036 (Por.); (3)2-8-013:003 (Por.); (3)2-8-014:003 (Por.); (3)2-8-014:035 (Por.); (3)2-8-014:105 - Lots makai of Old Māmalahoa Hwy. & would require SLU Boundary Amendment & extension of water service) ▪ (3)2-8-013:061; (3)2-8-013:061; (3)2-8-013:062 lots mauka of town with existing Single Family Dwellings & would require SLU Boundary Amendment to add more density. |
| Associated Homesteads | Honomū Homesteads – 28 A-20a zoned lots |

Figure 22. Honomū Community Basemap

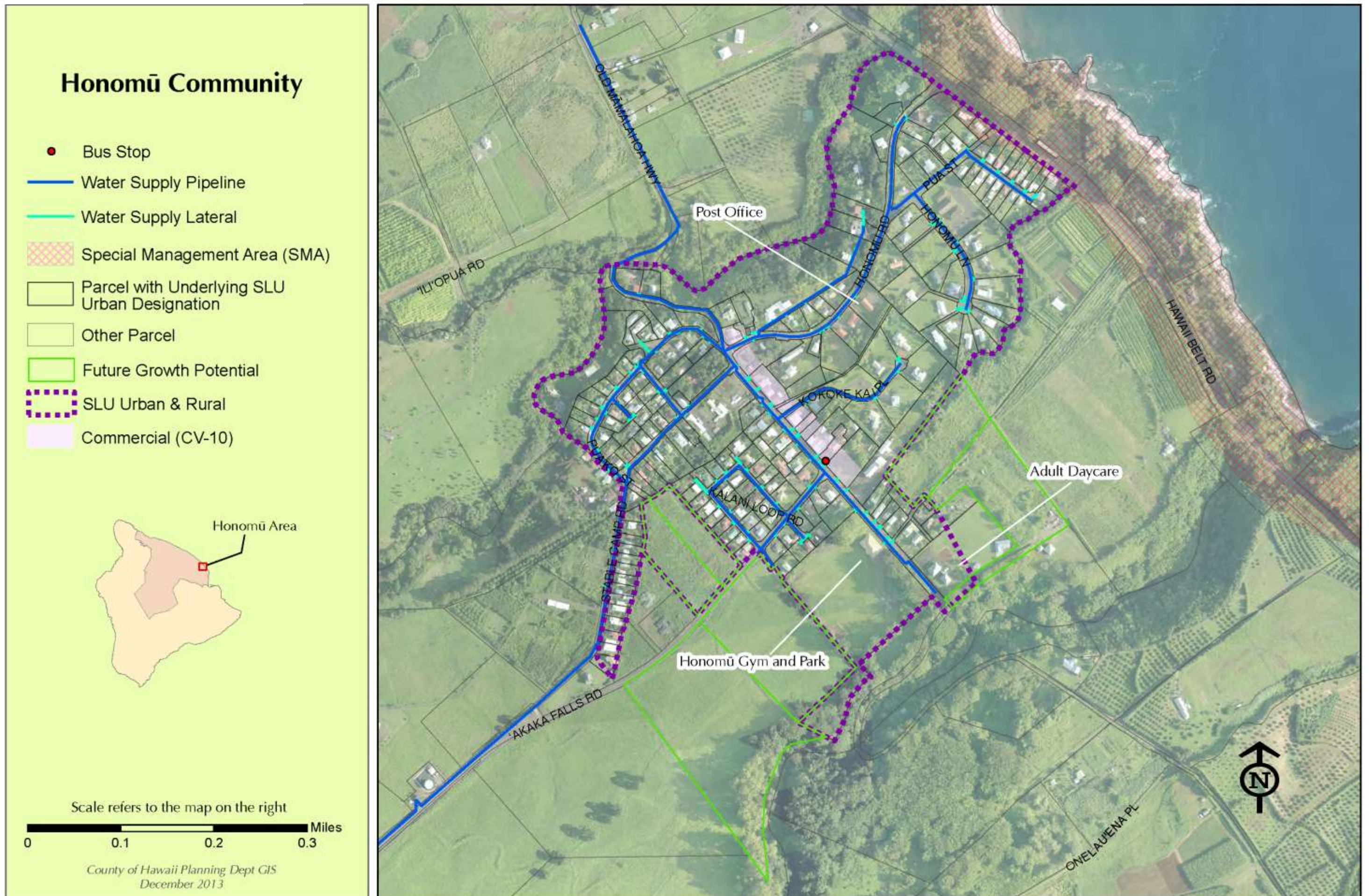
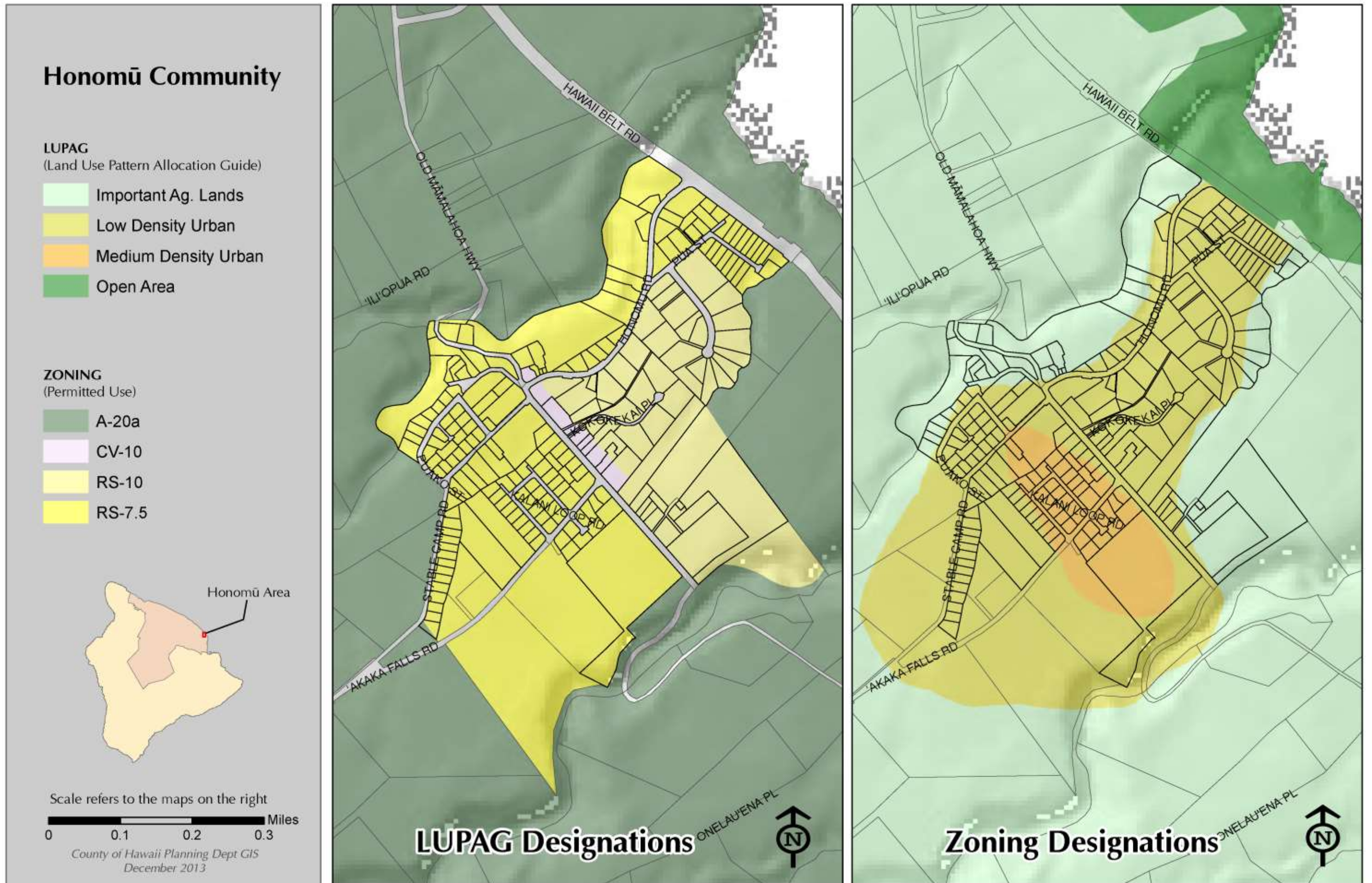


Figure 23. Honomū LUPAG & Zoning Map



1 **Wailea/Hakalau Analysis**

2 **Table 25. Wailea/Hakalau Assets and Challenges**

| | |
|--|--|
| Character | Traditional plantation Village/Town surrounded by working agriculture, with historic buildings. (2010 population of 136). |
| Neighborhoods | <p>Hakalau - Residential neighborhoods with single family residential zoning (RS), with minimum lot sizes of 7,500 square feet.</p> <p>Wailea - Residential neighborhoods with single family residential zoning (RS), with minimum lot sizes of 7,500 square feet.</p> |
| Transportation facilities: road standards, connectivity, transit, active transport | <p>Hakalau – Serviced by the Old Māmalahoa Highway, there is a street loop and cul-de-sac that connect the residential lots.</p> <p>Wailea - Most of the residential lots are serviced by the Old Māmalahoa Highway.</p> <p>Narrow village road standards accommodate calm vehicle speeds. Area is walkable and bikeable with small blocks and all neighborhoods within a ¼ mile of the town center and facilities. There is a pedestrian highway overpass that connects the Hakalau with Wailea. Transit users wait for the bus under this overpass on the mauka side of the highway.</p> |
| Potable Water | Served by the Hakalau Water System. Water service is typically available for one dwelling units per existing lot based on existing zoning. Service is not typically available for subdivision, ‘ohana units, and changes of zone. The service area doesn’t cover the Hakalau Plantation Village area, however, there are 25 existing water commitments available to that development. |
| Wastewater | There is no centralized wastewater treatment system. All lots use individual cesspools or septic systems. The entire Planning Area is located in a non-critical wastewater area, so cesspools are permitted on a minimum lot area of 10,000 s.f. For any commercial expansion, if the size of the commercial lots cannot accommodate onsite septic systems, then a collective offsite septic or wastewater package plant may be needed for Hakalau and Wailea. |
| Emergency Services | There is no fire station or police substation; the closest are in Laupāhoehoe. |
| Other facilities & Services: health, social, education, libraries | Post Office and beach park in Hakalau. Ballpark and gym (shuttered and falling into disrepair) in Wailea. The old Hakalau School has been used recently by the DOE as an alternative education site for troubled youth. |
| Planned and in-progress Capital Improvements | <ul style="list-style-type: none"> ▪ Funds expended to rehabilitate the Kaahikini Bridge |
| Commercial Districts | <p>Hakalau – Village Commercial (CV) Zoning in the vicinity of the Post Office</p> <p>Wailea - Village Commercial (CV) Zoning along the Old Māmalahoa Highway (in the proximity of the certified kitchen and bed and breakfast)</p> |



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| Agriculture Operations | Tropical Fruits, Truck Crops, and pasture surround the town. Hakalau mill warehouses are currently being used to clean and package truck crops. There is a certified kitchen in Wailea town to facilitate the creation of value added agricultural products. |
| Industrial Districts | Currently portions of three lots have General Industrial (MG) zoning with a minimum lot size of 5 acres, at Hakalau Point (overlooking Hakalau beach park) with existing plantation warehouse structures. The largest (9 acre) industrially zoned parcel is currently going through the re-zoning process to single family residential (RS) with a minimum lot size of 15,000 s.f. and General Industrial (MG) with a minimum lot size of 20,000 s.f. to allow for a 13-lot subdivision (water commitments are already available for the project.) There is arsenic contamination in the soil that will need to be mitigated. |
| Potential Brownfields | Former mill sites, sites with pesticide contamination. |
| LUPAG/Zoning /SLU Interface | The General Plan identifies one urban core with a Medium Density Urban (MDU) at the Hakalau commercial zoning. There is no MDU in Wailea town commercial area. Low Density Urban encompasses existing Residential zoning and conforms generally with the State Land Use Urban district. The General Plan Industrial does not fully encompass the existing industrial zoned area, however, the Planning Department has determined that the makai lots fall under LDU for purposes of re-zoning and subdivision. |
| Infill Options | <p>Residential: Under existing zoning and without any water system improvements there are 35 vacant parcels available for development of one single-family dwelling per parcel with the current water limitation.</p> <p>On those parcels, approximately 39 more units could be developed with upgrades to the water system (assuming 7 units per pre-existing lot of record).</p> <p>Throughout Wailea & Hakalau, many lots, most of which already have dwellings, are eligible for subdivision under existing zoning. Approximately 109 additional buildable lots could be created with upgrades to the DWS water system that allow for full subdivision (assuming 7 units per pre-existing lot of record).</p> <p>As stated above in the Industrial Districts section, if the re-zone and subdivision are completed, there will be an additional 13 lots in the vicinity of Hakalau Point.</p> <p>Commercial: The capacity of existing commercially-zoned areas far exceeds commercial development. Portions of existing commercial development are vacant, and some commercially-zoned parcels are not developed for commercial use.</p> <p>Industrial: The capacity of existing industrial-zoned areas is sufficient for current levels of industrial development.</p> |
| Extension Options | Existing infill potential in the Urban areas will accommodate growth projections through 2035. Therefore, expansion outside of SLU Urban district is inappropriate. |
| Associated Homesteads | Kaiwiki 3 Homesteads – 58 A-10a Zoned Lots; Hakalau Homesteads – 70 A-10a Zoned Lots |

Figure 24. Wailea/Hakalau Community Basemap

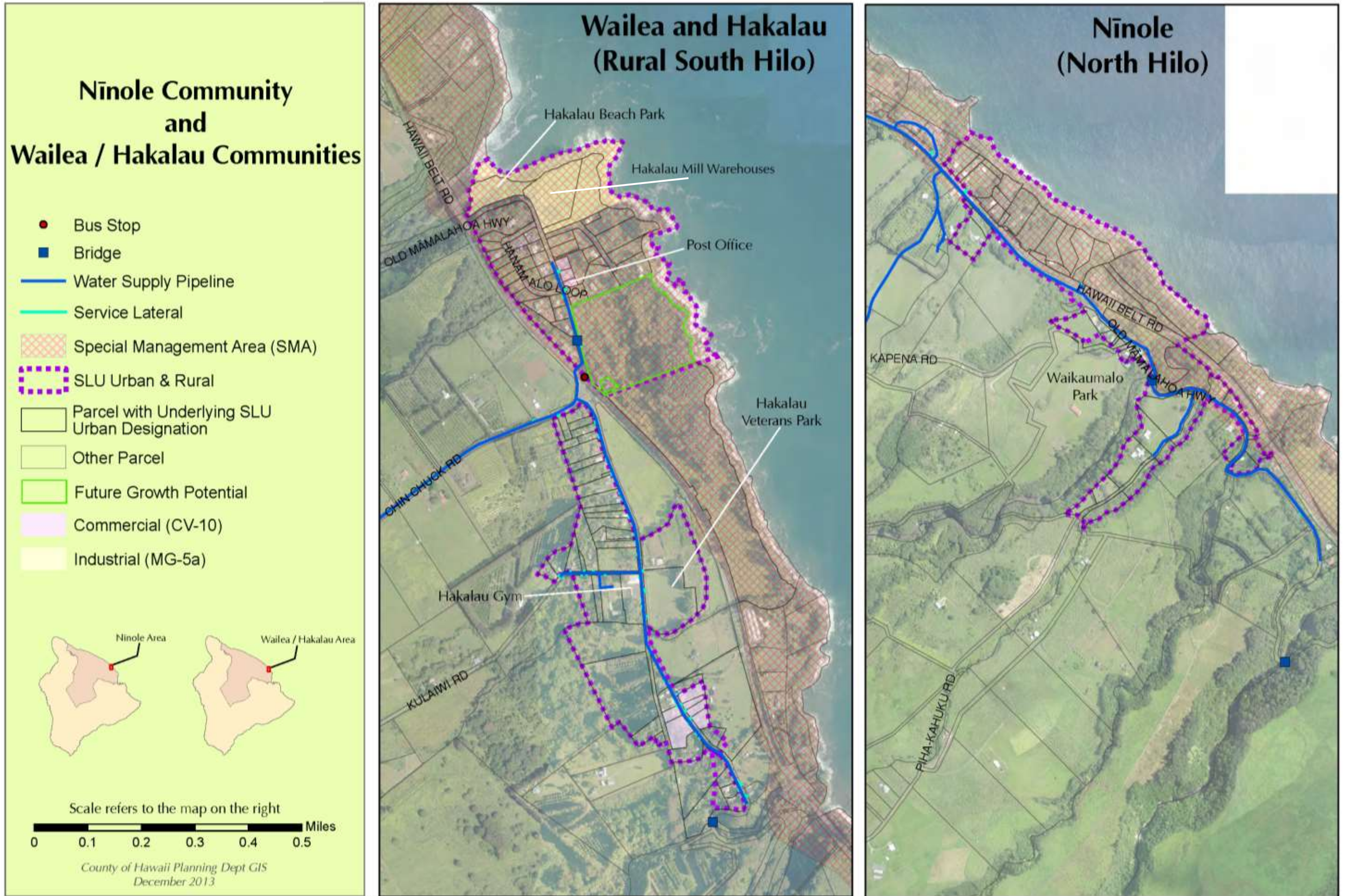
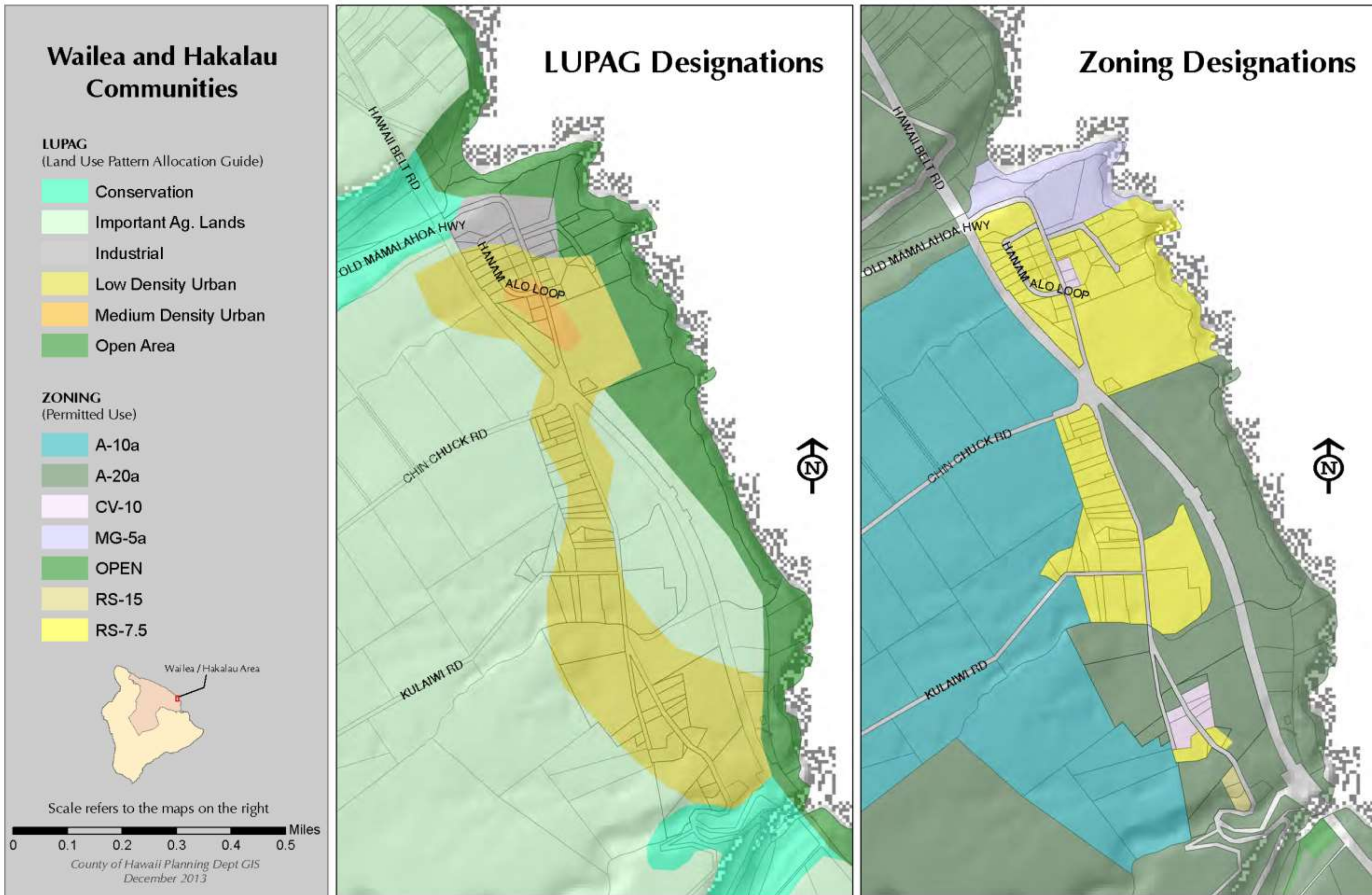


Figure 25. Wailea/Hakalau LUPAG & Zoning Map



1 Nīnole Analysis

2 Table 26. Nīnole Assets and Challenges

| Character | Small Plantation Village with some historical structures surrounded by working agriculture. (2010 population of 52). |
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| Neighborhoods | Underlying State Land Use Rural supports Residential neighborhoods with Rural-Agriculture Zoning (RA) with minimum lot sizes of ½ acre mauka and makai of Hwy 19. There is currently an 11-lot subdivision application over 9.3 acres makai of Hwy 19 along with a proposal to renovate two plantation dwellings and the former M. Kawahara service station. |
| Transportation facilities: road standards, connectivity, transit, active transport | Lots primarily serviced the Hwy 19, Old Māmalahoa Hwy and homestead roads. Narrow village road standards accommodate calm vehicle speeds mauka of Hwy 19. Area is walkable and bikeable along Old Māmalahoa Highway. Homestead roads are walkable, but have a steep terrain. County bridge over the Waikaumalo Stream. |
| Potable Water | Served by the Nīnole Water System. Water service is typically available for one dwelling units per existing lot based on existing zoning. Service is not typically available for subdivision, ‘ohana units, and changes of zone. |
| Wastewater | There is no centralized wastewater treatment system for the town/village; all lots use individual wastewater systems. The entire Planning Area is located in a non-critical wastewater area, so cesspools are permitted on a minimum lot area of 10,000 s.f. |
| Emergency Services | There is no fire or police stations. Service from Laupāhoehoe. |
| Other facilities & Services: health, social, education, libraries | Waikaumalo Park; Post Office |
| Planned and in-progress Capital Improvements | N/A |
| Commercial Districts | There is no Medium Density Urban or existing commercial zoning to define a current or planned town core. There is a current proposal to renovate the former M. Kawahara service station makai of Hwy 19 with the intention to re-open the store in the future via a special permit. |
| Agriculture Operations | Tropical Fruits, Truck Crops, and pasture surround the town. Former M. Kawahara service station structure makai of Hwy 19 are currently being used to clean truck crops. |
| Industrial Districts | There is no industrial zoning in Nīnole. |



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| Potential Brownfields | Sites with pesticide contamination. |
| LUPAG/Zoning /SLU Interface | The General Plan Low Density Urban encompasses approximately 35 acres mauka of the Highway encompassing lands zoned RA-.5a, A-1a, A-5a, and A-20a. The GP Rural, RA zoning, and State Land Use Rural designation generally correlate. |
| Infill Options | Residential: Under existing zoning and without any water system improvements there are 20 vacant parcels available for development of one single-family dwelling per parcel with the current water limitation. This will easily accommodate growth projections through 2035. |
| Extension Options | Existing infill potential in the SLU Rural areas will easily accommodate growth projections through 2035. Therefore, expansion outside of SLU Rural district is inappropriate. |
| Associated Homesteads | <ul style="list-style-type: none"> ▪ Waikamalo-Maulua Homesteads – 76 A-20a Zones Lots ▪ Piha-Kahuku Homesteads - 60 A-20a, and 4 RA-.5a zoned lots |

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Figure 26. Ninole Community Basemap

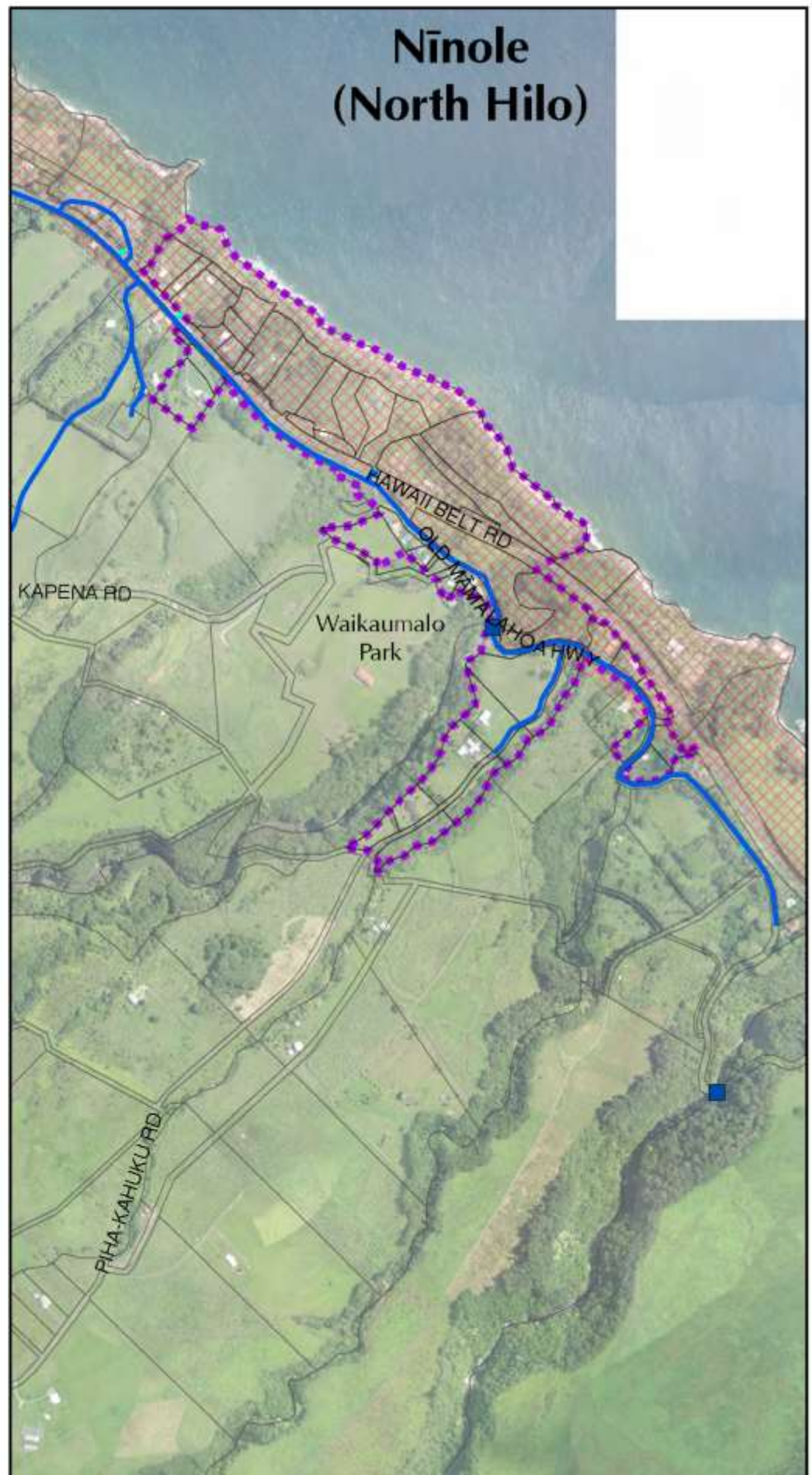
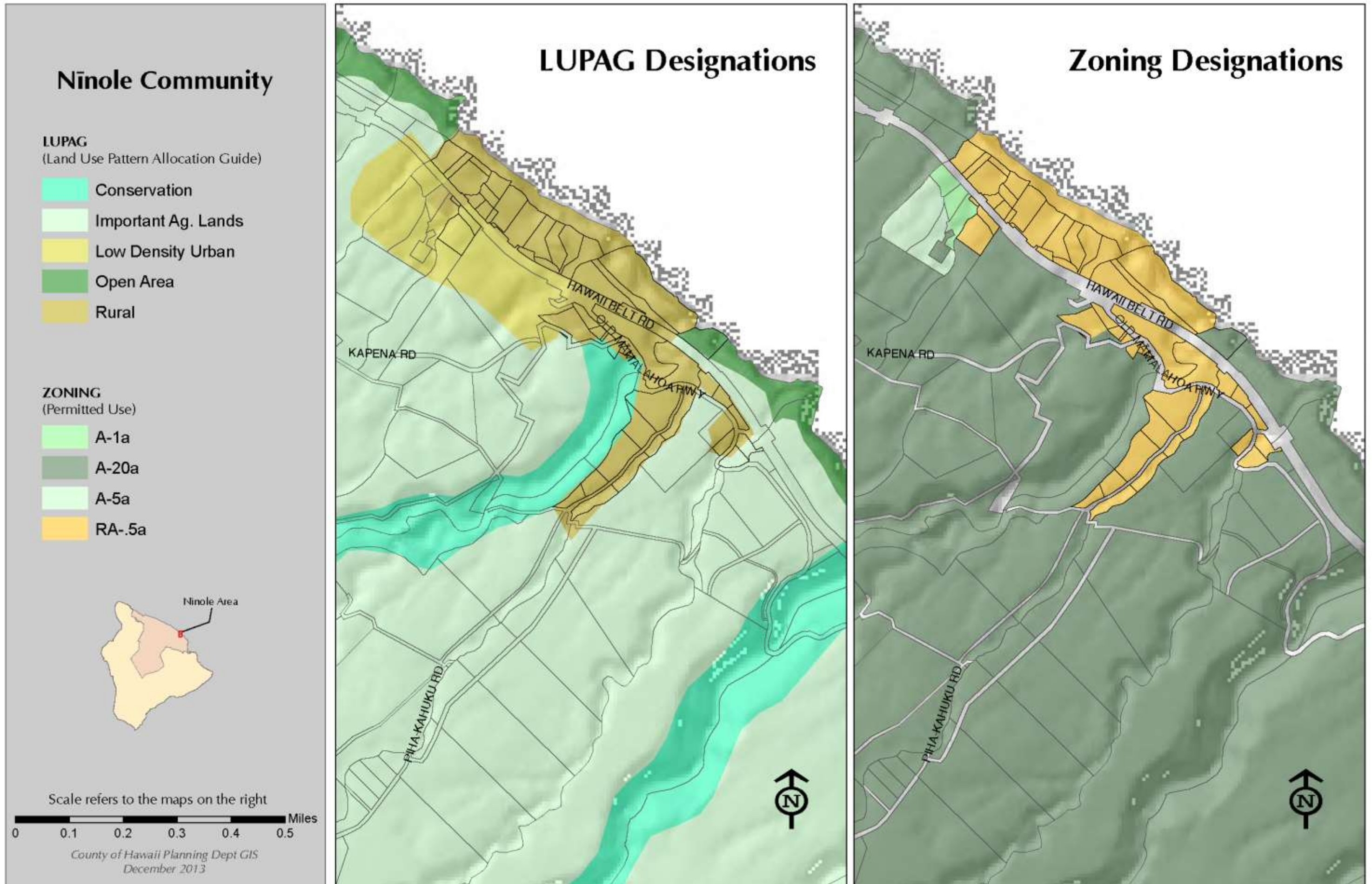


Figure 27. Ninole LUPAG & Zoning Map



1 Laupāhoehoe/Pāpa‘aloha Analysis (Including Kapehu Camp and Waipunalei)

2 Table 27. Laupāhoehoe/Pāpa‘aloha Assets and Challenges

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| <p>Character</p> | <p>Pāpa‘aloha – Classic plantation village built up around the Laupāhoehoe Sugar Mill, surrounded by open pasture and working agriculture.</p> <p>Laupāhoehoe – Once a major transportation and agricultural hub, North Hilo’s largest town is now a rural village, surrounded by working agriculture with a strong sense of place (2010 population of 581).</p> |
| <p>Neighborhoods</p> | <p>Kapehu Camp – Despite its underlying Agricultural Zoning, Kapehu Camp is clearly a residential neighborhood with parcels ranging from 6,800 s.f to 12,600 s.f. in size.</p> <p>Pāpa‘aloha – Residential neighborhoods mauka and makai of the highway with single family residential zoning (RS), with minimum lot sizes of 10,000 to 15,000 square feet. Senior housing available in Pāpa‘aloha makai. Additionally, despite higher density and smaller lot sizes, Kekoa Camp is zoned Agriculture (A-1a), thus it is a legal, nonconforming settlement.</p> <p>Laupāhoehoe - Residential neighborhoods mauka and makai of the highway with single family residential zoning (RS), with minimum lot sizes of 10,000 to 15,000 square feet.</p> <p>Waipunalei - Despite its underlying Agricultural Zoning, Waipunalei is clearly a residential neighborhood.</p> |
| <p>Transportation facilities: road standards, connectivity, transit, active transport</p> | <p>Pāpa‘aloha – Most makai lots served by the Old Māmalahoa Hwy which acts as the town’s Main Street and reconnects to Hwy 19 on the far end of town. The mauka subdivision is serviced by Pāpa‘aloha Road which connects with homestead lots mauka. There is a community built bus stop at the intersection of Hwy 19 and the Old Māmalahoa Hwy adjacent to the Pāpa‘aloha Senior Housing.</p> <p>Laupāhoehoe – Makai Lots served dead end collector roads off of Hwy 19 and lots mauka of Hwy 19 are served by Old Māmalahoa Hwy. Area is walkable and bikeable along Old Māmalahoa Highway. Homestead roads are walkable, but have a steep terrain. Connectivity to mauka homestead areas by Manowaiopae Homestead Rd. Bus stop/unofficial park and ride located on the makai side of Hwy 19 under the pedestrian overpass.</p> |
| <p>Potable Water</p> | <p>Served by the Laupāhoehoe Water System. The service area for this water system includes Laupāhoehoe, Pāpa‘aloha, Kapehu Camp, and Waipunalei.</p> <p>Kapehu Camp – Water service is typically available for one dwelling unit per existing lot based on existing zoning. Service is not typically available for subdivision, ‘ohana units, and changes of zone.</p> <p>Laupāhoehoe, Pāpa‘aloha, and Waipunalei - Water service is typically available for up to seven dwelling units per existing lot based on existing zoning. Service is typically available for subdivision, ‘ohana units, and changes of zone.</p> |



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| Wastewater | <p>Kapehu Camp – This small system serves Kapehu Camp. The wastewater treatment plant provides secondary treatment and disposes the effluent by soil absorption system. The sludge is disposed at the Hilo wastewater treatment plant. The design capacity is 0.016 mgd and the existing average flow is 0.013 mgd. There is adequate capacity for additional connections.</p> <p>There is no centralized wastewater treatment system for Pāpa’aloa, Laupāhoehoe, and Waipunalei. All lots use individual cesspools or septic systems. The entire Planning Area is located in a non-critical wastewater area, so cesspools are permitted on a minimum lot area of 10,000 s.f.</p> |
| Emergency Services | Fire station (without EMS Service) and a district police station in Laupāhoehoe |
| Other facilities & Services: health, social, education, libraries | Laupāhoehoe Public Charter School (K-12), Laupāhoehoe Library, Laupāhoehoe Public Pool, Laupāhoehoe Point Beach Park and Gym (senior center), Pāpa’aloa Gym & Annex, Pāpa’aloa Senior Housing, transfer station, Hawaiian Civic Club facility. |
| Planned and in-progress Capital Improvements | <ul style="list-style-type: none"> ▪ Funds appropriated to improve the Laupāhoehoe Point Access Road ▪ Funds appropriated for North Hilo Road Improvements ▪ Funds appropriated for Laupāhoehoe and Manowai’opae Homestead road improvements ▪ Funds appropriated for Manowai’opae Homestead Road retaining wall ▪ Funds appropriated to Laupāhoehoe Boat Ram improvement design. |
| Commercial Districts/Town Core | <p>Pāpa’aloa – Village Commercial (CV) zoning on one parcel along the Old Māmalahoa Highway (Post Office). Medium Density Urban is near but misses the CV Zoning in Pāpa’aloa.</p> <p>Laupāhoehoe – Village Commercial (CV) zoning on in three separate areas in the vicinity of the school (makai side of Old Māmalahoa Highway, location of 50’s diner); mauka of Old Māmalahoa Highway (Old Laupāhoehoe Hospital); mauka and makai of Highway 19 (Post Office area mauka and Minute Stop area makai). The General Plan Medium Density Urban encompasses the three CV areas in Laupāhoehoe. A single family home is being proposed for the parcel that currently hosts the Sunday Farmers Market.</p> |
| Agriculture Operations | The towns are surrounded by pasture and working agriculture (truck crops, macadamia nuts, fruit orchards, and the Hāmākua Mushroom Farm). |
| Industrial Districts | Laupāhoehoe – Pāpa’aloa named Industrial Area in the GP. Currently there is no industrial zoning in Laupāhoehoe. Portions of 3 lots in Pāpa’aloa makai are zone for General Industrial (MG) and consist of former mill structures owned by the State and most recently leased out as a trucking base yard. |
| Potential Brownfields | Mill buildings, base yards, old gas stations, or repair shops. Sites with pesticide contamination. |
| LUPAG/Zoning /SLU | The Low Density Urban extends beyond the SLU Urban and RS zoning into Prime |

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| Interface | agricultural land. The former Pāpa‘aloa Mill Site is industrially zoned but not recognized by the General Plan as Industrial. The General Plan designates Waipunalei area, Kekoa Camp, and parts of RS zoned parts of Pāpa‘aloa in Important Agricultural Land, although they are in residential use as evidenced by the predominance of homeowners exemptions. |
| Infill Options | <p>Residential: On RS parcels with an existing dwelling, an ‘ohana unit requires a public or private water sewage disposal system and an approved public or private water system.</p> <p>Via subdivision of parcels under existing zoning and without any water system improvements, approx. 230 additional buildable lots could be created.</p> <p>Commercial: The capacity of existing commercially-zoned areas far exceeds commercial development. Portions of existing commercial development are vacant, and some commercially-zoned parcels are not developed for commercial use.</p> <p>Industrial: The capacity of existing industrial-zoned areas is sufficient for current levels of industrial development.</p> |
| Extension Options | Existing infill potential in the Urban areas will easily accommodate growth projections through 2035. Therefore, expansion outside of SLU Urban district is inappropriate. |
| Associated Homesteads | <ul style="list-style-type: none"> ▪ Manowai‘opae – Mostly A-20a zoned lots (some of the homestead lots make up a part of urban Laupāhoehoe); ▪ Pāpa‘aloa – 96 A-20a zoned lots; Laupāhoehoe – 53 A-20a zoned lots; Waipunalei – 87 A-20a zoned lots; ▪ Kihalani – Mostly A-20a zoned Lots, 2 A-5a zoned lots (some of the homestead lots make up a part of urban Laupāhoehoe) |

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Figure 28. Laupāhoehoe/Pāpa'aloa Community Basemap

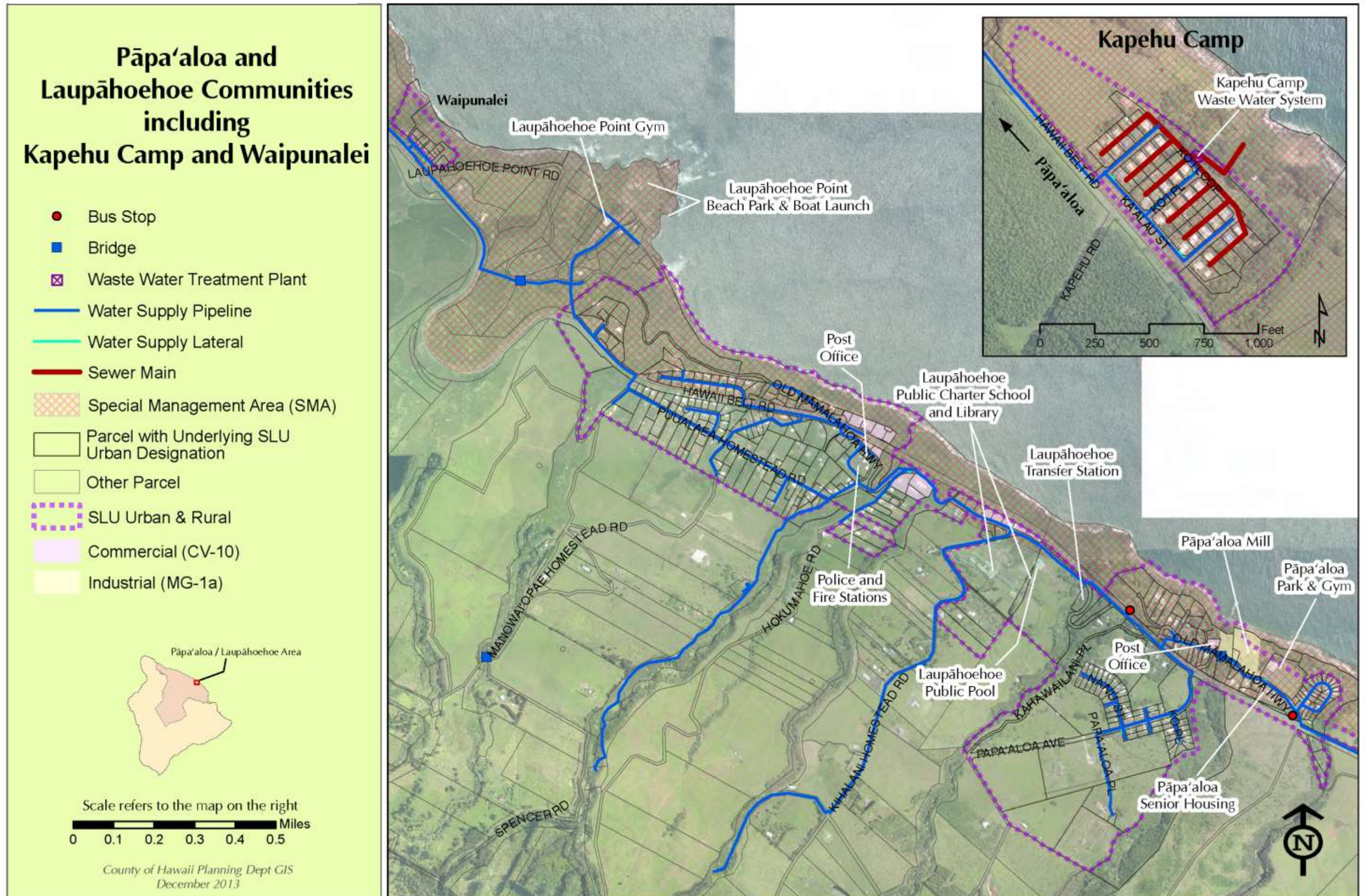


Figure 29. Laupāhoehoe/Pāpa'aloa LUPAG Map

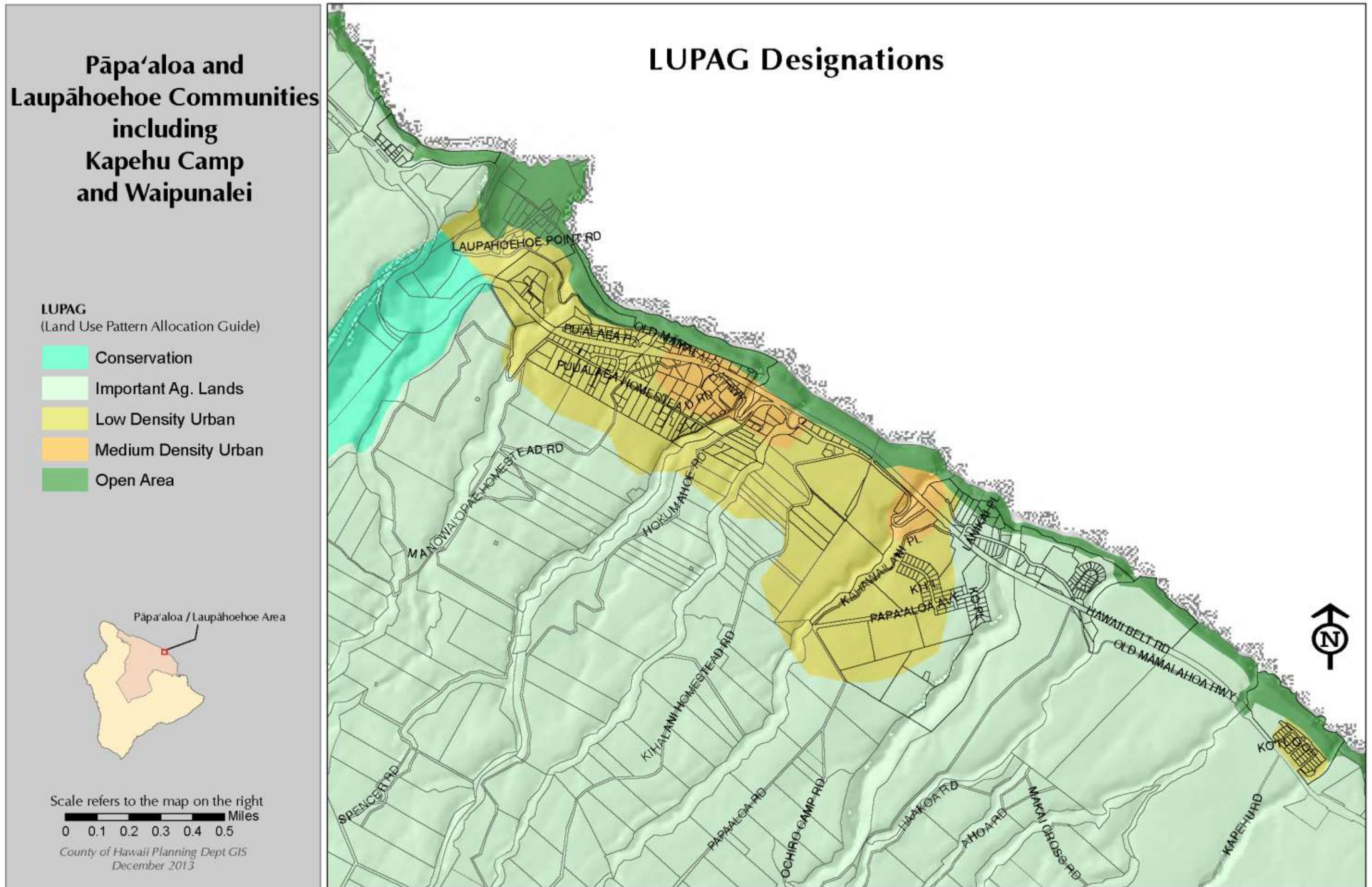
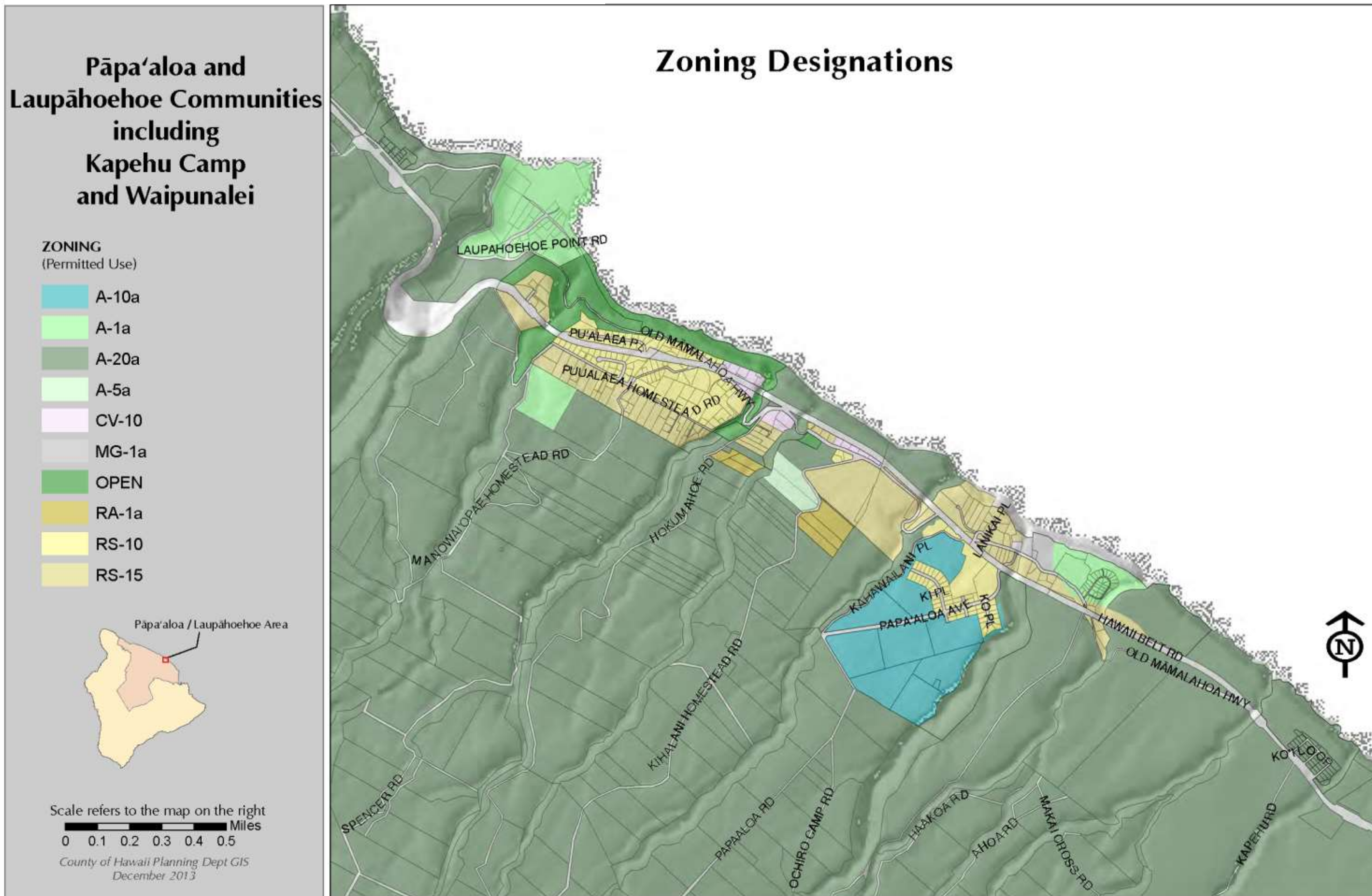


Figure 30. Laupāhoehoe/Pāpa'aloa Zoning Map



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1 'O'ōkala Analysis

2 Table 28. 'O'ōkala Assets and Challenges

| Character | Classic rural plantation village made surrounded by open pasture and working agriculture. (2010 population of approximately 200). |
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| Neighborhoods | Residential neighborhoods mauka and makai of the highway with single family residential zoning (RS), with minimum lot sizes of 10,000 s.f. Additionally, despite higher density and smaller lot sizes, Nui Village is zoned Agriculture (A-20a), thus it is a legal, nonconforming settlement. |
| Transportation facilities: road standards, connectivity, transit, active transport | Curvilinear street pattern coming off of the Old Māmalahoa Highway (service from highway 19). Residential neighborhoods are served with a series of looping streets and cul-de-sacs. Narrow village road standards accommodate calm vehicle speeds. Area is walkable and bikeable with small blocks and all neighborhoods within a ¼ mile of the Post Office. There is a community built bus stop makai of Hwy 19 just mauka of the 'O'ōkala Gym. |
| Potable Water | Served by the 'O'ōkala water system. Water service is typically available for up to seven dwelling units per pre-existing lot based on existing zoning. Water service is typically available for new lots created by subdivision and 'ohana dwellings, but not typically available for changes of zone or SLU Boundary Amendments. |
| Wastewater | There is no centralized wastewater treatment system. All lots use individual cesspools or septic systems. The entire Planning Area is located in a non-critical wastewater area, so cesspools are permitted on a minimum lot area of 10,000 s.f. |
| Emergency Services | There is no fire station or police substation; service response is from Laupāhoehoe. |
| Other facilities & Services: health, social, education, libraries | Post Office; 'O'ōkala Gym has been shuttered and has fallen into disrepair. |
| Planned and in-progress Capital Improvements | There are no recent or current CIP appropriations |
| Commercial Districts/Town Core | 'O'ōkala's commercial core consists of portions of two lots with Village Commercial (CV) zoning. One of these lots has an existing single-family dwelling it. There is no Medium Density Urban LUPAG designation in 'O'ōkala. |
| Agriculture | The town is surrounded by pasture land and the 'O'ōkala Dairy mauka of the |



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| Operations | Highway. |
| Industrial Districts | 3 parcels are zoned General Industrial (MG) including the 'O'okala Mill site. Currently, there is a proposal on the table to use the mill as a small scale sawmill. |
| Potential Brownfields | Mill sites, base yards, gas stations, sites with pesticide contamination. |
| LUPAG/Zoning /SLU Interface | There is no General Plan Medium Density Urban. The Low Density Urban does not encompass the existing Residential zoned lands, and significantly expands projected residential growth mauka and makai of the existing residential lots, encompassing approximately 80 acres of existing agriculturally-zoned land. The former 'O'okala Mill Site is industrially zoned; the General Plan Industrial does not correspond with the zoning. The General Plan designates Niu Camp in Low Density Urban, although it is zoned A-20a but used for residential use as evidenced by the predominance of homeowners exemptions. |
| Infill Options | Residential: On RS parcels with an existing dwelling, an 'ohana unit requires a public or private water sewage disposal system and an approved public or private water system. Via subdivision of parcels under existing zoning and without any water system improvements, approx. 48 additional buildable lots could be created. |
| Extension Options | Existing infill potential in the Urban areas will easily accommodate growth projections through 2035, therefore, expansion outside of SLU Urban district is inappropriate. |
| Associated Homesteads | N/A |

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Figure 31. 'O'okala Community Basemap

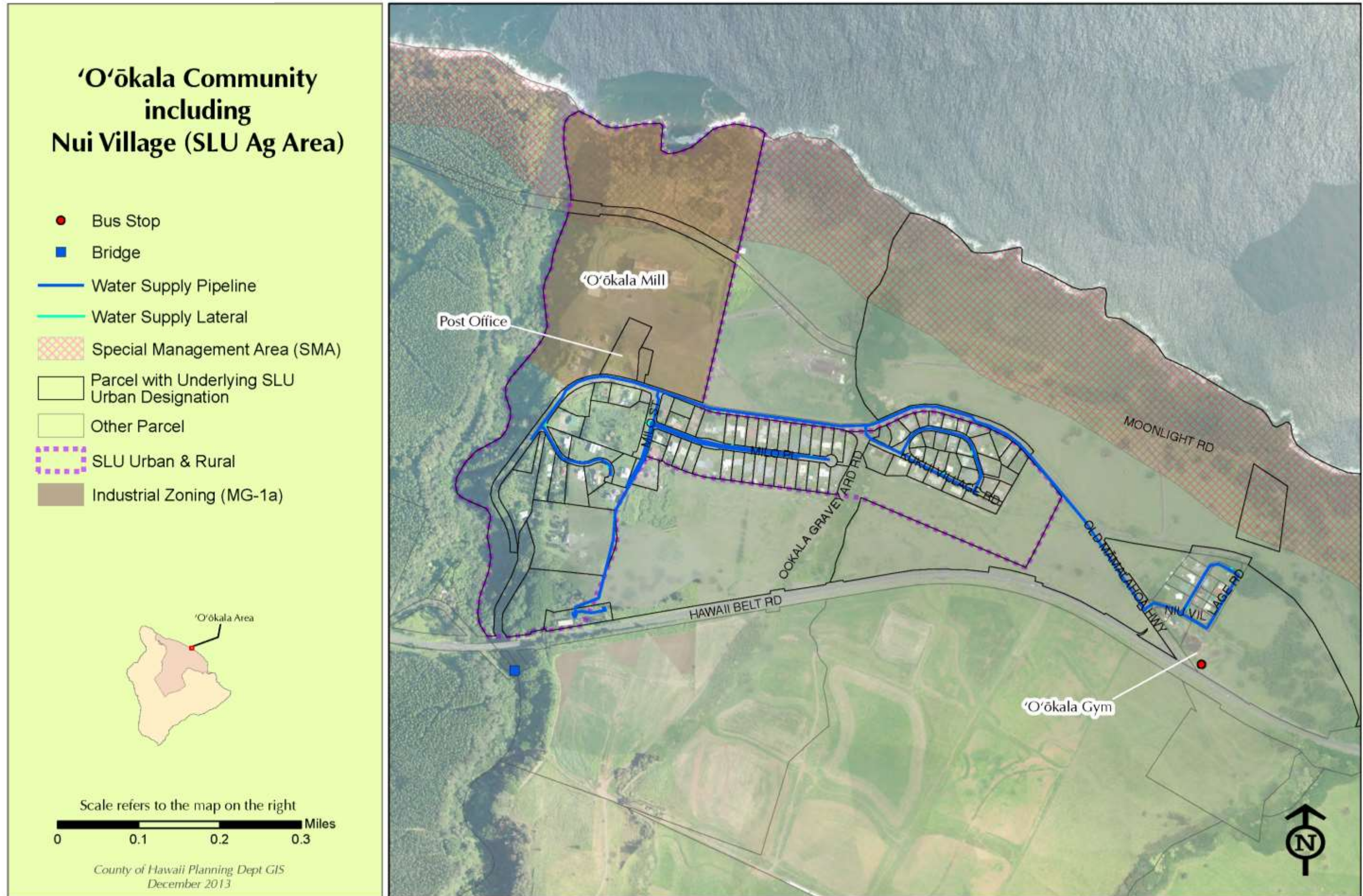
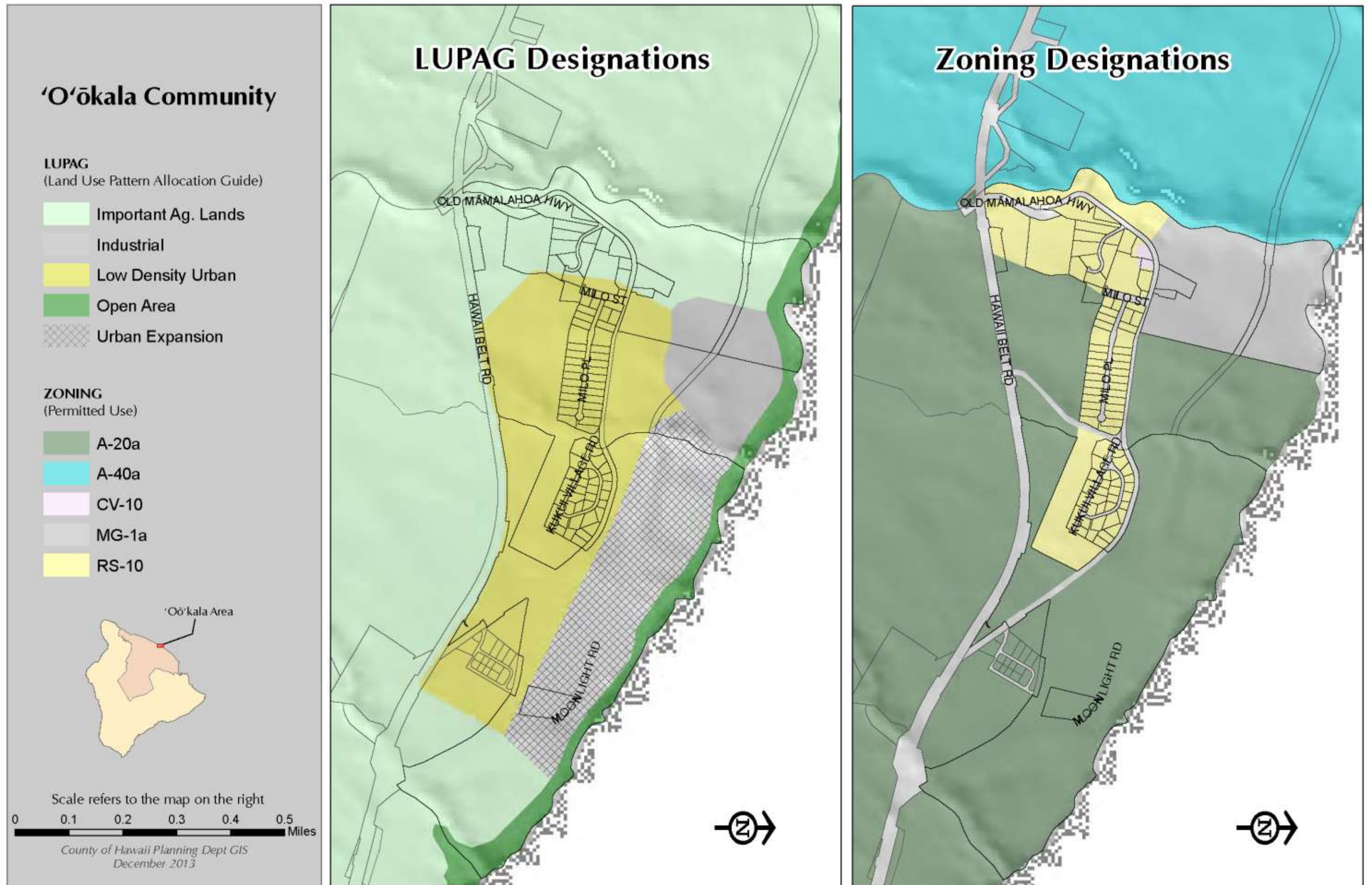


Figure 32. 'O'ōkala LUPAG & Zoning Map



1 Pa'auilo Analysis

2 Table 29. Pa'auilo Assets and Challenges

| Character | Pa'auilo is a classic rural plantation village surrounded by working agriculture. (2010 population of 595) |
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| Neighborhoods | <p>Residential neighborhoods located makai of the highway and some community facilities (gym/park). Mostly single family residential (RS), with minimum lot sizes of 7,500 to 10,000 square feet. In addition, there is a small block of 16 lots zoned for double-family residential (RD) with a minimum land area for each dwelling unit to be 3,750 square feet.</p> <p>Additionally, Nakalei Camp is located toward the bottom of Pa'auilo Mill Road and despite higher density and smaller lot sizes, it is Zone Agriculture (A-40a), thus it is a nonconforming subdivision.</p> <p>Neighborhoods mauka of the Highway, consist of single family residential (RS) zoning with minimum lot sizes of 7,500 to 15,000 square feet. This area includes a 7-unit condominium building on Hauola Road.</p> <p>Pa'auilo also encompasses two smaller settlements.</p> <ul style="list-style-type: none"> ▪ The Ka'ohē Subdivision mauka of the highway consisting of single family residential (RS), with minimum lot sizes of 1,500 square feet. ▪ Makai of Kūka'iau Ranch and bisected by HWY 19 is a settlement consisting mostly of single family residential (RS), with minimum lot sizes of 7,500 to 1,500 square feet. |
| Transportation facilities: road standards, connectivity, transit, active transport | <p>Area makai of HWY 19 has a curvilinear street pattern off of Pa'auilo Mill Road serving the camp. Narrow village road standards accommodate calm vehicle speeds. Area is walkable and bikeable with small blocks and all neighborhoods (in Pa'auilo town) within a ¼ mile of the town center and facilities. There is a pedestrian highway overpass that connects the makai residential neighborhood with facilities mauka of the highway and a bus stop is planned for under that overpass.</p> |
| Potable Water | <p>Pa'auilo is served by the County's Pa'auilo Water System, which is interconnected to the Haina water system. The service area for this water system includes Pa'auilo and Kūka'iau; Water service is typically available for up to seven dwelling units per pre-existing lot based on existing zoning. Water is typically available for subdivision and 'ohana dwellings, but not changes of zone/SLU boundary amendments. Mauka of the Pōhākea/Pa'auilo Tank, only 1 unit per PELOR is available.</p> |
| Wastewater | <p>There is no centralized wastewater treatment system. All lots use individual cesspools or septic systems. The entire Planning Area is located in a non-critical wastewater area, so cesspools are permitted on a minimum lot area of 10,000 s.f.</p> |



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| Emergency Services | There is no fire station or police substation; service response is from Honoka'a. Pa'auilo volunteer fire company is located at the Hamakua Housing Authority offices makai of Hwy 19 in Pa'auilo. |
| Other facilities & Services: health, social, education, libraries | Pa'auilo Park and Gym; Pa'auilo Elementary School, Kamehameha Schools Pre-School; Post Office. |
| Planned and in-progress Capital Improvements | <ul style="list-style-type: none"> ▪ Recent projects include improvements to the gymnasium and meeting rooms (annex). ▪ Funds have been appropriated for a Pa'auilo Volunteer Fire Garage ▪ Funds have been appropriated for improvement to the Pa'auilo Plant and Slaughterhouse. ▪ Planned mass transit bus shelter makai of the highway under the Pa'auilo Overpass |
| Commercial Districts/Town Core | <p>Village commercial (CV) zoning is located along the highway mauka of Pa'auilo Mill Road and at the intersection of Houla and Old Main Roads. The General Plan Medium Density Urban intends to encompass the existing commercial zoning but does not fully cover the CV-zoned lots. The MDU crosses the Highway to encompass the RD-zone area makai.</p> <p>In the settlement makai of Kuka'iau Ranch, there are two parcels with Neighborhood Commercial (CN) zoning (Donna's Cookies).</p> |
| Agriculture Operations | Town surrounded by Pasture and timber plantations. Additionally, the State owns several parcels makai of the town that are producing truck crops, nuts, and fruit. The Pa'auilo Incubator Kitchen provides an opportunity for farmer to create value added products. Finally, the Pa'auilo slaughterhouse, owned by the state and leased by Hawai'i Beef Producers, is one of the few slaughterhouses on the island. |
| Industrial Districts | There is no industrial zoning in the Pa'auilo area, however, the Slaughterhouse was approved for use via a Special Permit. |
| Potential Brownfields | Abandoned mill sites, sites with pesticide contamination. |
| LUPAG/Zoning /SLU Interface | The Low Density Urban significantly expands projected residential growth on all sides of Pa'auilo town encompassing approximately 300 acres of existing agriculturally-zoned land. The former Pa'auilo Mill Site is agriculturally zoned but is General Plan Industrial. The General Plan designates Nakalei Camp in Important Agricultural Land although the camp is in residential use as evidenced by the predominance of homeowner's exemptions. |
| Infill Options | Residential: On RS parcels with an existing dwelling, an 'ohana unit requires a public or private water sewage disposal system and an approved public or |

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| | <p>private water system.</p> <p>Via subdivision of parcels under existing zoning and without any water system improvements, approx. 95 additional buildable lots could be created.</p> <p>Commercial: The capacity of existing commercially-zoned areas far exceeds commercial development. Portions of existing commercial development are vacant.</p> |
| Extension Options | Extension and greater development outside of the SLU Urban area would require a landowner/developer to make improvements to the water system or develop a private water system. |
| Associated Homesteads | Pa'auilo 1 st Series – 52 A-5a zoned lots; Pa'auilo 2 nd Series – 156 A- 5a zoned lots; Pöhākea – 50 A-5a zoned lots; Kainhe – 41 A- a zoned lots |

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Figure 33. Pa'auilo Community Basemap

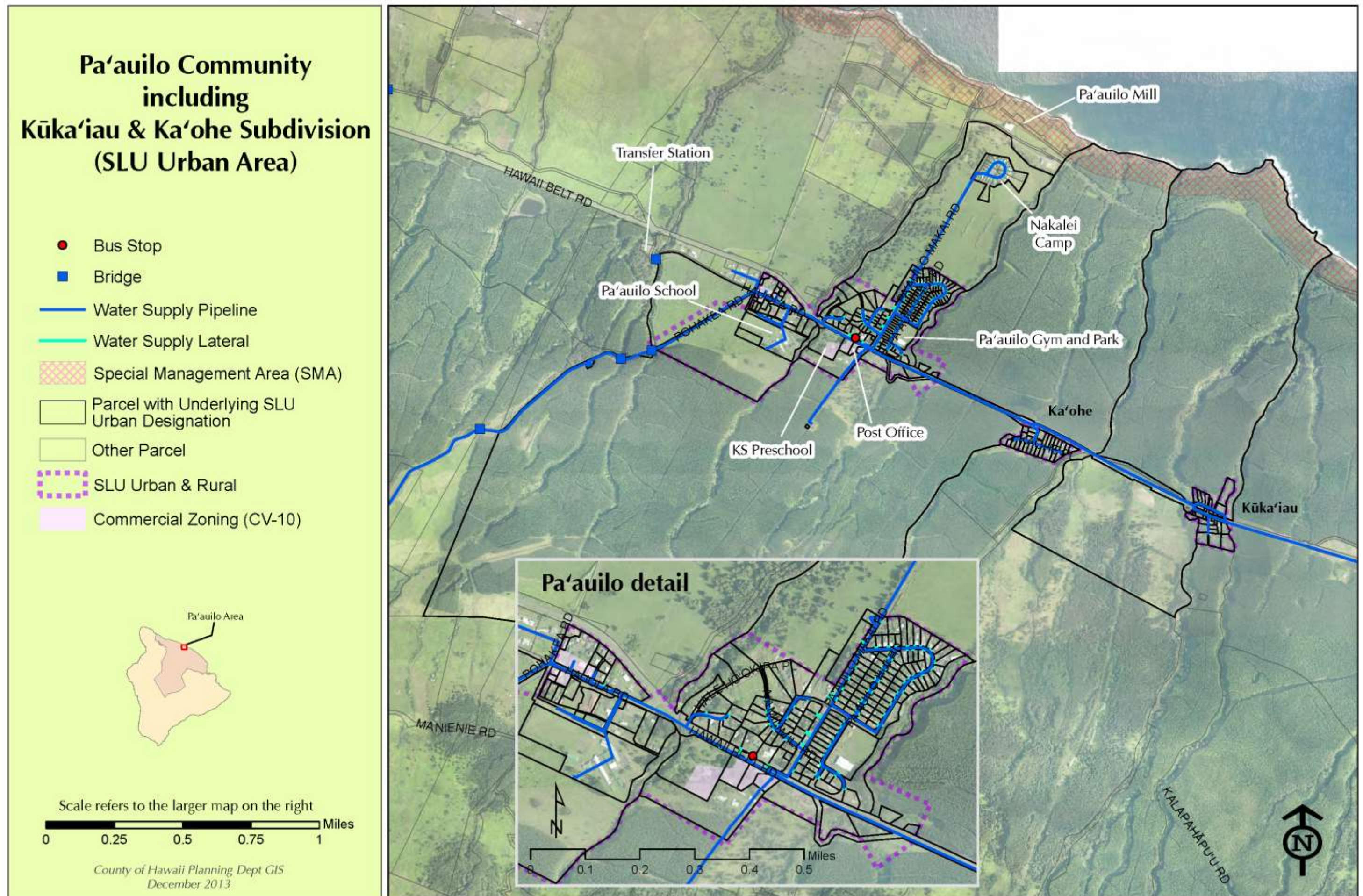
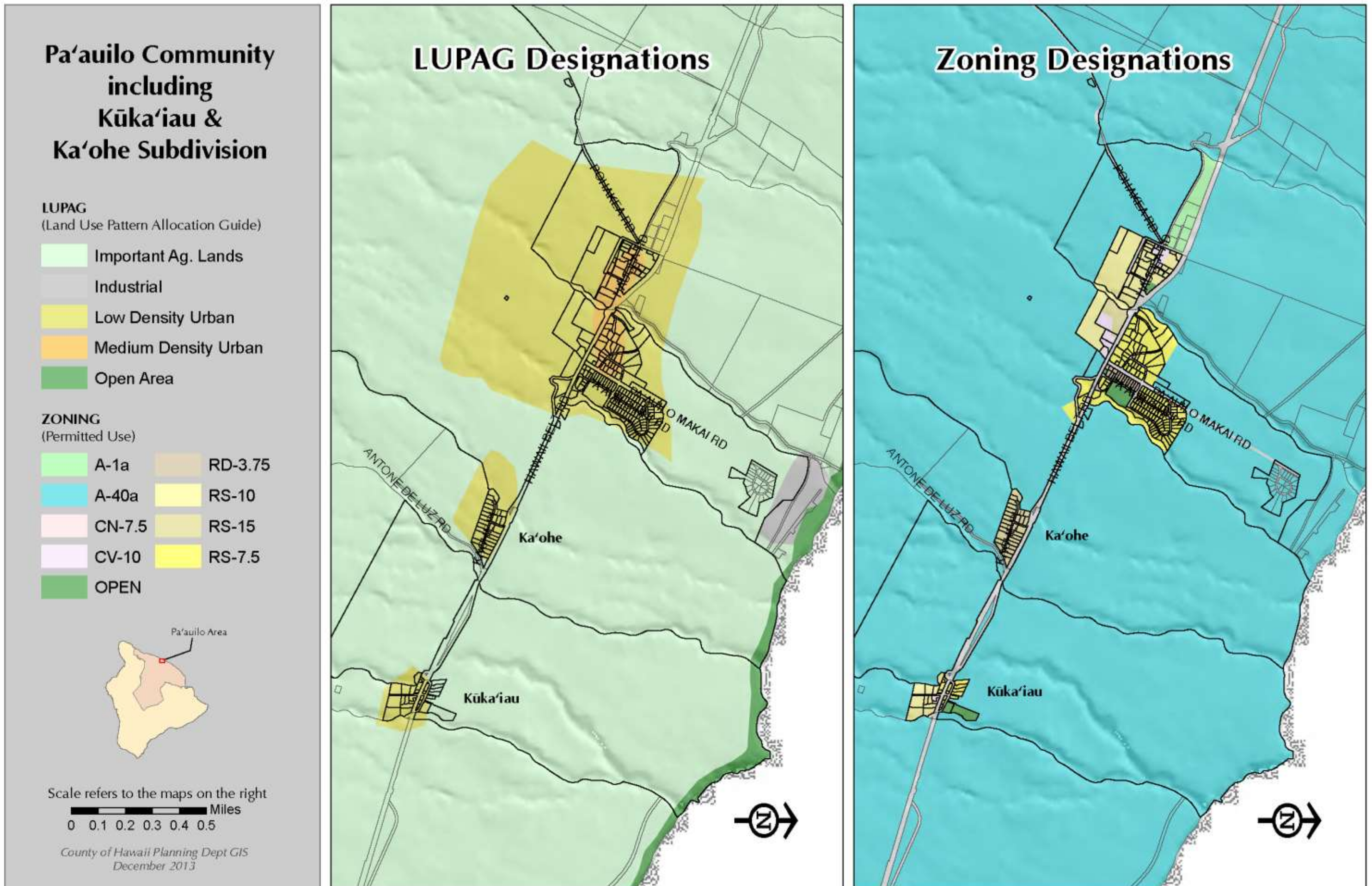


Figure 34. Pa'auilo LUPAG & Zoning Map



1 Honoka'a Analysis

2 Table 30. Honoka'a Assets and Challenges

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| <p>Character</p> | <p>The Planning Area's largest town (2010 population of 2,258 persons). Traditional Neighborhood Development (TND) with a strong sense of place rooted in its plantation and paniolo heritage. Historic Buildings. Gateway town to Waipi'o Valley.</p> |
| <p>Neighborhoods</p> | <p>Residential neighborhoods clustered around commercial and community facilities primarily makai of HWY 19.</p> <p>Haina – Mostly single family residential zoning (RS) with minimum lot sizes of 15,000 square feet. Despite similar, smaller lot size, there is a concentration of lots zoned Agriculture (A-1a) adjacent to the RS zoned neighborhood. These lots are used for residential purposes.</p> <p>Honoka'a Town – Mostly single family residential zoning (RS), with a minimum lot sizes of 7,500 square feet to 15,000 square feet. Small multi-family housing development and mixed-use apartments above commercial buildings along commercially-zoned Māmane Street.</p> <p>Senior housing is also available at Hale Hau'oli Hāmākua.</p> |
| <p>Transportation facilities: road standards, connectivity, transit, active transport</p> | <p>TND with curvilinear street pattern mauka and makai of HWY 19. Network of interconnected streets distributes traffic and allows for multiple routing choices. Mauka- Makai collector roads include Plumeria Street, Lehua Street, and Pakalana Street. Māmane Street is a north south collector road and a State highway (240) and has sidewalk facilities promoting pedestrian usership. Narrow, rural village road standards are present for most local roads, which accommodate multi-modal transportation and calm vehicle speeds. Walkable and bikeable; small blocks, and all neighborhoods are within ½ mile of town center and facilities. Mass transit park and ride facility and bus shelter adjacent to Honoka'a Park.</p> |
| <p>Potable Water</p> | <p>Honoka'a is served by the County's Haina Water System, which is interconnected to the Waimea and Pa'auilo Water Systems. Water service is typically available for one unit per pre-existing lot of record. Water is not typically available for new lots created by subdivision, 'ohana units, and changes of zone or SLU Boundary Amendments.</p> <p>Once phase II of the Āhualoa-Honoka'a Water Transmission Line is complete, DWS will re-evaluate and possibly increase capacity.</p> |
| <p>Wastewater</p> | <p>There is a centralized County wastewater collection and treatment system located in Haina. This system has adequate capacity to accommodate future growth.</p> <p>Recently, the county completed a Large Capacity Cesspool Conversion project in downtown Honoka'a. This allowed for the connection of downtown businesses and residents to the public sewer system.</p> |



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| Emergency Services | Fires station and EMS. Police Station. |
| Other facilities & Services: health, social, education, libraries | Honoka‘a Elementary and High School, North Hawai‘i Education and Research Center (NHERC); Honoka‘a Gym, Park, Community Center, and Rodeo Arena; Honoka‘a Public Library; Post Office; Transfer Station; and Hale Ho‘ola Hāmākua (Hospital) |
| Planned and in-progress Capital Improvements | <p>Recent projects include:</p> <ul style="list-style-type: none"> ▪ DWS: Āhualoa-Honoka‘a Water Transmission Line Phase I is complete mauka of Hwy 19; Phase II (makai of Hwy 19 into Honoka‘a Town) requires additional funding ▪ Honoka‘a Large Capacity Cesspool conversion completed in 2013. ▪ Funds have been appropriated for Lehua Street sidewalk improvements ▪ Funds have been appropriated for lighting and playground equipment for Honoka‘a Park. ▪ State CIP funds <ul style="list-style-type: none"> ○ Brantley Center, Inc., Hawai‘i; Plans, design, construction for renovations of existing facilities in Honoka‘a. ○ Honoka‘a High School; Plans, design, construction for covered bleachers and other athletic facility improvements. ○ North Hawai‘i Education and Research Center; Renovations for Nursing and Culinary buildings. ○ Mamane Street; Honoka‘a; construction improvements to intersection and sidewalk from Lehua Street to Plumeria Street, provide a pedestrian connectivity between town and North Hawai‘i Education Research Center and State long-term care and emergency room. |
| Commercial Districts/Town Core | <p>The commercial core is defined by the existing Village-Commercial (CV) zoning stretching along 0.5 mile of Māmane Street. Additional commercial zoning is located at the intersection of Māmane Street and ‘Ōhi‘a Street (CV & CN). Additional commercial zoning is located at the intersection of Pakalana Street and Highway 19 (Tex Drive-In Plaza & Laundromat).</p> <p>The General Plan provides for significant expansion of Medium Density Urban beyond the existing commercial zoning, extending mauka along Lehua Street to Tex’s. There is also a Medium Density Urban in Haina encompassing lots currently zoned Residential, Industrial, and Agricultural.</p> |
| Agriculture Operations | <p>Pasture lands and timber plantation surround the town. There is a certified kitchen facility at NHERC used to produce value added agricultural products.</p> <p>Lower Hāmākua Ditch Irrigation System runs makai of Honoka‘a Town and provides irrigation water to farmers/ranchers including the North Hilo/Hāmākua</p> |

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| | Ag Co-Op and the State's Hāmākua Ag Park (see Aina section for discussion of these areas). |
| Industrial Districts | Haina and Honoka'a identified as industrial centers by the General Plan. General Industrial Zoning (MG-1a) is located at the site of the old Haina Mill. |
| Potential Brownfields | Abandoned mill sites, base yards, and sites with pesticide contamination. |
| LUPAG/Zoning /SLU Interface | There are lots zoned Residential and Industrial in Haina that are designated Important Agricultural Land. There are three areas in Haina designated Industrial encompassing lots zoned Agricultural and Open. The Low Density Urban significantly expands projected residential growth on all sides of Honoka'a encompassing approximately 1,160 acres of existing agriculturally-zoned land. Consideration should be given to expand the Low Density Urban to encompass areas presently zoned agricultural but are used as residences as evidenced by the predominance of homeowners exemptions—cluster of lots in Haina behind the ball field, at the western edge of town, in the center of town in the vicinity of Kahili-Hala-Huapala streets, and the eastern edge of town. |
| Infill Options | <p>Residential: Via subdivision of parcels under existing zoning and without any water system improvements, approx. 82 additional buildable lots could be created.</p> <p>Future expansion needs could be accommodated with the expansion of water service (either municipal or private) to RS Zoned Parcels mauka of Hwy 19 and makai of the Old Māmalahoa Hwy as well as RS Zoned Parcels Makai of Hwy 19 and mauka of NHERC and the Park.</p> <p>Commercial: The capacity of existing commercially-zoned areas far exceeds commercial development. Portions of existing commercial development are vacant, and some commercially-zoned parcels are not developed for commercial use.</p> <p>Industrial: The capacity of existing industrial-zoned areas is sufficient for current levels of industrial development.</p> |
| Extension Options | Residential: There is sufficient acreage within the SLU Urban area to accommodate estimated population growth if water system improvements are made to increase capacity. |
| Associated Homesteads | Āhualoa Homesteads – Approximately 350 lots with Agricultural (A-5a) Zoning; Kaaō Homesteads – Approximately 110 lots with Agricultural (A-5a & A-1a), Residential Agriculture (RA-3a) and Residential (RS-10) Zoning (just mauka of HWY 19 between Wailana Place and Mauna Loa Street). |

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Figure 35. Honoka'a Community Basemap

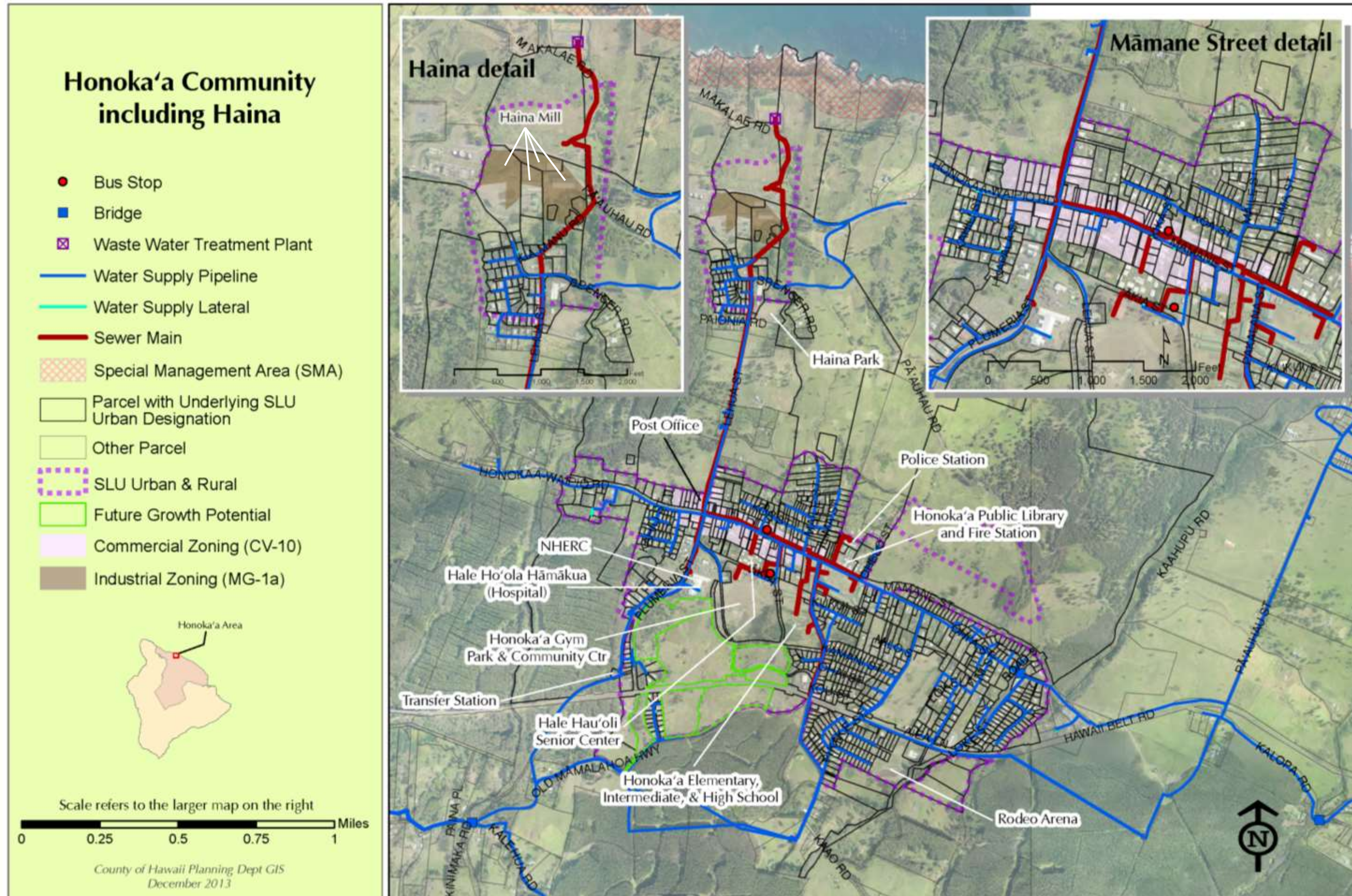
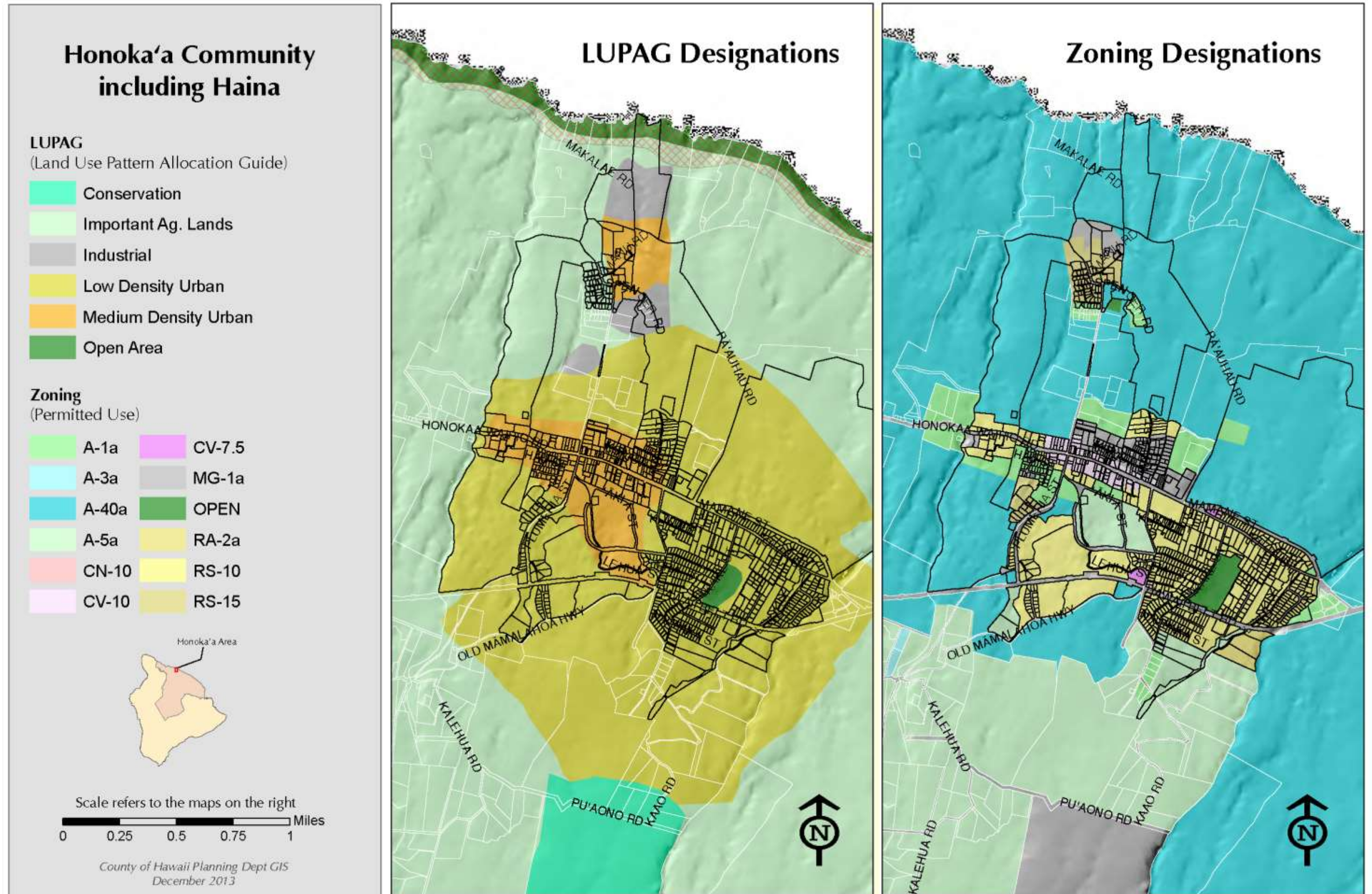


Figure 36. Honoka'a LUPAG & Zoning Map



1 **Kukuihaele Analysis**

2 **Table 31. Kukuihaele Assets and Challenges**

| | |
|---|---|
| Character | Kukuihaele is a small plantation village (2010 population of 336 persons) surrounded by open pasture, with some historic buildings (i.e. plantation managers house). Kukuihaele is gateway community to Waipi’o Valley. |
| Neighborhoods | Residential neighborhoods are located along Kukuihaele Road with mostly single-family residential zoning (RS) with minimum lots sizes of 15,000 square feet Waipi’o side of Mud Lane and 7,500 to 15,000 square feet Honoka’a side of Mud Lane. Note: Despite their Agricultural Zoning (A-40a), Camp 106 (Honoka’a side of town) and Waipi’o Lookout lots are smaller and are used as residences as evidenced by homeowners exemptions. |
| Transportation facilities: road standards, connectivity, transit, active transport | Small village served by two collector roads Honoka’a-Waipio road and Kukuihaele Road (which acts as a main street). Mud Lane bisects the village in a mauka-makai direction. Narrow village road standards accommodate multi-modal traffic and calm vehicle speed. Roads are bikable and walkable. There is no mass transit service to Kukuihaele. |
| Potable Water | Kukuihaele is served by the County’s Kukuihaele Water System. The service area for this water system extends from Kukuihaele to Kapulena. Due to damage to the single spring source from an earthquake, the County Department of Water Supply has developed a well in Kapulena to replace the spring and installed a backup line along Mud Lane to connect to the Waimea Water System. There is no current capacity to accommodate new hookups. |
| Wastewater | There is no centralized wastewater treatment system. All lots use individual cesspools or septic systems. The entire Planning Area is located in a non-critical wastewater area, so cesspools are permitted on a minimum lot area of 10,000 s.f. |
| Emergency Services | There is no fire station or police substation; service response is from Honoka’a. |
| Other facilities & Services: health, social, education, libraries | A former school site is now a County park. A privately owned social hall (former Japanese School building) is available for community activities. The County also maintains a small cemetery and the Waipi’o Valley Lookout. |
| Planned and in-progress Capital Improvements | There are no recent or current CIP appropriations |
| Commercial Districts | Consists of three, Neighborhood Commercial (CN-10) zoned lots on the makai side of Kukuihaele road. |
| Agriculture Operations | Pasture and eucalyptus forestry surrounds the town and nearby Waipi’o Valley is the center of wetland Kalo production on the island. |



| | |
|-----------------------------|---|
| Industrial Districts | There is no industrial zoning in Kukuihaele. |
| Potential Brownfields | Sites with pesticide contamination. |
| LUPAG/Zoning /SLU Interface | The General Plan provides for some expansion beyond the existing SLU Urban/residential zoning. Camp 106 and the Waipi’o Lookout lots are not included in the General Plan Low Density Urban, are zoned A-40a, and are used as residences as evidenced by homeowners exemptions. |
| Infill Options | <p>Residential: Due to a water freeze on water hookups until Kapulena Well is complete (est. 2014-2016); there is no current water capacity to allow for new building hookups, ‘ohana dwellings, subdivision, change of zone, or SLU boundary amendment. When that system comes on-line, it is likely that there will only be 1 unit of water per pre-existing lot of record available.</p> <p>Based on the above, there are 16 vacant that would be available to build when County water is available. An additional 14 lots could be created through subdivision with a water variance.</p> <p>Resort/Commercial: There are three large Resort (V-25) zoned lots mauka of Kukuihaele Road which currently house the Kukuihaele Social Hall and the Plantation Managers house. Resort zoning allows for several commercial type uses, including restaurants and retail establishments. However, the capacity of the existing commercial/resort zoned areas exceeds commercial development.</p> |
| Extension Options | Extension and greater development outside of the SLU Urban area would require a landowner/developer to make improvements to the water system or develop a private water system. |
| Associated Homesteads | N/A |

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Figure 37. Kukuihaele Community Basemap

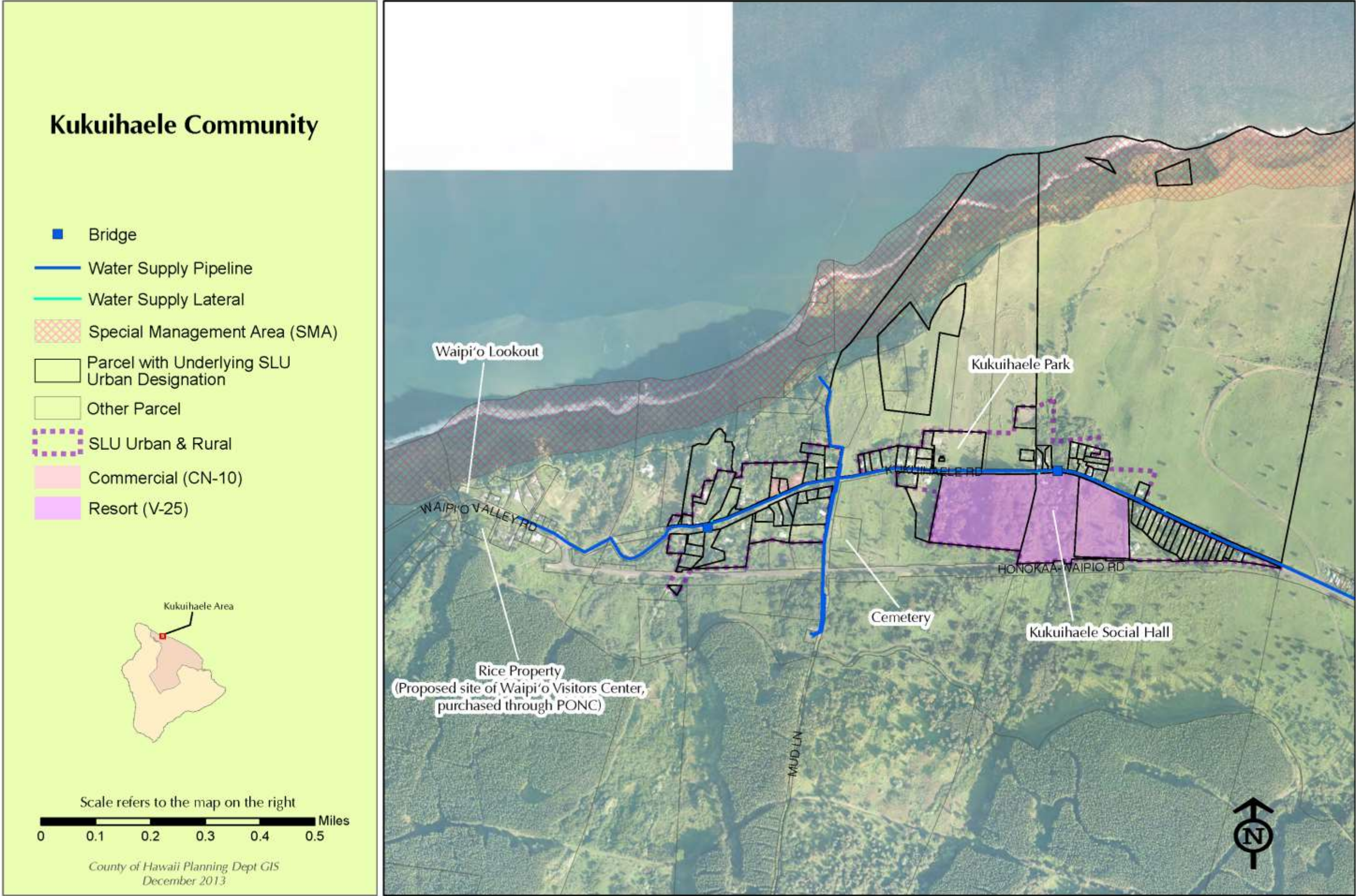
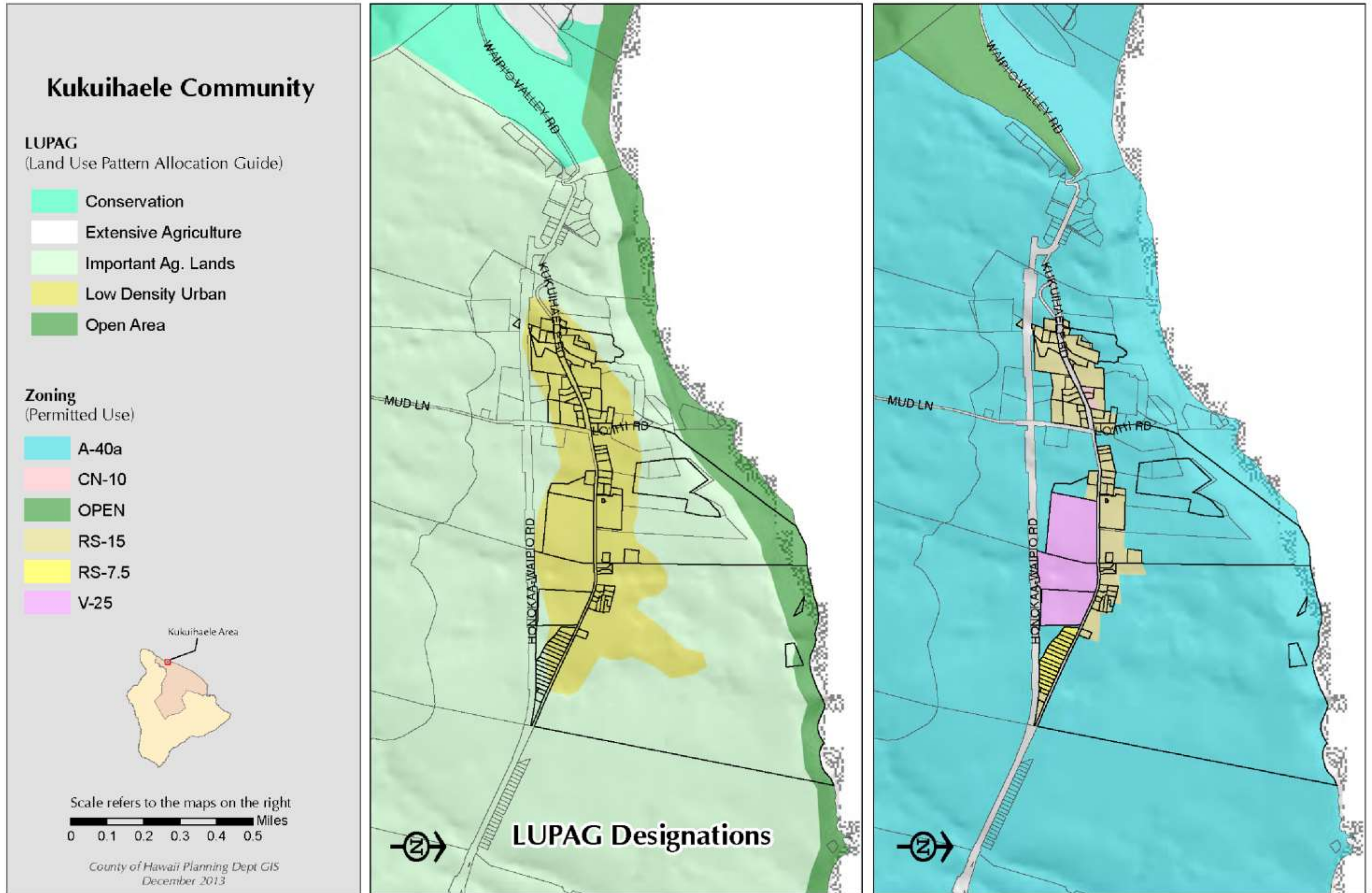


Figure 38. Kukuihaele LUPAG & Zoning



1 **Rural Homestead Settlements Analysis**

2 As mentioned in the historical settlement analysis above [add link], there are 33 “homestead”
 3 settlements in the Planning Area made possible under the Land Act of 1895. Most of these lots were
 4 created in in the early 1900’s and for the most part planted in sugar cane for the better part of a century
 5 until the plantations closed in 1994. Once taken out of cane production, the lands were made available
 6 for purchase. These areas are generally mauka of existing towns and villages and are located on
 7 agriculturally zoned lands. These homestead parcels are legal lots of record created before the first
 8 zoning code was enacted therefore the ability for low density, residential development in these areas is
 9 allowed.

10 This has created the perfect conditions for rural sprawl, as the majority of the Planning Area’s growth
 11 since 1990 has taken place in these homestead areas. There are approximately 2,000 lots homestead
 12 lots of these parcels have been or can be further subdivided due to their size and underlying zoning
 13 (Agricultural 1, 3, 5, and 10 acres). This growth is further facilitated by comparatively low property costs
 14 and availability in relation to in-town real estate, ease in obtaining water and road variances, and the
 15 draw of “country” living to many buyers.

16 Residential growth in these areas is problematic due to the relative lack of adequate road infrastructure
 17 that was initially provided by the plantations, but has since fallen into disrepair. Many of the old
 18 homestead roads are either private or roads-in-limbo, which puts the onus on the individual lot owners
 19 to maintain substandard roads (and sometimes bridges) while dealing with increased vehicular traffic.

20 Due to the relative large population growth in these areas, the associated infrastructure issues, and the
 21 inconsistency with the community’s vision for the region, it is important to understand the issue and to
 22 provide alternative tools and strategies to determine how to best address the community’s objectives.

23 In many ways, growth in these homestead areas is in conflict with the community’s [stated values, vision,](#)
 24 [and objectives](#) which seek to protect agricultural land from non-agricultural uses, preserve open space,
 25 maintain public access to the mountains and ocean, and direct growth into traditional towns and
 26 villages.

27 **Homestead Assets and Challenges**

28 Assets

- 29 ▪ Land available in small enough units (5 or 10 acres) to support small scale, family agriculture with
 30 the ability to have a house on the farmlot
- 31 ▪ Electricity and water are available to some homestead areas
- 32 ▪ Strong community associations (i.e. Pa’auilo Mauka/Kalōpā Community Association)
- 33 ▪ Population potentially helpful in supporting economic health of nearby towns and villages
- 34 ▪ Areas available for agricultural tourism, alternative visitor experience (i.e. Hawaiian Vanilla
 35 Company)

36 Challenges

37 Planning Area has 33 homestead settlements primarily in mauka, agricultural areas. Homestead lots
 38 are legal lots of record created in the early 1900’s pre-statehood and State Land Use Law.

- 39 ▪ There are approximately 2,000 buildable lots with potential for further subdivision for an additional
 40 1,000 lots with few infrastructure/permitting constraints.

- 1 ▪ Lack of conventional infrastructure has not been a development constraint to homestead growth. It
2 is often easier to develop these areas than to develop in the towns and villages. .
- 3 ▪ The majority of population growth in the last 20 years has taken place outside of urban areas and
4 into homesteads (41% growth over 20 years; 27% of planning area residents live on a homestead
5 lot).
- 6 ▪ Loss of agricultural land to non-agricultural uses (residential development without the associated
7 agricultural use) and increased conflicts between farmers and ranchers and new, non-farming
8 residents.
- 9 ▪ Substandard roads and roads-in-limbo without clear understanding of who is responsible for
10 maintenance. Many bridges on homestead roads are structurally deficient. Increased visitor traffic
11 adds to roadway safety and maintenance issues.
- 12 ▪ County unlikely to invest significant resources in providing infrastructure to spread out, sparsely
13 populated homestead areas.

14 **Homestead Level Analysis**

15 The following tables identify the Planning Areas homestead settlements broken down by sub-region
16 (Hāmākua, North Hilo, & Rural South Hilo) and provide basic information about each settlement area
17 including the name, the current number of lots and percent of the lots that have a dwelling on them and
18 how many dwellings there are, the general zoning of the area, infrastructure that is available, and notes
19 about additional subdivision potential, etc.

20 Please note: The analysis of further subdivision does not include road lots, government ownership, and
21 ownership by Kamehameha Schools as they have no current plans to take their agricultural lands out of
22 agricultural use.

23 **Table 32. Homestead Settlement Assets and Challenges**

| Hāmākua Homesteads |
|--|
| <p>Ka’ao Homesteads</p> <ul style="list-style-type: none"> ▪ <u>Location</u>: Directly mauka of Honoka’ā Town in the vicinity of the Hāmākua Country Club ▪ <u>Zoning</u>: A-1a & A-5a in the Ag District, RS-10 in the Urban District ▪ <u>No. Lots/% Occupied</u>: 27 Lots in the SLU Ag District/44% Occupied ▪ <u>Water</u>: Served by Haina Water System, Available to SLU Urban Area residences ▪ <u>Electricity</u>: Available ▪ <u>Roads</u>: <ul style="list-style-type: none"> ○ North/South: Hwy 19, Puaono Rd. ○ Mauka/Makai: Mauna Loa St (Portion RIL), Kaa Rd (Portion RIL), Loke St. (Portion RIL) ▪ <u>Subdivision Potential</u>: 8 parcels are large enough to be further subdivided into 22 additional 5 acre lots ▪ <u>Notes</u>: 91 lots (RS & RA Zoned) lie in SLU urban and are analyzed in the Honoka’ā town Analysis. |
| <p>Āhualoa Homesteads</p> <ul style="list-style-type: none"> ▪ <u>Location</u>: Mauka of Hwy 19 and Honoka’ā Town |

- Zoning: A-5a & 2 lots of A-3a
- # Lots/% Occupied: 350 Lots /61% Occupied
- Water: Served by the Haina Water System, Some Water Available
- Electricity: Available
- Roads:
 - North/South: Hwy 19, Kapuna Road, Kahana Dr., Old Māmalahoa Hwy; Puaono Road
 - Mauka/Makai: Kalehua Rd., Kinimaka Rd (Por. RIL), Kumupele Rd (Por. RIL), Homestead Rd. (Por. RIL)
- Subdivision Potential: 77 parcels are large enough to be further subdivided into 244 additional 5 acre lots

Kalōpā Homesteads

- Location: Between Honokaʻa and Paʻauilo, stretching from the shoreline to mauka of Hwy 19
- Zoning: A-5a
- # Lots/% Occupied: 215 Lots/79% Occupied
- Water: Served by the Haina Water System, Some Water Available
- Electricity: Available
- Roads:
 - North/South: Hwy 19, Kapuna Road, Kahana Dr., Old Māmalahoa Hwy; Puaono Road
 - Mauka/Makai: Kalehua Rd., Kinimaka Rd (Por. RIL), Kumupele Rd (Por. RIL), Homestead Rd. (Por. RIL)
- Subdivision Potential: 77 parcels are large enough to be further subdivided into 244 additional 5 acre lots

Kaʻapahu Lower Homesteads

- Location: Mauka of Hwy 19 between Kalōpā Homesteads and Paʻauilo
- Zoning: A-5a
- No. Lots/% Occupied: 95 Lots /75% Occupied
- Water: Served by Haina Water System, Some Water Available
- Electricity: Some Electric Available
- Roads:
 - North/South: Kaʻapahu Rd.
 - Mauka/Makai: Hoʻo Kahuā, Kula Kahiko
- Subdivision Potential: 17 parcels are large enough to be further subdivided into 58 additional 5 acre lots
- Notes: 91 lots (RS & RA Zoned) lie in SLU urban and are analyzed in the Honokaʻa town Analysis.

Kaʻapahu Upper Homesteads

- Location: Mauka of Kaʻapahu Lower Homesteads (Paʻauilo Mauka)
- Zoning: A-5a
- # Lots/% Occupied: 76 Lots /57% Occupied
- Water: Served by the Haina Water System, Some Water Available

- Electricity: Some Electric Available
- Roads:
 - North/South: Pa'auilo Mauka Rd., Pohakelani Rd.
 - Mauka/Makai: Waikaalulu rd. (Portion RIL), Kukuipapa Rd. (Portion RIL),
- Subdivision Potential: 28 parcels are large enough to be further subdivided into 111 additional 5 acre lots

Pa'auilo 2nd Homesteads

- Location: Mauka of Hwy 19, Directly Hilo Side of Ka'apahu Lower and Upper Homesteads
- Zoning: A-5a
- # Lots/% Occupied: 157 Lots/50% Occupied
- Water: Served by the Haina Water System, Some Water Available
- Electricity: Some Electric Available
- Roads:
 - North/South: Manienie Rd. (Por. RIL),
 - Mauka/Makai: Access from Hwy 19 via Pohakea Rd., Ka'apahu Rd. (Por. RIL)
- Subdivision Potential: 13 parcels are large enough to be further subdivided into 60 additional 5 acre lots

Pōhākea Homesteads

- Location: Mauka of Hwy 19, Directly Hilo Side of Ka'apahu Upper Homesteads
- Zoning: A-5a
- No. Lots/% Occupied: 51 Lots /49% Occupied
- Water: Served by Haina Water System, Some Water Available
- Electricity: Some Electric Available
- Roads:
 - North/South: Pohakealani Rd.
 - Mauka/Makai: Access from Hwy 19 via Pohakea Rd. & Pōhākea Mauka Rd.
- Subdivision Potential: 22 parcels are large enough to be further subdivided into 112 additional 5 acre lots

Kaunamano Homesteads

- Location: Mauka & Makai of Hwy 19 Between Kalōpā Homesteads and Pa'auilo
- Zoning: A-5a
- # Lots/% Occupied: 32 Lots /65% Occupied
- Water: Served by the Haina Water System, Some Water Available
- Electricity: Some Electric Available
- Roads:
 - North/South: Hwy 19 & Kalōpā Rd.
 - Mauka/Makai: Kunamano Rd. & Akasaki Rd.
- Subdivision Potential: 2 parcels are large enough to be further subdivided into 4 additional 5 acre lots

Pa'auilo 1st Homesteads

- Location: Mauka of Pa'auilo Town
- Zoning: A-5a
- # Lots/% Occupied: 52 Lots/21% Occupied
- Water: No Water Available
- Electricity: No Electric Available
- Roads:
 - North/South: N/A
 - Mauka/Makai: Access from Hwy 19 via Antone DeLuz Rd. (Por. RIL), Private Roads.
- Subdivision Potential: 21 parcels are large enough to be further subdivided into 64 additional 5 acre lots

Kainehe Homesteads

- Location: Mauka of Hwy 19, between Pa'auilo and 'O'okala
- Zoning: A-40a
- No. Lots/% Occupied: 3 Lots /0% Occupied
- Water: No Water Available
- Electricity: No Electric Available
- Roads:
 - North/South: Pohakealani Rd.
 - Mauka/Makai: Access from Hwy 19 via Kalapahāpu'u Rd.
- Subdivision Potential: None

Niupea Homesteads

- Location: Mauka of Hwy 19 Between Kainehe Homesteads and 'O'okala
- Zoning: A-5a
- # Lots/% Occupied: 41 Lots /39% Occupied
- Water: No Water Available
- Electricity: No Electric Available
- Roads:
 - North/South: Hwy 19
 - Mauka/Makai: Access from Hwy 19 via Niupea Homestead Rd. (Por.RIL), Kaala Rd.
- Subdivision Potential: 16 parcels are large enough to be further subdivided into 71 additional 5 acre lots

North Hilo Homesteads

Waipunalei Homesteads

- Location: Mauka and Makai of Hwy 19 between 'O'okala and Laupāhoehoe
- Zoning: A-20a
- # Lots/% Occupied: 86 Lots/64% Occupied

- Water: Served by the Laupāhoehoe Water System, Some Water Available
- Electricity: Some Electric Available
- Roads:
 - North/South: Hwy 19, Old Māmalahoa Hwy, Loyola Rd., Liloa Rd (Portion RIL), Ignacio Pl.
 - Mauka/Makai: Access from Hwy 19 via Jardine Rd (Portion RIL) and Stevens Rd.
- Subdivision Potential: N/A

Kahoahuna Homesteads

- Location: Mauka of Waipunalei Homesteads
- Zoning: A-20a
- # Lots/% Occupied: 13 Lots/31% Occupied
- Water: No Water Available
- Electricity: No Electric Available
- Roads:
 - North/South: N/A
 - Mauka/Makai: Stevens Rd (which is listed as a RIL for this section of homesteads), private roads.
- Subdivision Potential: 5 parcels are large enough to be further subdivided into 13 additional 20 acre lots

Manowai'opae Homesteads

- Location: Mauka and Makai of Old Māmalahoa Hwy in Laupāhoehoe
- Zoning: A-20a
- # Lots/% Occupied: 71 Lots in the SLU Ag District/44% Occupied
- Water: Served by the Laupāhoehoe Water System, Some Water Available
- Electricity: Mostly serving the RS & CV Zoned Lots
- Roads:
 - North/South: Hwy 19, Old Māmalahoa Hwy
 - Mauka/Makai: Access is from Stevens Rd (which is listed as a RIL for this section of homesteads), private roads.
- Subdivision Potential: 1 parcel is large enough to be further subdivided into 2 additional 20 acre lots
- Notes:
 - 125 lots (RS & CV Zoned) lie in SLU urban and are analyzed in the Laupāhoehoe town Analysis.
 - Portions of 5 lots directly mauka of Hwy 19 are located in the Special Management Area (SMA)

Laupāhoehoe Homesteads

- Location: Mauka of Manowai'opae Homesteads
- Zoning: A-20a
- # Lots/% Occupied: 53/17% Occupied
- Water: Not Available
- Electricity: Not Available

- **Roads:**
 - North/South: Spencer Rd. (Por. RIL), Private Roads
 - Mauka/Makai: Access from Hwy 19 via Manowai'opae Homesteads Rd. (Por. RIL), Spencer Rd., Private Roads
- **Subdivision Potential:** 2 parcels are large enough to be further subdivided into 7 additional 20 acre lots

Kihalani Homesteads

- **Location:** Hilo side of Manowai'opae Homesteads mauka of Hwy 19 in Laupāhoehoe
- **Zoning:** A-20a, A-5a (2 lots)
- **# Lots/% Occupied:** 53/17% Occupied
- **Water:** Served by the Laupāhoehoe Water System, Some Water Available
- **Electricity:** Some Electric Available
- **Roads:**
 - North/South: Old Māmalahoa Hwy., Kama'o Pl. (Por. RIL), Private roads
 - Mauka/Makai: Access from Service from Old Māmalahoa Hwy. via Kihalani Homestead Road (Por. RIL), Private roads
- **Subdivision Potential:** N/A
- **Notes:** 16 lots mauka of Hwy 19 are located within the Special Management Area (SMA)

Pāpa'aloa Homesteads

- **Location:** Hilo Side of Kihalani Homesteads mauka of Pāpa'aloa
- **Zoning:** A-20a
- **# Lots/% Occupied:** 96/54% Occupied
- **Water:** Not Available
- **Electricity:** Some Electric Available
- **Roads:**
 - North/South: Spencer Rd. Kapehu Rd. (RIL), Mauka Cross Rd. (Por. RIL),
 - Mauka/Makai: Access from Hwy 19 via Kapehu Rd. & Via Pāpa'aloa Ave.; Pāpa'aloa Rd., Ochiro Camp Rd., Ahoa Rd., Haakoa Rd (All Por. RIL)
- **Subdivision Potential:** N/A

Waikaumalo/Maulua Homesteads

- **Location:** Directly Hilo side of Maulua Gulch to Nīnole, mauka of Hwy 19
- **Zoning:** A-20a, RA-.5a (7 lots)
- **# Lots/% Occupied:** 106/25% Occupied
- **Water:** Served by the Nīnole Water System, Some Water Available
- **Electricity:** Some Electric Available
- **Roads:**
 - North/South: Hwy 19, Private Rds.
 - Mauka/Makai: Access from Hwy 19 via Kapena Rd. & Honomaihoa Rd. (Por. RIL), Waikolu Rd, Wailele Rd., Unnamed RIL, Private Rds.
- **Subdivision Potential:** 31 parcels are large enough to be further subdivided into 109 additional 20

acre lots

Piha/Kahuku Homesteads

- Location: Hilo side of Maulua Gulch to Waikaumalo/Maulua, Mauka of Old Māmalahoa Hwy in Nīnole
- Zoning: A-20a, RA-.5a (4 lots)
- # Lots/% Occupied: 64/45% Occupied
- Water: Served by the Nīnole Water System, Some Water Available
- Electricity: Some Electric Available
- Roads:
 - North/South: Old Māmalahoa Hwy, Private Roads
 - Mauka/Makai: Piha-Kahuku Rd.(Por. RIL)
- Subdivision Potential: 4 parcels (RA-.5a) are large enough to subdivide into 16 additional .5acre lots

Opea-Peleau Homesteads

- Location: Mauka of Old Māmalahoa Hwy in Umauma
- Zoning: A-20a; Forest Reserve (FR) Most Mauka Lot
- # Lots/% Occupied: 16/13% Occupied
- Water: No Water Available
- Electricity: Some Electric Available
- Roads:
 - North/South: Old Māmalahoa Hwy
 - Mauka/Makai: Access from Old Māmalahoa Hwy. via 'Awapuhi Rd. & Leapola Rd., Private Roads.
- Subdivision Potential: 1 parcel is large enough to be further subdivided into 2 additional 20 acre lots
- Notes: Makai most lot in the Special Management Area (SMA)

Lepoloa-Kauniho Homesteads

- Location: Mauka and Makai of Hwy 19 and Mauka of Old Māmalahoa Hwy in Umauma
- Zoning: A-20a
- # Lots/% Occupied: 29/66% Occupied
- Water: No Water Available
- Electricity: Some Electric Available
- Roads:
 - North/South: Hwy 19, Old Māmalahoa Hwy
 - Mauka/Makai: Access from Hwy 19 via Kauniho Rd. & Access from Old Māmalahoa Hwy via Leapola Rd. (Por RIL)
- Subdivision Potential: N/A
- Notes: 4 Lots directly Makai and Mauka of Hwy 19 in the Special Management Area (SMA)

Kamee Homesteads

- Location: Hilo side Lepoloa-Kauniho Homesteads, Mauka of Old Māmalahoa Hwy in Umauma
- Zoning: A-20a

- # Lots/% Occupied: 20/25% Occupied
- Water: Water Not Available
- Electricity: Electric Not Available
- Roads:
 - North/South: Private Roads
 - Mauka/Makai: Access from Old Māmalahoa Highway via Kamee Road
- Subdivision Potential: 7 parcels are large enough to be further subdivided into 27 additional 20 acre lots

Rural South Hilo Homesteads

Hakalau Homesteads

- Location: Mauka of Old Māmalahoa Hwy in Wailea/Hakalau
- Zoning: A-10a
- # Lots/% Occupied: 63 in SLU Ag District/62% Occupied
- Water: Served by Hakalau Water System, Some Water Available
- Electricity: Some Electric Available
- Roads:
 - North/South: Pueo'ihī Rd. (RIL), Kanna Rd., 'Io Pl. (RIL), Ozaki House Rd.
 - Mauka/Makai: Access from Old Māmalahoa Highway via Kulaiwi Rd (Por. RIL) & Chin Chuck Road (Por. RIL)
- Subdivision Potential: 1 parcel is large enough to be further subdivided into 2 additional 10 acre lots
- Notes: Mauka of Old Māmalahoa Hwy at Kulaiwi Road, 7 lots Kulaiwi Rd. 7 lots lie in SLU urban and are analyzed in the Wailea/Hakalau town Analysis.

Kaiwiki 3rd Homesteads

- Location: Hilo Side of Hakalau Homesteads mauka of Old Māmalahoa Hwy
- Zoning: A-10a (50 Lots); A-20a (8 Lots)
- # Lots/% Occupied: 58/34% Occupied
- Water: No Water Available
- Electricity: Some Electric Available
- Roads:
 - North/South: Old Māmalahoa Hwy, Kanna Rd. (RIL), Ozaki House Rd.
 - Mauka/Makai: Access from Old Māmalahoa Highway via Kaiwiki Homestead Rd.
- Subdivision Potential: 25 parcels are large enough to be further subdivided into 67 additional 10 acre lots

Honomū Homesteads

- Location: Mauka of Honomū Town
- Zoning: A-20a
- # Lots/% Occupied: 28/21% Occupied
- Water: Water Not Available



- Electricity: Some Electric Available
- Roads:
 - North/South: 'Akaka Falls Rd (Por. RIL), Private Roads
 - Mauka/Makai: Access from Old Māmalahoa Highway via Akaka Falls Rd (Por. RIL); Private Roads
- Subdivision Potential: 5 parcels are large enough to be further subdivided into 16 additional 20 acre lots

Kaupakuea Homesteads

- Location: Mauka of Pepe'ekeo
- Zoning: A-10a
- # Lots/% Occupied: 27/59% Occupied
- Water: Water Not Available
- Electricity: Some Electric Available
- Roads:
 - North/South: Mauka Cross Country Rd., Private Roads
 - Mauka/Makai: Access from Old Māmalahoa Highway via Kaupakuea Homestead Rd. (Por. RIL) Private Roads
- Subdivision Potential: N/A

Kula'imano Homesteads

- Location: Mauka and Makai of Hwy 19 to the shoreline, Part of Pepe'ekeo Town
- Zoning: A-10a (50 Lots); A-20a (8 Lots)
- # Lots/% Occupied: 58/34% Occupied
- Water: No Water Available
- Electricity: Some Electric Available
- Roads:
 - North/South: Old Māmalahoa Hwy, Kanna Rd. (RIL), Ozaki House Rd.
 - Mauka/Makai: Access from Old Māmalahoa Highway via Kaiwiki Homestead Rd.
- Subdivision Potential: 25 parcels are large enough to be further subdivided into 67 additional 10 acre lots
- Notes: 22 lots lie in SLU urban and are analyzed in the Pepe'ekeo Town Analysis.

Ka'ie'ie 1st & 2nd Homesteads

- Location: Mauka of Old Māmalahoa Hwy in Pāpa'ikou
- Zoning: A-20a
- # Lots/% Occupied: 28/21% Occupied
- Water: Pāpa'ikou/Pauka'a Water System, Some Water Available
- Electricity: Some Electric Available
- Roads:
 - North/South: Ka'ie'ie Rd (Por. RIL), Kaapoko Homestead Rd.
 - Mauka/Makai: Access from Hwy 19 via Ka'ie'ie Rd (Por. RIL)
- Subdivision Potential: N/A

Kaapoko Homesteads

- Location: Mauka of Old Māmalahoa Hwy in Pāpa‘ikou
- Zoning: A-10a
- # Lots/% Occupied: 27/59% Occupied
- Water: Pāpa‘ikou/Pauka‘a Water System, Some Water Available
- Electricity: Some Electric Available
- Roads:
 - North/South: N/A
 - Mauka/Makai: Access from Old Māmalahoa Highway via Kaapoko Homestead Rd.
- Subdivision Potential: N/A

Kaiwiki 1st & 2nd Homesteads

- Location: Mauka of Kaiwiki
- Zoning: A-10a, A-5a, Open
- # Lots/% Occupied: 164/68% Occupied
- Water: Served by the Hilo Water System, Some Water Available
- Electricity: Some Electric Available
- Roads:
 - North/South: Kopa‘a Rd (Por. RIL), Kaapoko Homestead Road
 - Mauka/Makai: Access from Old Māmalahoa Hwy via Kaiwiki Rd (Por. RIL); Kamaehu Rd. (Por. RIL);
- Subdivision Potential:
 - 3 parcels are large enough to be further subdivided into 7 additional 10 acre lots
 - 4 parcels are large enough to be further subdivided into 11 additional 5 acre lots

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Assessing Existing Growth Patterns & Looking Ahead to the Future

For a century, residents of the Planning Area primarily lived in plantation towns and villages with compact design that provided easy access to schools, restaurants, shopping, health care, entertainment, and other amenities of community life.

In the past few decades, lands that were previously planted in sugar (including many of the 33 homestead settlement areas) were made available for residential development which created the opportunity for sprawling rural development. This trend of rural development was accompanied by outmigration of people from traditional towns and villages as resident’s sought employment outside of the Planning Area.

Potential future settlement patterns available to the Planning Area for development over the next 20 years should be evaluated based on the Community Objectives, Community’s Preferred Future Growth patterns, town/village capacity for growth, and General Plan Policies.

Values, Priorities, and Objectives

1 Through this CDP planning process, the community has articulated their desire to preserve the rural,
2 agricultural character of the region. Hāmākua communities identified a range of **values** related to
3 Hāmākua’s towns and villages:

- 4 ▪ **Community/‘Ohana:** community, aloha, education, ‘ohana, heritage, cultural & ethnic diversity,
5 rural/small town, agriculture, peace and quiet, lifestyle, no traffic, controlled development, sports
6 and outdoor recreation

7 Likewise, the community identified the following related **priorities** for the local economy:

- 8 ▪ Local business jobs, retail, services, dining, renewable energy, and housing

9 When considering the community’s values and priorities along with resources and challenges
10 summarized in the Community Profile and strategy area research, the Steering Committee adopted
11 several **Community Objectives** that speak directly to the Planning Area’s historic villages and towns:

- 12 ▪ Direct future settlement patterns that are sustainable and connected. Honor Hāmākua’s historic
13 and cultural assets by concentrating new development in existing, walkable, mixed-use town centers
14 while limiting rural sprawl.
- 15 ▪ Protect and nurture Hāmākua’s social and cultural diversity and heritage assets, including sacred
16 places, historic sites and buildings, and distinctive plantation towns.
- 17 ▪ Revitalize retail, service, dining, and entertainment centers that complement the community’s rural
18 character and culture.
- 19 ▪ Develop and improve critical community infrastructure, including utilities, healthcare, emergency
20 services, affordable housing, educational opportunities and recreational facilities to keep our ‘ohana
21 safe, strong, and healthy.

22 **Community Identified Preferred Future Growth Patterns**

23 Moreover, in the spring of 2012, the CDP Planning Team invited the community to a regional workshop
24 to provide feedback on strategies under consideration for the CDP, and to gauge the community’s
25 preferences on how and to what extent they wanted their towns and villages to grow.

26 To do this, the Team incorporated keypad polling feedback technology and facilitated small group
27 discussions to have participants consider “what is” versus “what can be” in their towns, and the
28 implications on the community’s vision broken down into the following clusters based on the three
29 pillars of sustainability:

- 30 ▪ **‘Āina/environment** – protected agricultural land, forests, waters, open spaces, and cultural/heritage
31 sites.
- 32 ▪ **Community** – distinctive towns/villages, schools, housing, health care, parks, roads.
- 33 ▪ **Local economy** – vibrant local businesses, living wage jobs, access to goods and services, agriculture,
34 ranching, and renewable energy.

35 Participants were then organized into groups based on town/village geographic location and provided
36 aerial maps of the town and an outline of the growth boundary from the GP LUPAG map/SLU Urban
37 designation, and a facilitator took them through the following questions:

38 **Current State** –

- 39 ▪ With the community’s vision in mind, what about your town is working now?

1 ▪ With the community’s vision in mind, what’s not working, what’s missing?

2 Possible Future State –

3 ▪ The County’s current policy allows expansion to the extent identified on the map. If it were allowed
4 to this extent . . .

5 ○ How could expansion help achieve the community’s vision?

6 ○ How could expansion work against the community’s vision?

7 Preference –

8 ▪ Considering all that we just discussed about the current and possible future state of your town . . .
9

10 ○ For each of you, would you like to see your towns expand to this extent (see map)? If not,
11 why? If yes, what should the expansion look like?

12 All of the raw data and results from these small group sessions and keypad polling can be found on the
13 Hāmākua CDP website¹⁸⁰, however the CDP summarized the results of the small group sessions and
14 keypad polling as follows:

15 **Small Group Sessions**

16 ▪ Participants were mostly happy with the way things are

17 ▪ But some town-specific improvements are needed

18 ○ Add affordable housing

19 ○ Improve highway intersections and alternate routes

20 ○ Add/improve infrastructure and facilities – sirens, ditches, trails, parks, restrooms

21 ○ Improve health, youth, and kupuna services

22 ○ Create community “spaces” – centers, gardens, etc.

23 ○ Expand agriculture and renewable energy

24 ▪ Participants wanted to focus on the quality of growth/development, not the quantity

25 ▪ If there is expansion, it should help with community improvements

26 ▪ Otherwise, maintain the current quality of life and preserve the small town, rural feel

27 ▪ Participants were cautious about potential impacts of growth and want it to be managed carefully

28 **Keypad Polling**

29 What type of growth is wanted?

¹⁸⁰<http://www.hawaiicountycdp.info/hamakua-cdp/steering-committee/steering-committee-meetings/march-29-2012-march-30-2012> & <http://www.hawaiicountycdp.info/hamakua-cdp/steering-committee/steering-committee-meetings/april-1-2012>

- 1 ▪ No growth or “other” (40%)¹⁸¹
- 2 ▪ Add population as needed by letting towns expand, but keep as much land in agriculture as possible
- 3 (33%)
- 4 ▪ Add population without expanding towns (fill in towns) (20%)
- 5 ▪ Add population as needed by letting towns expand to current allowable extent (7%)

6 **Benefits of Traditional Towns & Villages**

7 In support of the community’s preferred settlement patterns, the benefits of high-quality, traditional
8 villages and towns that are compact, walkable, and include a mix of uses are well-documented and
9 briefly discussed below.¹⁸²

10

- 11 ▪ **Stronger Community:** People living in walkable neighborhoods trust neighbors more, participate in
12 community projects and volunteer more than in non-walkable areas.
- 13 ▪ **Improved Health:** The average white male living in a compact community weighs 10 pounds less
14 than his counterpart in a low-density subdivision.
- 15 ▪ **Lower Infrastructure Costs:** Compact infrastructure is up to 47% less expensive than conventional
16 suburban development patterns.
- 17 ▪ **Lower Transportation Costs:** Households in drivable suburban neighborhoods spend on average
18 24% of their income on transportation; those in walkable neighborhoods spend about 12%.
- 19 ▪ **Cleaner Environment:** Less driving means less air pollution, including lower greenhouse gas
20 emissions.
- 21 ▪ **Greater Property Values:** Homes in walkable urban neighborhoods have experienced less than half
22 the average decline in price from the housing peak in the mid-2000s.

23 Advantages of Tradition Towns and Villages Include:

- 24 ▪ Well-connected organic street network
- 25 ▪ Walkability to daily needs
- 26 ▪ Compact development with a clear center and edge
- 27 ▪ Creates a unique rural sense of place
- 28 ▪ Preservation of open space and agricultural land
- 29 ▪ Provides a range of housing types
- 30 ▪ Supports economic activity
- 31 ▪ Formal public gathering spaces

181 Note, the option for “No Growth” was not available on the first night of the workshop (Honoka’a), but added at community request on the second night (Pāpa’ikou).

182 <http://www.placemakers.com/2012/09/13/places-that-pay-benefits-of-placemaking/>

- 1 Some disadvantages include:
- 2 ▪ Requires public facilities and services
- 3 ▪ New patterns of development can easily disrupt character

4 **Town/Village Capacity for Growth**

5 Considering the number of **existing buildable lots and entitlements** (areas zoned for residential growth, but not yet subdivided), the Planning Area already has room for growth. Based on Real Property Tax data, on average Hāmākua’s towns and villages (areas within the State Land Use Urban & Rural Districts) currently have a 22% vacancy rate.

9 Importantly, this analysis of buildable lots within in the towns and villages does not include:

- 10 ▪ The significant acreage of land already zoned for residential development in Pauka’a, Pāpa’ikou, Pepe’ekeo, Honomū, Pāpa’aloha/Laupāhoehoe, ‘O’ōkala, and Honoka’a that is not yet subdivided.
- 11
- 12 ▪ Legal non-conforming subdivisions (Add hyperlink): Portion of Haina Camp, Pā’auhau Village, Nakalei Camp, Kaohe Tract Subdivision, Milo Subdivision and Niu Camp in ‘O’ōkala, periphery portions of Wailea and Honomū, portions of Andrade Camp and Kula’imano Homesteads in Pepe’ekeo, and periphery portions of Pāpa’ikou, Pauka’a, and Kaiwiki.
- 13
- 14
- 15
- 16 ▪ The many small-acreage, agriculturally-zoned lots that could be subdivided in the future, outside of the SLU urban area.
- 17

18 In short, the Planning Area’s towns and villages have capacity to absorb growth. Assuming even the most explosive growth in the next 20 years and a conservative 3.0 people per household, there are already more than enough buildable lots and additional entitlements in place to absorb that growth.

19

20

21 **Table 33. Town Growth Capacity Table**

| Town or Village | Number of Lots ¹⁸³ | Number Vacant | % Vacant | Potential Lots Via Subdivision | Infrastructure Availability |
|-----------------|-------------------------------|---------------|----------|--------------------------------|---|
| Kukuihaele | 89 | 20 | 22% | 14 (with water variance) | Water – Moratorium Wastewater - Individual |
| Honoka’a | 906 | 166 | 18% | | Water – Restricted Wastewater - Sewer |
| Pa’auilo | 259 | 49 | 18% | 95 | Water – Limited Wastewater - Individual |
| ‘O’ōkala | 97 | 16 | 16% | 48 | Water – Limited Wastewater - Individual |

183 Parameters include lots the that fall within in the SLU Urban and Rural boundaries

| | | | | | |
|--|-----|-----|---|-----|--|
| Laupāhoehoe /Pāpa‘aloa | 432 | 187 | 43% | 230 | Water – No Restrictions Wastewater - Individual |
| Nīnole | 49 | 20 | 40% | 20 | Water – Limited Wastewater - Individual |
| Wailea/Hakalau | 104 | 42 | 40% | 60 | Water – Restricted Wastewater - Individual |
| Honomū | 218 | 32 | 15% | 133 | Water – No Restrictions Wastewater - Individual |
| Pepe‘ekeo | 536 | 59 | 11% | 80 | Water – Limited Wastewater - Sewer |
| Pāpa‘ikou | 602 | 115 | 19% | 502 | Water – Limited Wastewater - Sewer |
| Pauka‘a | 252 | 37 | 14% | 57 | Water – Limited Wastewater – Sewer/Individual |
| Wainaku/Kaiwiki | 351 | 54 | 15% | 88 | Water – Limited Wastewater - Individual |
| Water: | | | Wastewater: | | |
| <ul style="list-style-type: none"> ▪ Moratorium = Restrictions on Hookups, Subdivisions, ‘Ohana Dwellings, , Rezoning & SLU Boundary Amendments ▪ Restricted = Restrictions for Subdivisions, ‘Ohana Dwellings, Rezoning & SLU Boundary Amendments ▪ Limited = Restrictions for Rezoning & SLU Boundary Amendments | | | <ul style="list-style-type: none"> ▪ Individual - No Sewer Available, Individual Wastewater Systems allowed ▪ Sewered – Sewer Available | | |

1

2 General Plan Policies & Courses of Action

3 CDPs are intended to implement the broad goals within the County’s General Plan on a regional basis
4 and translate the broad General Plan statements to specific actions. It is important, therefore, to
5 consider General Plan policies specific to regional settlement patterns and courses of action specific to
6 Hāmākua:

7 Policies

- 8 ▪ 9.3(x): Vacant lands in urban areas and urban expansion areas should be made available for
9 residential uses before additional agricultural lands are converted into residential uses.

- 1 ▪ 11.1.3(e): Encourage the clustering of development in order to reduce the cost of providing utilities.
- 2 ▪ 13.2.3(b): Investigate various methods of funding road improvements, including private sector
- 3 participation, to meet the growing transportation needs of the island.
- 4 ▪ 13.2.3(d): Support the development of programs to identify and improve hazardous and
- 5 substandard sections of roadway and drainage problems.
- 6 ▪ 13.2.3(m): Develop minimum street standards for homestead and other currently substandard
- 7 roadways that are offered for dedication to the County to ensure minimal levels of public safety.
- 8 ▪ 13.2.3(q): Work in conjunction with the State to establish a clear agreement of the ownership and
- 9 maintenance of the old homestead roads.
- 10 ▪ 14.1.3(j): Encourage urban development within existing zoned areas already served by basic
- 11 infrastructure, or close to such areas, instead of scattered development.
- 12 ▪ 14.1.3(b): Promote and encourage the rehabilitation and use of urban areas that are serviced by
- 13 basic community facilities and utilities.
- 14 ▪ 14.2.3 (i) Designate, protect and maintain important agricultural lands from urban encroachment.
- 15 ▪ 14.2.3 (j) Ensure that development of important agricultural land be primarily for agricultural use.
- 16 ▪ 14.2.3(s): Important agricultural lands shall not be rezoned to parcels too small to support
- 17 economically viable farming units.
- 18 ▪ 14.2.3 (t) Discourage speculative residential development on agricultural lands.
- 19 ▪ 14.3.3(d): Convert existing strip development to more appropriate uses when and where it is
- 20 feasible.

21 **Courses of Action**

22 **South Hilo**

- 23 ▪ 13.2.5.2.2(b): Major east-west collector roads between the old Māmalahoa Highway and the Belt
- 24 Highway and those serving upper homestead areas should be widened and improved.

25 **North Hilo**

26 ▪ Commercial

- 27 ○ 14.3.5.4.2(a) Centralization of commercial activities in the Laupāhoehoe-Pāpa‘aloa area shall
- 28 be encouraged.
- 29 ○ 14.3.5.4.2(b) Appropriately zoned lands shall be allocated as the need arises.
- 30 ○ 14.3.5.4.2(c) Do not allow strip or spot commercial development on the highway outside of
- 31 the primary commercial area.

32 ▪ Industrial

- 33 ○ 14.4.5.4.2(a) Identify sites suitable for future industrial activities as the need arises
- 34 ○ 14.4.5.4.2(b) Encourage the rehabilitation of existing service-oriented industrial areas

1 **Hāmākua**

- 2 ▪ 13.2.5.2.2(a): Restore and maintain existing homestead roads.
- 3 ▪ Commercial
- 4 ○ 14.3.5.4.2(a) Centralization of commercial activities in the Honokaa area shall be
- 5 encouraged. Urban renewal of the area should be undertaken.
- 6 ○ 14.3.5.4.2(b) Suitable commercially zoned lands shall be provided as the need arises.
- 7 ○ 14.3.5.4.2(c) Encourage commercial activities within Honokaa town to promote and
- 8 enhance the history and culture of the paniolo and former sugar plantation.
- 9 ▪ Industrial
- 10 ○ 14.4.5.3.2(a) Identify sites suitable for future industrial activities as the need arises
- 11 ○ 14.4.5.3.2(b) Service oriented Limited Industrial and/or Industrial-Commercial uses may be
- 12 permitted in the Laupāhoehoe-Pāpa’aloo area although the area is not currently identified
- 13 on the LUPAG map.

14 **Previous Planning**

15 **The Kohala-Hāmākua Region General Plan (1963)**¹⁸⁴: This is a key comprehensive historical document.

16 Topics include sugar cane, macadamia nuts, forestry, diversified agriculture, land use, water resources,

17 recreation, environment, and tourism.

18 **A Plan for the Hāmākua District (1970)**¹⁸⁵: This is a joint COH, Departments of Planning and Research

19 and Development with the Hāmākua District Development Council. This is a brief study with extensive

20 input from HDDC committees with many ideas and concepts that may still be viable, but are so far not

21 implemented.

22 **A Plan for the North Hilo District (1970)**¹⁸⁶: This plan was prepared for the County of Hawaii and the

23 North Hilo Community Council and it contains informative information on the existing conditions of the

24 time and the consolidations of facilities and services already taking place due to changes in

25 transportation and other economic factors. It cites the expanding reliance on mechanization of

26 plantation agriculture as a reason for the declining rates of employment and populations as the next

27 generations seek employment and housing outside the region. It identifies a need for diversified

28 agriculture and expanding employment opportunities for women.

29 **Final Report, Hāmākua Humanities Project (1975)**¹⁸⁷: This report was based on matching funds from

30 the National Trust for Historic Preservation through its state affiliate, the Hawai’i Committee of the

31 Humanities, the Hāmākua District Development Council sponsored the project with several county and

32 state co-sponsors. This report had cross-sectional input from the community and consisted of a 12 page

33 grant proposal describing what later became the subtitle: A Study of Land Use, Cultural Diversity and

34 the Sense of Community in Hāmākua District Hawai’i : A Century in Perspective.

184 Bush and Gerakis, 1963; Tomich: Hawai’i Perspectives on Hāmākua History (2008), pg. 185.

185 Kasamoto (1970); Tomich: Hawai’i Perspectives on Hāmākua History (2008), pg. 185.

186 <http://www.hawaiicountycdp.info/hamakua-cdp/about-the-hamakua-cdp-planning-area/past-and-current-planning-activities-in-the-hamakua-cdp-planning-area/A%20plan%20for%20the%20N.%20Hilo%20District%20-%201970.pdf/view>

187 Hāmākua District Development Council (1975b); Tomich: Hawai’i Perspectives on Hāmākua History (2008), pg. 185.

1 **A Master Plan Proposal for Waipi’o Valley, Hawai’i , Draft Report (1975)** ¹⁸⁸: This plan was prepared by
 2 HDDC and involved a project that grew out of the Humanities Project – to evaluate Waipi’o Valley
 3 relative to its past and future in the face of encroaching pressures from unplanned development. Four
 4 major themes emerged: Agriculture, Recreation, Conservation, and Historical Values. There was some
 5 community opposition to some portions of the proposals, and the plan was ultimately shelved.

6 **Honoka’a Hawai’i: Guidelines and Recommendations for a Māmane Street Historic District (1976)** ¹⁸⁹:
 7 This was the second spin-off project from the Humanities Project that provides a highly professional
 8 evaluation of Honoka’a as a candidate for Historic District Registry. Many volunteers assisted in
 9 researching the status of old buildings along Māmane Street. There was some community opposition to
 10 seeking the Historic District designation but the issue is still being discussed as an option.

11 **Northeast Hawai’i Community Development Plan (1979)** ¹⁹⁰: this is a County of Hawai’i CDP that serves
 12 as an extension of the County General Plan adopted in 1971. This plan covers the districts of Hāmākua,
 13 North Hilo, and Rural South Hilo and addresses the various elements of the GP.

14 **Honoka’a Urban Design Plan (1979)** ¹⁹¹: Prepared for the County of Hawai’i with the help of a local
 15 advisory committee, this plan is an outgrowth of the General Plan of 1971 and the Northeast Hawai’i
 16 Community Development Plan of 1979. This plan’s recommendations sought to redefine segments of
 17 the descriptors for the Māmane Street Historic District designation and provided for adopting the
 18 Honoka’a Urban Design Plan into Ordinance 463.

19 **Laupāhoehoe Rural Design Plan (1979)**: ¹⁹² Prepared for the County of Hawai’i with the help of a local
 20 advisory committee, this plan is an outgrowth of the General Plan of 1971 and the Northeast Hawai’i
 21 Community Development Plan of 1979. The main goal of this plan is to maintain the rural character of
 22 Laupāhoehoe and Pāpa’aloa. The objectives of the plan are:

- 23 ▪ Maintain a feeling of country by retaining, expanding, and emphasizing open space;
- 24 ▪ Provide for the development of man-made features that do not visually overwhelm the existing
 25 structure and scale of the area and are compatible with the rural atmosphere;
- 26 ▪ Maintain agricultural uses and the existing visual mix of plant materials with in the study area.

27 **Hāmākua Regional Plan: From Kaia’akea to Waipi’o (1990)**: ¹⁹³ This plan was a joint regional planning
 28 effort involving several northeast Hawai’i communities, County, State, and private sector entities to
 29 deal with the closing of Hāmākua Sugar Company and the subsequent changes in land use and the local
 30 economy. This plan called for “the preservation of the Waipi’o Rim as unqualified precondition to
 31 consideration for development” (pg. iii), however, it also recommended controversial resort
 32 development within Waipi’o Valley. This plan makes various specific recommendations for the

188 Hāmākua District Development Council (1975b); Tomich: Hawai’i Perspectives on Hāmākua History 2008, pg. 186.

189 Preservation Press (1976); Tomich: Hawai’i Perspectives on Hāmākua History (2008), pg. 186.

190 <http://www.hawaii-county-cdp.info/hamakua-cdp/about-the-hamakua-cdp-planning-area/past-and-current-planning-activities-in-the-hamakua-cdp-planning-area/1-NEHI%20CDP-1979.pdf/view>

191 <http://www.hawaii-county-cdp.info/hamakua-cdp/about-the-hamakua-cdp-planning-area/past-and-current-planning-activities-in-the-hamakua-cdp-planning-area/Honokaa%20Urban%20Design%20Plan%201979.pdf/view>

192 County of Hawai’i, 1976, by EDAW Inc., and JHK Tanaka, Inc.

193 <http://www.hawaii-county-cdp.info/hamakua-cdp/about-the-hamakua-cdp-planning-area/past-and-current-planning-activities-in-the-hamakua-cdp-planning-area/2-Hamakua%20Regional%20Plan-1990.pdf/view>

1 northeast Hawai'i communities it references, including infrastructure improvements and growth
2 management strategies.

3 **A Plan for the Hilo Hāmākua Coast (2000)**¹⁹⁴: This plan was initiated by the Hilo Hāmākua Community
4 Development Corporation after the demise of the sugar industry with these objectives: create a diverse
5 and resilient economy based on local business ownership, expand local control of land and natural
6 resources, increase access to financing for entrepreneurial initiatives, and enhance educational and
7 other opportunities that foster cultural appreciation and intergenerational communication. The goals of
8 the plan include:

9 Strategies to use local knowledge and skills to facilitate local business ownership;

- 10 ▪ Citizen engagement in political, technical, and financial processes;
- 11 ▪ Programs and policies which bring young and old from throughout the region together for social,
12 cultural, and economic purposes;
- 13 ▪ Educational initiatives which foster personal health and a sense of place while protecting the ‘āina;
- 14 ▪ Basic improvements to community physical infrastructure;
- 15 ▪ Ongoing public involvement in research, planning, and development efforts

16 **Directing Future Growth Analysis Table**

17 Although the community desires to direct growth into towns and reduce rural sprawl, underlying land
18 use policies, entitlements, infrastructure constraints, economic factors, and to a lesser degree real
19 estate preferences have worked counter to realizing that vision. It is important to note that addressing
20 some of these factors are beyond the scope of this CDP, however the following table seeks to provide
21 CDP strategy directions to meet the community’s objectives.

22 **Table 34. Directing Future Growth Analysis Table**

| Challenges | Support/Rationale | CDP Strategy Direction |
|---|---|--|
| <p>The General Plan LUPAG map growth boundary (Low-Density Urban designation) allows for expansion well beyond the existing town area and SLU urban boundaries and encompasses large acreage of prime agricultural lands.</p> <p>LUPAG, Zoning, and State Land Use Designations are inconsistent in many towns and villages</p> | <p>Plan Support:</p> <ul style="list-style-type: none"> ▪ Northeast Hawai'i Community Development Plan (1979) <p>Policy Support:</p> <ul style="list-style-type: none"> ▪ General Plan 14.2.3 (i) (j) (s) (t) | <p>Land Use Policy Map: Identify urban growth boundaries and make recommendations on LUPAG amendments</p> <p>Land Use Policy Map: Identify conflicts</p> |

194 <http://www.hawaii-county-cdp.info/hamakua-cdp/about-the-hamakua-cdp-planning-area/past-and-current-planning-activities-in-the-hamakua-cdp-planning-area/Hilo%20Hamakua%20plan.pdf/view>

| | | |
|---|--|--|
| <p>Lack of infrastructure (particularly water availability) is a major impediment to developing greater density and directing growth within the towns and villages</p> | <p>Plan Support:</p> <ul style="list-style-type: none"> ▪ Northeast Hawai'i Community Development Plan 1979 ▪ A Plan for the Hilo-Hāmākua Coast ▪ Hāmākua CDP Community Vision & Objectives <p>Policy Support:</p> <ul style="list-style-type: none"> ▪ General Plan 9.3(x); 11.1.3(e); 14.1.3(b); 14.1.3(j); 14.1.3(b); 14.2.3 (i); 14.2.3 (j); 14.2.3(t) | <p>Advocacy: Encourage Department of Water Supply to prioritize water system capacity expansion and allocation polices to concentrate growth within existing towns and villages</p> <p>CBCA: Interested communities can explore alternative infrastructure funding options</p> |
| <p>County unable to provide comprehensive town level community plans for each of the Planning Area's Towns and Villages through CDP</p> | <p>Plan Support:</p> <ul style="list-style-type: none"> ▪ Northeast Hawai'i Community Development Plan 1979 ▪ Laupāhoehoe Rural Design Plan ▪ Honoka'a Urban Design Plan ▪ Policy Support: 14.1.3(j); 14.1.3(b) | <ul style="list-style-type: none"> ▪ Policy/CBCA: Direct county to partner with willing communities to develop town revitalization plans |
| <p>Population growth within town and villages is stagnant, and in some cases, towns have lost population (3% growth over 20 years);</p> | <p>Plan Support:</p> <ul style="list-style-type: none"> ▪ Northeast Hawai'i Community Development Plan 1979 <p>Policy Support:</p> <ul style="list-style-type: none"> ▪ General Plan 9.3(x); 11.1.3(e); 14.1.3(b); 14.1.3(j); 14.1.3(b); 14.2.3 (i); 14.2.3 (j); | <p>Policy: Encourage county to explore infill incentives to facilitate growth and re-development of towns/villages</p> |
| <p>Loss of agricultural land to non-agricultural uses (residential</p> | <p>Plan Support:</p> | <p>Land Use Policy Map: Designate Hāmākua's Kula (Agricultural</p> |



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| <p>development without the associated agricultural use) and increased conflicts between farmers and ranchers and new, non-farming residents</p> | <ul style="list-style-type: none"> ▪ Northeast Hawai'i Community Development Plan 1979 <p>Policy Support:</p> <ul style="list-style-type: none"> ▪ General Plan 9.3(x); 14.1.3(b); 14.1.3(j); 14.2.3 (i) 14.2.3 (j); 14.2.3(s); 14.2.3 (t) | <p>Land) Sector to be preserved for agriculture and open space</p> <p>Policy: Guidance to Planning Department on Land Use Applications in the Kula Sector</p> <ul style="list-style-type: none"> ▪ SLU Boundary Amendment/Rezone ▪ Special Permit including types of special permits to allow ▪ Use Permit ▪ Subdivision ▪ Variance ▪ Additional Farm Dwelling and Ohana ▪ Plan Approval <p>Policy: Property Tax incentives for actual farm activity and dedications as well as increased scrutiny and enforcement mechanisms</p> <p>Policy: Encourage Rural cluster development</p> <p>Policy: Develop a Transfer of development rights policy for the County of Hawai'i</p> <p>Policy/CBCA: Education for new buyers on agricultural land use and right to farm laws.</p> |
| <p>Substandard homestead roads without clear understanding of who is responsible for maintenance</p> <p>Many homestead bridges are structurally deficient</p> | <p>Plan Support:</p> <ul style="list-style-type: none"> ▪ Capital Improvement Budget <p>Policy Support:</p> <ul style="list-style-type: none"> ▪ General Plan 13.2.3(b); 13.2.3(d); 13.2.3(m); 13.2.3(q); South Hilo 13.2.5.2.2(b); Hāmākua 13.2.5.2.2(a) | <p>Policy: Encourage DPW to adopt and implement a "Rural Road Standard" to minimize road construction/maintenance costs, bring road sizes in line with rural character and allow more rural roads to be added to the County's Road Inventory</p> |

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| <p>There are approximately 2,000 buildable lots with potential for further subdivision for an additional 1,000 lots with few infrastructure/permitting constraints.</p> | <p>Policy Support:</p> <ul style="list-style-type: none"> ▪ General Plan 11.1.3(e); 14.1.3(b); 14.1.3(j); | <p>Policy/CBCA: Explore alternative parcel configuration mechanisms such as land banking and Rural Cluster Development.</p> |
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