



STRATEGIES  
UNDER CONSIDERATION

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Aloha Kakou:

We, the Hāmākua Community Development Plan (CDP) Steering Committee thank you for reading this *Strategies Under Consideration* booklet and taking interest in the future of your community.

To be clear, this booklet is not the Hāmākua CDP—we are not there yet. Rather, the booklet lays out the proposed ideas and strategies that could become the building blocks for the CDP. The purpose of the booklet is to seek your input on these ideas while they are still being formulated and before they are finalized in the CDP.

The process to develop the CDP started two years ago when we held Talk Story sessions in community centers, residents' homes, churches, schools, with over 2,400 of you participating and sharing your values and vision of Hāmākua's future. Guided by this vision, the County and the consulting team have spent these past 12 months gathering data, holding workshops, compiling maps and synthesizing the ideas that are presented in this booklet.

The booklet presents questions where we particularly seek your input; however, your feedback is not limited to these questions. Your thoughts, combined with the continued work of the consulting team to refine these ideas, will be leading up to a regional workshop in 2012 where all are invited to put our minds together to brainstorm ideas, resolve issues, and work out the details on how to make this Plan happen. We are creating a Plan that captures our passions and sets forth a roadmap for a better future and we need input and inspiration to develop such a plan.

We will provide more details about this regional workshop over the next few months so that you will have ample time to prepare to further participate in shaping your community's future. If you have questions, want more information, or want to share your thoughts, please feel free to talk to any of us, or contact the Planning Department:

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# 1 INTRODUCTION

## *What is a Community Development Plan?*

A Community Development Plan (CDP) is an official plan authorized by the County of Hawai'i General Plan that translates the broad goals and objectives of the General Plan to the unique needs and conditions of a region. The CDP is adopted by ordinance and therefore has the force and effect of law.

This Hāmākua Community Development Plan is a long-range plan with a 25-year time horizon, from 2010 to 2035. A kindergartner today would grow into a young adult of 30 years old during this planning period.

## *Planning Area*

Located in the northeastern portion of the Island and County of Hawai'i, the Hāmākua CDP planning area encompasses the judicial districts of Hāmākua and North Hilo, and a portion of the South Hilo district referred to as Rural South Hilo (the "Planning Area" or "Hāmākua") (see Location Map on next page). The southern boundary of the Planning Area follows the current Council District 1 boundary.

The Planning Area totals approximately 1,011 square miles, which is approximately 25% of the total land area of the island. The Planning Area includes the communities of Waipi'o Valley, Kukuihaele, Honoka'a, Pā'auhau, Āhualoa, Kalōpā, Pa'auilo, 'O'ōkala, Laupāhoehoe, Pāpa'aloa, Nīnole, Umauma, Wailea, Hakalau, Honomū, Pepe'ekeō, Pāpa'ikou, Pauka'a, Wainaku, Kaiwiki and other small communities in between.

## *Purpose of this Plan*

The purposes of the Hāmākua CDP are:

- To identify and build upon the unique characteristics and strengths of the place and its people;
- To articulate a vision that unifies and inspires a collective commitment and action;

- Consistent with the unique characteristics and vision, develop goals, objectives, and implementation strategies:
  - To guide future growth to appropriate areas;
  - To set in place the building blocks for an economy and lifestyle that can sustain the next and following generations;
  - To identify and prioritize infrastructure and public facilities at an appropriate level of service for this rural area;
  - To create a plan of action and institutional framework where government and the people work in proactive partnership;
  - To identify appropriate updates to the General Plan that are more consistent with the values and needs of the people of this Planning Area.

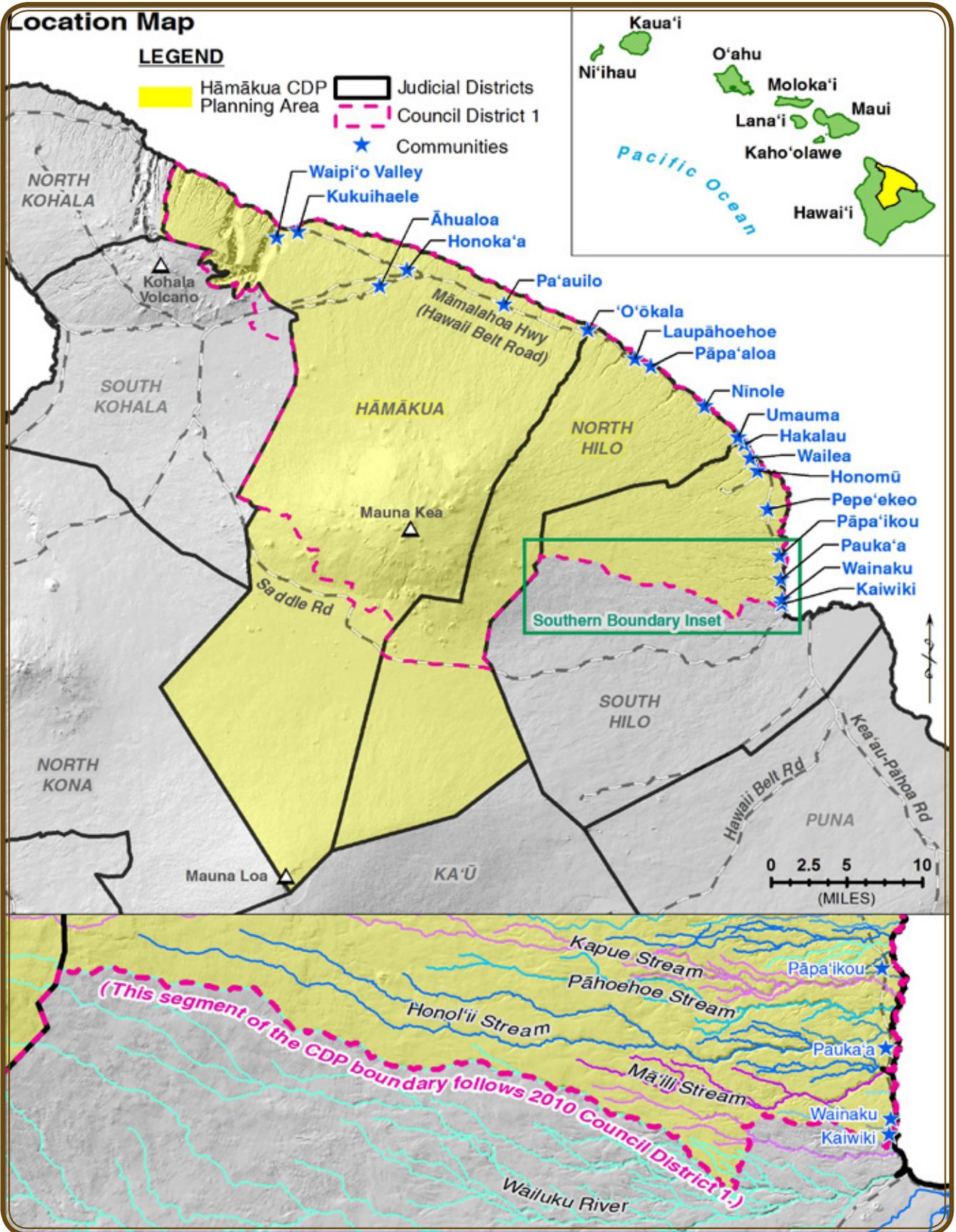
## *Notes to Reader:*

### *Additional Information*

At the end of each chapter you will see the above heading followed by a list of additional resources and information which helped inform the creation of the Proposed Strategies Booklet. This additional information is linked to documents and pages on the Hāmākua CDP website ([www.hamakuacdp.info](http://www.hamakuacdp.info))

Also:

Questions to the Reader are highlighted in these boxes at the end of each chapter.





## 2 VALUES AND VISION STATEMENT

The Hāmākua vision statement below is based on broad community input through surveys and Talk Story sessions, and adopted by the Steering Committee in March 2011:

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*We, the residents of Hāmākua recognize that the foundation of our life, livelihood and well-being comes from the ʻāina—the land, the seas, the rivers and streams, the forests, and the skies. As active stewards, we mālama the ʻāina as the source of sustenance for ourselves and future generations. This Kanaka Maoli wisdom guides our actions with the principle that “what is good for the land, is good for the people.”*

### **‘O ka mea kūpono ʻāina ka mea kūpono kanaka.**

*Our pristine landscapes and rich agricultural lands from mauka to makai, native forests to coastal waters, streams and watersheds, the sweeping views and open spaces are protected and enhanced. We protect our culturally significant and sacred places, and nurture our diverse cultural and plantation heritage. Access to natural resources and care for the ʻāina supports and perpetuates subsistence and recreation, Native Hawaiian, and other cultural traditions.*

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

*Our vibrant economy is based on local businesses that are able to provide living wage jobs and ensure access*

*to goods and services so that our families can work and shop close to home. We produce and rely on clean, renewable energy to power our communities and businesses.*

*Our high quality of life is rooted in our strong sense of ʻohana 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.*

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

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### 3 GROWTH MANAGEMENT

*Desired Outcome: In 2035, Hāmākua maintains its natural and historic character. Environmentally significant areas restored and protected. Villages and towns have grown into compact walkable communities, and lands between towns are primarily in productive agricultural use. Sacred and significant places and features are protected and managed.*

#### Objectives

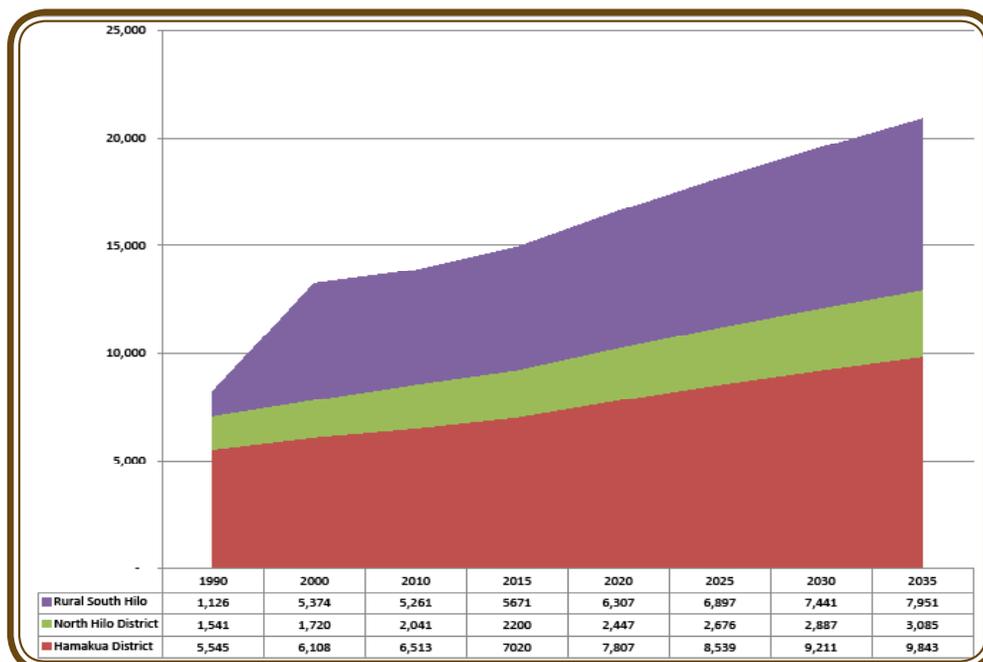
The vision above translates into the following objectives:

- **Develop an Official Land Use Map** to guide future growth, that will:
  - **Identify areas that should be protected and/or restored** for their many values including native habitat, health of streams, nearshore waters, and scenic beauty;
  - **Identify areas where growth should be directed** by defining urban boundaries, facilitating town and village revitalization, and discouraging rural sprawl;
  - **Officially designate sacred/unique places and features** to position them for broader recognition, funding, and/or special controls.

#### Past Growth Trends and Future Projections

The CDP Planning Area has grown relatively slowly over the last two decades with the growth rate significantly leveling between 2000 and 2010 (compound annual growth rate of 0.5%), compared to the growth rate during the prior decade from 1990 to 2000 (4.9%) (U.S. Census).

Based on the State Department of Business and Economic Development’s population projection to the year 2035 and the County’s General Plan projection, the Planning Area’s compounded annual growth rate from 2010 to 2035 is projected at 1.7%. At this growth rate, the Planning Area’s population will comprise 8% of the County in 2035, ranking as the 5th most populated area in the County out of 8 areas. The Table below illustrates the past trends and future growth projections.



### Official Land Use Map

A proposed strategy to guide future growth is to include an official land use map in the CDP (Proposed Official Land Use Maps can be seen on pp. 10-12 - Please note, these maps are a draft and a subject to further refinement). This map would:

- Recommend changes to the General Plan map (the General Plan refers to this map as the Land Use Pattern Allocation Guide Map, or LUPAG);
- Officially designate special features (e.g. the Old Māmalahoa Highway as a Heritage Corridor);
- Identify areas that require special attention such as significant view corridors.

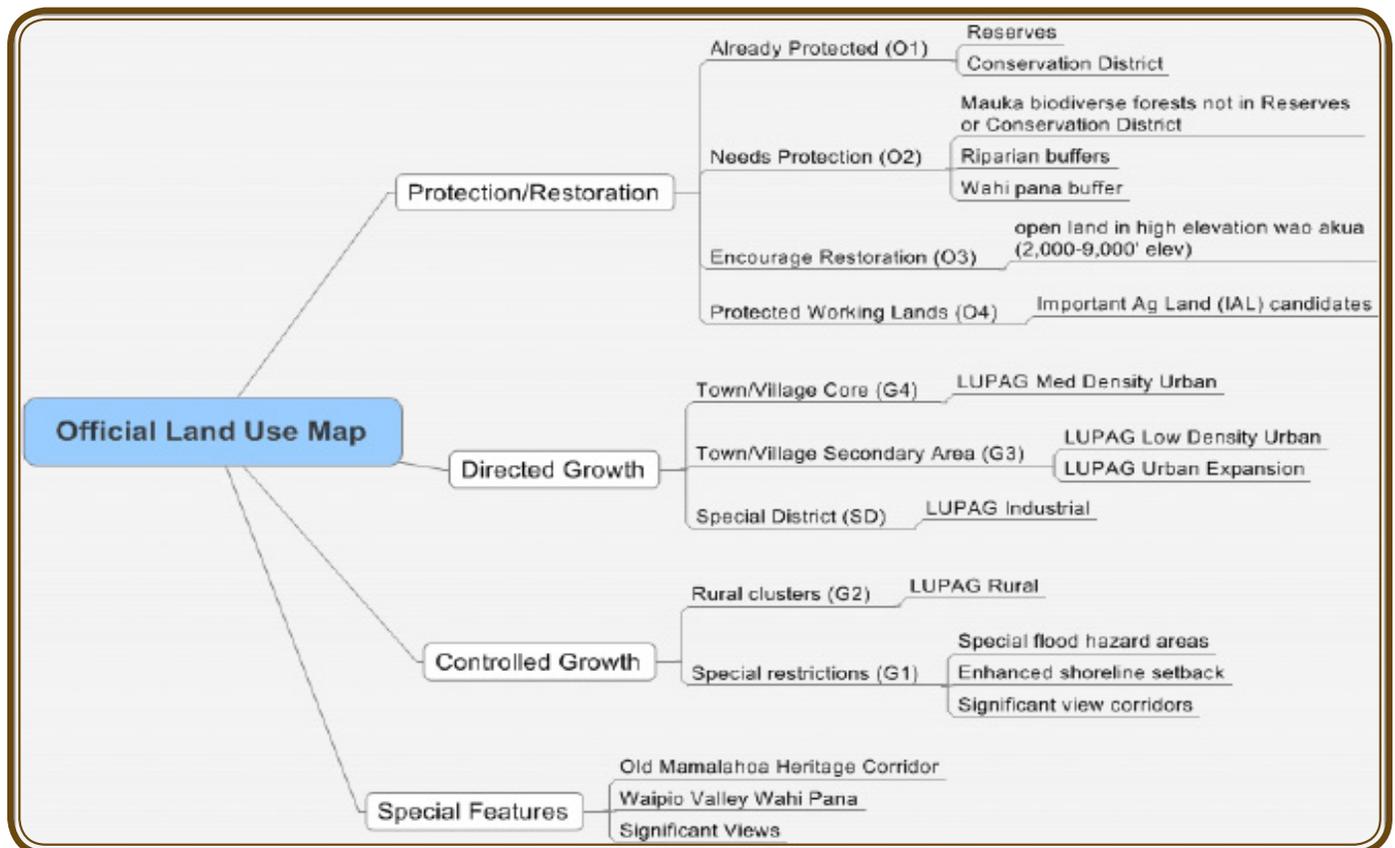
**Strategy 1: Identify Areas That Should Be Protected or Restored (Designated as “O” for Open)**

All lands within the Planning Area would be classified into one of the categories shown in the figure below.

These include:

- Areas are already protected and require continued Support (O-1), such as existing reserves and lands within the Conservation District;
- Areas that should be protected but currently are not protected (O-2), such as unprotected native forest areas, watersheds of outstanding streams, and Waipi’o Valley;
- Areas that should be encouraged to be restored to improve watershed health (O-3), proposed as the elevation range where native forests grow best (2,000 - 9,000 feet elevation). These areas would receive high priority for restoration incentives. Since these incentives are often competitive and have limited funds, the official recognition of these areas as priority restoration areas may help land-owners to justify selection of their property; and
- Areas that are prime working lands for agriculture (O-4).

For agricultural lands (O-4), the State Constitution provides special protections for Important Agricultural Lands (State IAL). Act 183/2005 defined the State IAL to include lands that are capable of sustaining high yields for export or local consumption, and needed for future self-sufficiency even if currently not in produc-



tion. The criteria to identify State IAL, listed in HRS 205-44, include: suitable soil qualities, availability of infrastructure, existing or traditional agricultural use, lands identified under productivity rating systems. The State Department of Agriculture emphasizes retention of agricultural land in blocks of contiguous, intact, and functional land units large enough to allow flexibility in agricultural production and management. The designation as a State IAL has two important implications:

- The land effectively will remain perpetually in agriculture due to the 2/3 super-majority required to change the classification; and
- The lands become eligible for special incentives such as:
  - Income tax credits for agricultural infrastructure costs (e.g., roads, utilities, water, feasibility studies, equipment, legal and accounting services) as certified by the State Department of Agriculture (DOA may certify credits up to \$7.5 Million annually);
  - Loan guaranty up to 85% of the loan amount resulting in lower interest rate (1% below lender's prime rate);
  - State assistance for water improvements;
  - Agricultural processing priority through the Department of Health;
  - Property tax under the most favorable agricultural rates.



*Agricultural Activity, Pepe'ekeō*

The proposed intent of the O-4 designation through the CDP is to give priority for the IAL incentives to the following types of lands or agricultural activities:

- Lands capable of sustaining high yields—ALISH

prime or unique; LSB B (there are no A lands on the island);

- Lands within agricultural clusters under the concept discussed in the Economic Development chapter; if not rated as ALISH prime or unique or LSB B, these lands would automatically be considered O-4 upon designation as IAL pursuant to the farmer-initiated process;
- Timber lands that are designated in ALISH or LSB as prime would be higher candidates for alternative successive agricultural use after the harvesting of timber.

For lands ultimately designated State IAL, the CDP will propose the following policies to preserve the viability of agricultural use of these lands:

- Special Permits. Impose a stricter scrutiny (e.g., the special permit criteria in the Zoning Code's Intensive Agricultural (IA) district) to ensure that non-agricultural use will not fragment or detract from economical agricultural use of lands in the vicinity and that there are no reasonable alternative non-IAL sites. This stricter scrutiny is consistent with the objective of the IAL law to "direct non-agricultural uses and activities from important agricultural lands to other areas and ensure that uses on important agricultural lands are actually agricultural uses" (HRS 205-43) and the additional level of review for Special Permits on IAL lands (HRS 205-50);
- Minimum Lot Size. Establish that zoning designations consistent with the IAL designation are limited to Agricultural (A) or Intensive Agricultural (IA) which have a minimum lot size of five acres, and that Family Agricultural (FA) and Residential Agricultural (RA) with minimum lot sizes less than five acres would not be consistent.
- The State IAL designation allows farm dwellings and employee housing.

***Strategy 2: Identify Areas Where Growth Should Be Directed (designated as "G" for Growth).***

These areas include:

- Higher density town core (G-4) that would serve

as the town center with a mix of commercial and residential uses;

- Secondary urban area (G-3), primarily residential, that would effectively define the urban boundary growth limits;
- Special areas (Special Districts or SD), such as Industrial, as appropriate;



*Downtown Honomū is a good example of a Higher-Density Town Core*

Factors considered in defining the proposed growth areas include:

- The amount of available residentially zoned land within the existing town/village that are presently vacant that can absorb future growth;
- The amount of land required to accommodate the projected population;
- Capacity of water and wastewater infrastructure systems;
- Consistency among the State Land Use, LUPAG, and zoning designations;
- Topography and drainage;
- Critical mass of population to support the desired commercial;
- Compactness in terms of a walkable distance from the town center;
- Maintaining a rural character;
- Promoting local food production and consumption.

Higher density core areas are proposed in the following towns:

- Kukuihaele

- Honoka'a
- Pa'auilo
- 'O'ōkala
- Laupāhoehoe
- Hakalau
- Honomū
- Pepe'ekeō
- Pāpa'ikou

***Strategy 3: Identify Areas That Can Accommodate Growth But Require Special Controls (designated as "G").***

These are areas where growth would not be encouraged, but the choice would remain to develop with conditions. These areas include:

- Areas that do not possess significant natural or agricultural resource values (G-2) but require special controls to deter sprawl;
- Areas that have special concerns (e.g. hazards) or features (e.g., significant view plane) where the underlying permitted use may proceed with special restrictions (G-1).

The vast agricultural areas between the existing towns and villages have the potential to become sprawled with large-lot homesites. Development rights that are already in place would not be affected, such as grandfathered use on agriculturally-zoned homestead lots since they were created prior to the enactment of the State Land Use Law (unless the lots were reconfigured). Residential development is also a permitted use on existing Rural-zoned lots.

For agriculturally-zoned lands that are not within the above areas, subdivision or homesites could be discouraged by:

- Stricter criteria or monitoring for properties granted agricultural use property tax rates; or
- Not allowing hookup to the County water system without a 10-year agricultural dedication or agricultural easement over at least 85% of the arable portion of the lot.

**Strategy 4: Identify Special Designated Features**



*Section of the Old Māmalahoa Highway, Āhualoa*

**Old Māmalahoa Heritage Corridor**

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

- 1) Provide an official status to the designation through the CDP’s Official Map, which will be adopted as an ordinance;
- 2) Redefine the Heritage Corridor to be the Old Māmalahoa Highway;
- 3) Position this redefined Heritage Corridor for recognition as a Scenic Byway under the State and Federal programs to qualify for funding and expanded market exposure.

The Heritage Corridor could serve as an economic catalyst to attract primarily those visitors who value learning about the heritage of an area, desire a more personable experience, travel in smaller groups or independently, or prefer to slowly move through the area to savor the experience. The traditional large tour buses would stay on the Belt Highway. The economic role of the Old Māmalahoa Heritage Corridor is explained further in Chapter 4 - Economic Development.

**Significant Views**

The criteria, selection process, and implementation measures to preserve significant viewsheds are set forth in Chapter 5 - Natural and Cultural Resources Management. The Official Map would identify the vantage points and any associated lands subject to special restrictions or incentives to preserve the viewshed.



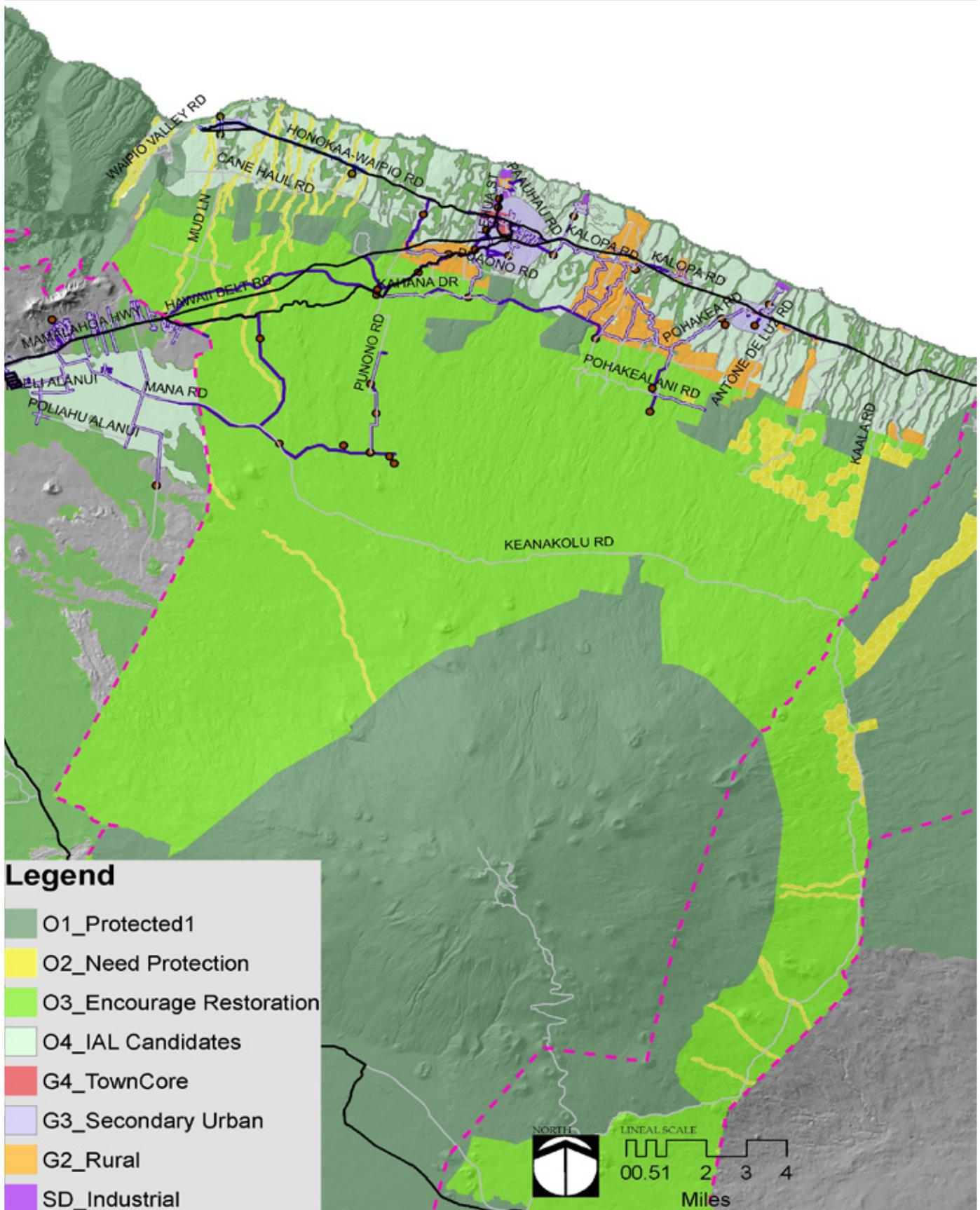
*View of Mauna Kea from Hāmākua Coast*

**Waipi’o Valley Wahi Pana Designation**

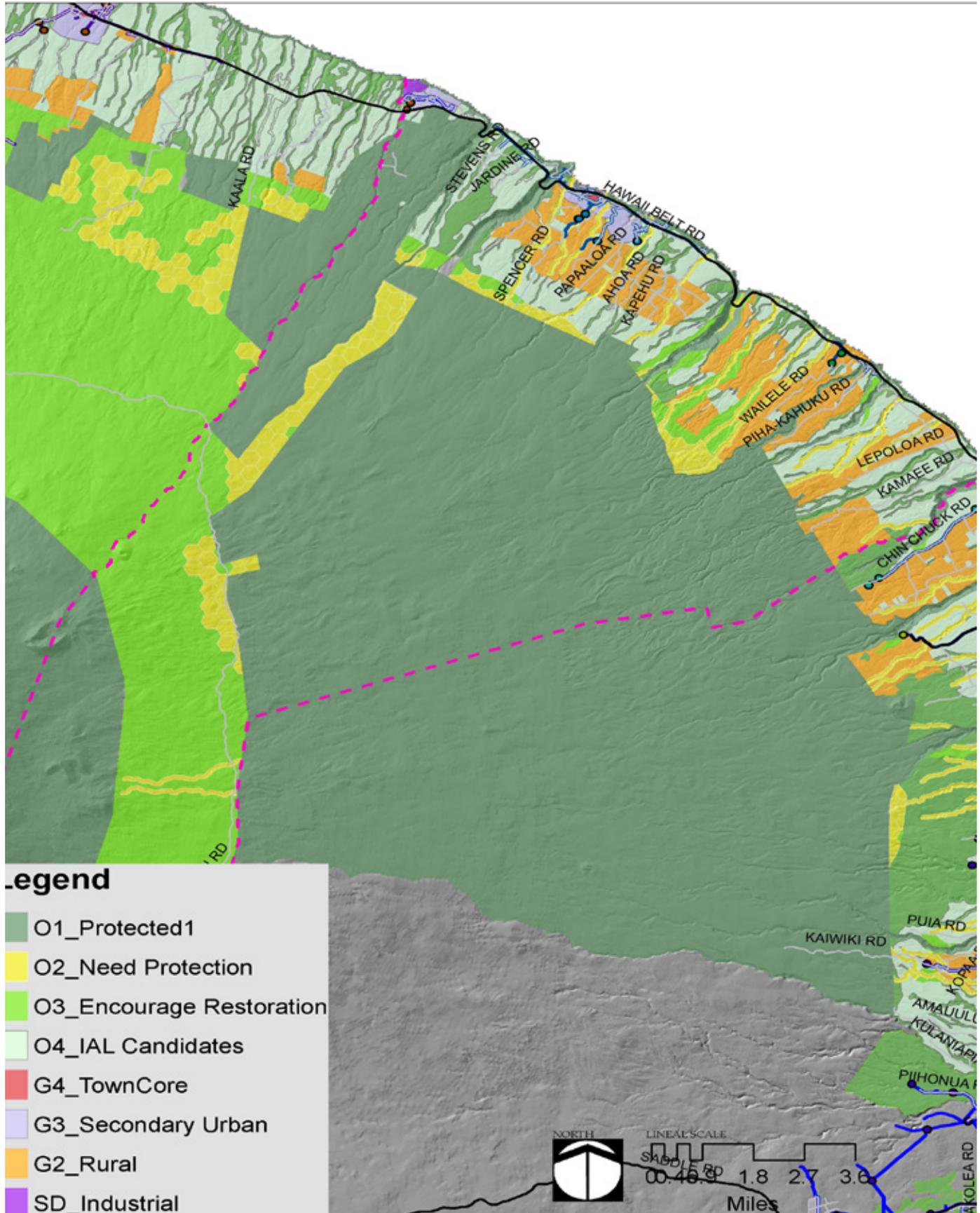
Waipi’o Valley is a significant natural and cultural treasure. The rationale, intent, and alternative designations to officially recognize Waipi’o Valley are set forth in the chapter on Natural and Cultural Resources Management. As a feature on the Official Map, the CDP could be used as support from the County and community for nomination to an appropriate designation determined by the stakeholders of Waipi’o Valley as part of the CDP.



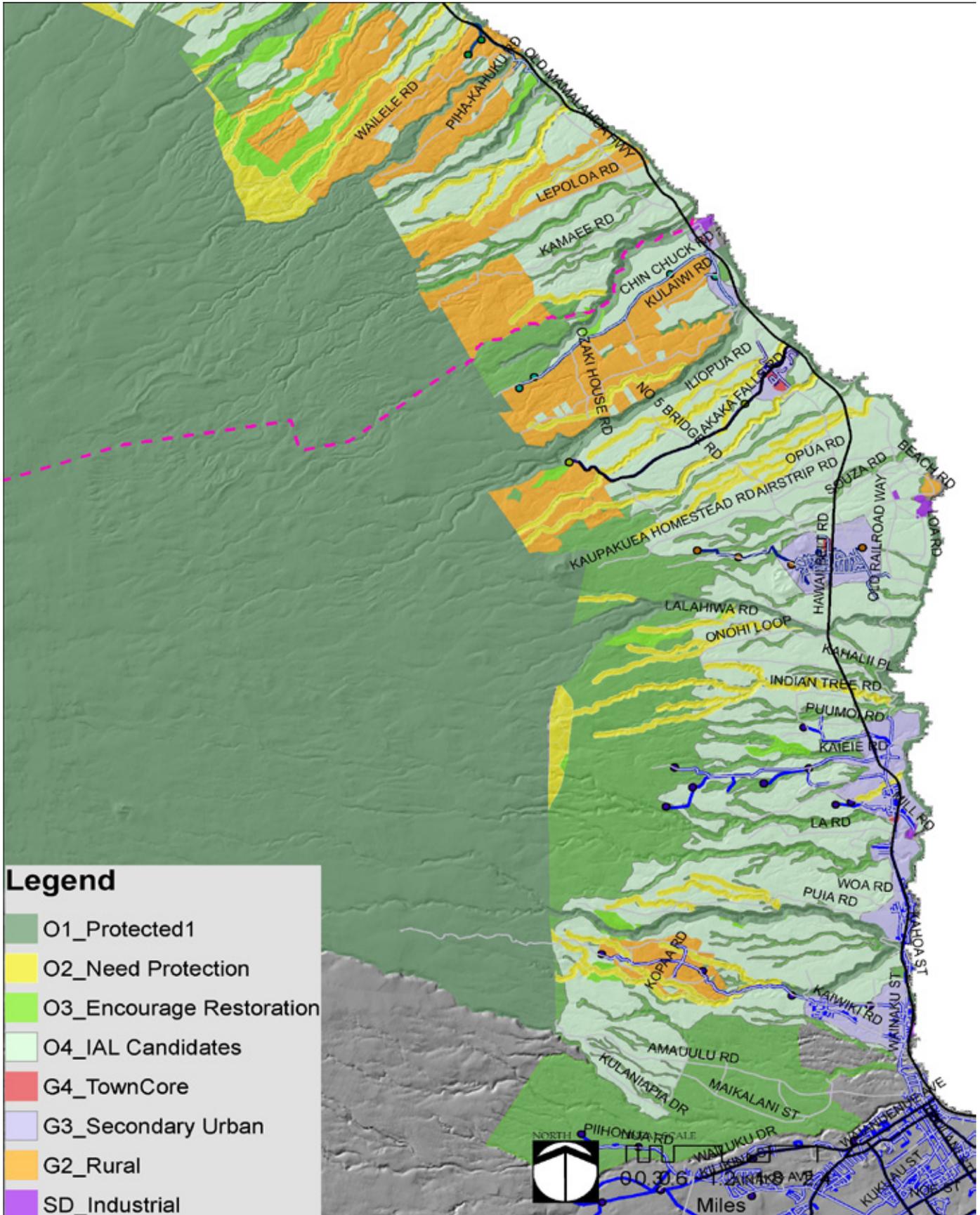
Proposed Official Land Use Map - Hamakua (Draft - subject to further refinement)



Proposed Official Land Use Map - North Hilo (Draft - subject to further refinement)



Proposed Official Land Use Map - Rural South Hilo (Draft - subject to further refinement)



*Additional Information:*

- **Consistency with CDP Values & Vision** [[link](#)]
- **General Plan references** [[link](#)]  
Information pertaining to Growth Management strategies can be found in the Land Use chapter starting on page 14-1; related subjects can be found in the chapters on Historic Sites (6-1), Natural Beauty (page 7-1), and Natural Resources and Shoreline (8-1).
- **CDP Community Profile References** [[link](#)]  
For more information on Land Use patterns and issues of the Planning Area, please see the Hamakua CDP Community Profile, starting on page 8-1.
- **Land use control system overview** [[link](#)]
- **State Important Agricultural Lands (IAL) program** [[link](#)]
- **Countywide population projection by Districts** [[link](#)]
- **Building permit trends** [[link](#)]
- **Population projection and infrastructure capacity assessment by towns** [[link](#)]

***Questions to the Reader***

1. Areas to protect-- are there other areas already protected that should be included?
2. Areas to encourage restoration-- are there any concerns with the proposed criteria to identify these areas that should receive priority for restoration incentives?
3. Important agricultural lands-- the relationship of the CDP to the upcoming State Important Agricultural Lands (IAL) program is an open question. The proposed approach is to limit the IAL to the best food production lands-- any comments or suggestions?
4. Town core and urban boundary areas-- do you agree with the proposed criteria and areas mapped as G-4 (town core) and G-3 (secondary area that defines the growth boundary)?
5. Restricted growth control areas-- the non-IAL lands outside of the town and villages are a challenge to control development; are the proposed measures effective or unfair?
6. Special designations-- do you agree to include these special features on the Official Map; are there other features that should be included?

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## 4 ECONOMIC DEVELOPMENT

*Desired Outcome: In 2035, residents of Hāmākua are prospering because of a thriving and sustainable economy that they have built from the distinctive natural, cultural, and historical assets. The foundation of their economy is a vibrant local food production sector that sustains the rural lifestyle and close sense of community that is at the heart of life within the Planning Area.*

*Clusters of farms are linked together in support networks that provide economies of scale; improved distribution systems for and access markets; a range of innovative research, technical and financial support; and facilities that add value and reduce input costs. Hāmākua farming and ranching communities are leaders in sustainable practices that serve to maintain and protect the natural and cultural assets that make Hāmākua a special place.*

*Hāmākua’s regional “flavor” is world renowned and has market value based on the commitment of local businesses, farmers, and ranchers to create a common image which implies a unique blend of health and wellness, environmental respect, rural lifestyle, and tradition. This regional recognition stimulates town and village revitalization in the region, drives on-going innovation and entrepreneurship, and provides products and services for residents that keeps money and resources flowing within the community.*

*This strong regional image also supports a diverse range of economic sectors that complement and supplement Hāmākua’s agricultural base. There is a viable health and wellness sector that provides employment while allowing Hāmākua’s kūpuna to “age in place”; a diverse timber industry that contributes to the area’s energy needs while providing a diversity of hard woods for crafting, furniture, and construction materials; restaurants featuring local grown and produced ingredients; personalized visitor experiences that emphasize sharing the culture and traditions of the area; and artists and artisans furthering the Hāmākua image with their creative interpretations.*

*On-going economic development efforts reflect the deep understanding and belief within the Planning Area that if you take care of the land and its people first, the rest will follow in a pono and enduring way.*

### **Objectives**

The vision above translates into the following objectives:

- **Encourage Food Production Networks** that reduce production costs, expand market opportunities, and add value to make more viable, sustain, and maintain Hāmākua’s rural/agriculture lifestyle.
- **Articulate a “Hāmākua” Image & Ethic** to distinguish and synergize a diversity of products and services bound to a set of common principles that promotes the Region’s brand/flavor.
- **Facilitate Appropriate Visitor-Supported and Healthcare Business Opportunities** within the Towns and Villages to diversify the economic opportunities.
- **Maintain, Contain, and Diversify the Timber Industry** as contributing and complementary component of the region’s economy.
- **Develop Support Networks** to encourage on-going economic, educational, and technological innovation that builds resident and community capacities to generate better entrepreneurial and employment opportunities into the future.

### Strategic Framework For Economic Development In Hāmākua

<p><b>Vision &amp; Values</b></p>	<p>“Hāmākua is a rural community of <b>distinctive small towns and villages</b> thriving on <b>sustainable agriculture and ranching</b> to provide ourselves and the rest of Hawai‘i with <b>healthy food and locally grown products</b>. Our vibrant economy is based on <b>local businesses</b> that are able to provide <b>living wage jobs</b> and <b>ensure access to goods and services</b> so that our families can work and shop close to home. We produce and rely on <b>clean, renewable energy</b> to power our communities and businesses. Our high quality of <b>life is rooted in our strong sense of ‘ohana and community.</b>”</p>		
<p><b>Guiding Principles &amp; Approach</b></p>	<p><b>Regional Flavor</b> – a community-based economic development approach that builds a local economy from its sense of place, identity, history, and community to distinguish its locally produced goods and services in the marketplace.</p> <p><b>Network Approach</b> – support system of networks that coordinate and link a range of resources, facilities, programs, services, and relationships to encourage economic development and entrepreneurial innovation on an on-going basis.</p>		
<p><b>Core Strategies</b></p>	<p>1. <b>Expand &amp; Sustain The Local Food Production Sector.</b></p>	<p>2. <b>Develop Diverse &amp; Synergistic Economic Sectors To Strengthen “Regional Flavor”.</b></p>	<p>3. <b>Encourage On-Going Economic &amp; Entrepreneurial Innovation.</b></p>
<p><b>Strategic Actions</b></p>	<p>a. Encourage the formation of <b>aggregation centers</b> and <b>support networks</b> that enhance the cost efficiency and viability of farming and ranching activities.</p> <p>b. Support and expand Hāmākua’s <b>grass-fed beef</b> industry.</p> <p>c. Develop appropriate <b>agriculture visitor experiences</b> by capitalizing on the slow food and food security movement.</p> <p>d. Encourage and expand <b>value-added agriculture</b> production.</p> <p>e. Develop <b>farm-to-school</b> and school-to-farm efforts to sustain Hāmākua’s identity as an agricultural community.</p>	<p>a. Establish and develop the <b>Old Māmalahoa Heritage Corridor</b> to catalyze town revitalization.</p> <p>b. Encourage appropriate, cultural-based, and personalized <b>visitor experiences</b> by establishing gateways to the planning area.</p> <p>c. Nurture <b>health and wellness</b> community-based businesses that improve access to desired goods and services in the community.</p> <p>d. Support and diversify the <b>timber industry</b> to provide alternative energy, crafting, furniture, and construction opportunities.</p>	<p>a. Nurture Hāmākua’s distinctive <b>Regional Flavor</b>.</p> <p>c. Catalyze <b>Historic Town Revitalization</b>.</p> <p>b. Establish <b>“Plug The Leaks”</b> initiatives to generate on-going economic and entrepreneurial opportunities that meet the needs and demands of residents.</p>
<p><b>Desired Outcomes</b></p>	<ul style="list-style-type: none"> <li>• A mix of population growth, visitor traffic capture, and local consumer spending that supports increased economic opportunities and living wage jobs while maintaining Hāmākua’s rural and agricultural lifestyle.</li> <li>• More local businesses that provide improved access to a range of goods and services that contribute to and strengthen Hāmākua’s regional identity and “flavor”.</li> <li>• Increased circulation of and access to capital within the community that supports and encourages on-going economic entrepreneurial opportunities for Hāmākua residents.</li> </ul>		

### *Need for an Improved Economic Future*

The median family income in the Planning Area ranges from a high of \$52,946 in Wainaku and a low of \$30,000 in Laupāhoehoe. All areas within the Planning Area, except for Wainaku, have median incomes below the Hawai'i County family median income of \$46,480 and all are well below the State median income of \$65,972. The poverty rate for the region is 15%, with a high of 25.2% of Laupāhoehoe families living below the poverty level and a low of 8.9% of families in Pauka'a being below the poverty level. A more telling indicator is that the family median income of all areas within the Planning Area is below the \$53,432 self-sufficiency family budget for Hawai'i Island – *the amount of money that families require to meet their basic needs without government and/or other subsidies*. In addition, the unemployment rate in the Planning Area is 10.9% compared to an island wide rate of 8.0%.

### *Encourage Food Production Networks*

***Strategy 1: Expand & Sustain The Local Food Production Sector***

According to 2010 consumer spending information for Hāmākua, households spent approximately \$18 million on food at home and away from home. There currently is a 49.1 leakage factor in terms of resources going outside of the community to meet household food needs and spending. Thus, forming strong community food networks will help to establish more local commerce and businesses that trade with each other; help the region be better connected to itself; and keep dollars circulating longer in the community for the benefit of the community.



*Produce from Hāmākua Springs Country Farms, Pepe'ekeō*

One of the goals recommended in the County of Hawai'i's Agriculture Development Plan (April 9, 2010) is to "expand Hawai'i Island food production so that 30% of its residents' demand for food can be supplied by local producers by 2020." With its abundant natural resources and agricultural history and heritage, Hāmākua is well positioned to play a leadership role in making progress on this goal.

However, as expressed by participants in the CDP data gathering workshops, the challenges facing agriculture development in the Planning Area are daunting. Some of the challenges identified relate to land and infrastructure costs (i.e., water and energy); labor and human capacity (i.e., knowledge and experience) concerns; market and distribution challenges; access to capital and appropriate financing products; and leadership capacity.

These concerns are also reflected in the Rocky Mountain Institute report "Island of Hawai'i Whole System Project" (March, 2007) that identified the critical element to growth in the agricultural and food production sectors as being the lack of adequate and appropriate processing and distribution systems. The report suggests investing in the following leverage points in the value chain to address these issues:

- Bringing down input costs;
- Improving availability of farming land;
- Getting higher prices for food;
- Building a direct relationship between the farmer and the consumer;
- Improving market channel infrastructure; and
- Enhancing the sense of an agricultural community.

### *Action 1: Encourage Formation of Aggregation Networking Centers*

The concept of aggregation centers is to foster and enable small farmers to act independently, while accessing resources and infrastructure to reduce expenses, expanding markets, identifying financing opportunities, and providing training for quality control and state of the art methods. To incentivize and enable this networking to occur, the CDP proposes to establish or encourage the following components:

- Aggregator Training & Technical Support. Capi-

talize on coordination of existing expertise (i.e., NHERC, UHH, HCC, CTAHR, PBARC) to develop and train potential “aggregators” to be managers that are equipped a range of agronomic, business, engineering, and leadership skills.

- Access To Research & Development Support. Provide cluster managers with access to research and development assistance through existing and potential partners.
- Preferential Status to Seek IAL Designation. The CDP could provide policy support for a cluster manager to directly petition for IAL designation (pursuant to HRS section 205-45), independent of the County’s designation process, to receive priority for IAL incentives.
- Conservation Plans. Provide clusters with priority status for Conservation Plans assistance.
- Alternative Financing Opportunities. Cluster status, especially coupled with IAL designation, would enhance access to available grants and loans under federal, State, County, or private programs. In addition, community-based and financial institution partnerships would be encouraged to provide a continuum of funding and financing products that address the start-up, operational, and expansion needs of cluster members.
- Expedited Permits. Pre-approved template permit applications consistent with CDP policies would be developed to provide clusters with expedited permits for stream alteration (irrigation and micro-hydro), roadside stands, and agricultural processing.

*Action 2: Support the Grass-Fed Beef Industry*

One factor limiting the expansion of the grass-fed beef industry in Hāmākua is the waste disposal system of the Pa’auilo Slaughterhouse. A promising proposal, anaerobic digestion, would not only remove that constraint by handling the current and planned expansion waste from the slaughterhouse, but also be able to reduce the slaughterhouse’s operational costs through cheaper energy production. The Pacific Basin Agricultural Research Center (PBARC) inspired and facilitated this coupling of agriculture and alternative energy, and private initiatives are trying to make the concept a reality. An-

other synergistic component of the anaerobic digester is the need for organic wastes to balance the carcass waste from the slaughterhouse. The source of organic waste could be agricultural processing operations—the waste from these operations would feed the anaerobic digester and these operations in turn would benefit by the cheaper energy to reduce operational costs. Other sources of organic waste could be green wastes from farmers, residents, or County transfer stations. The anaerobic digester could also digest septage from septic pumpers, who presently have to drive all the way to the Hilo Wastewater Treatment Plant to unload.

The CDP proposes to support and encourage the anaerobic digester complex as follows:



- The Official Land Use Map would designate the slaughterhouse and immediate surrounding lands as Industrial to serve as the basis for a General Plan Amendment to Industrial;
- The proposed eco-industrial overlay zone would be available to this project, especially if the application can demonstrate [a] synergistic relationships between two or more operations that result in waste reduction and cost savings; [b] inclusion of alternative energy components that reduce energy costs and vulnerability to oil price increases; [c] educational and visitor related opportunities that promote innovative concepts and provide supplemental income opportunities; and [d] other potential benefits to the public and Hāmākua’s agriculture industry (see Chapter 3);
- Support authorization as necessary to divert any solid wastes presently going to the County transfer stations as the project is able to incentivize this voluntary diversion through lower tipping fees,

bartering exchanges (e.g., fertilizer in return for green waste load), or other means;

- In recognition of the increased traffic from the proposed project and to facilitate rezoning, the CDP would support County acceptance of dedication of the access road (currently owned and solely maintained by Kamehameha Schools) from the Belt Highway to the project and slaughterhouse on the conditions that [a] the project meets the criteria for the eco-industrial overlay zone; [b] the access road is approved as part of the old Māmala-hoa Heritage Corridor; and [c] the project has the potential to divert some of the solid waste going to the County transfer stations and septic waste to the County waste-water treatment plants.
- The CDP will also support finishing pastures in the vicinity of the slaughterhouse to enable greater control on quality. This would involve recommending designation of these pasture lands as Important Agricultural Lands, to the extent agreed to by the affected landowners. The IAL designation would avail the slaughterhouse operators of the IAL incentives (e.g., tax credits) to provide necessary improvements and maintenance of these finishing pastures. If these finishing pastures do not already have rights to access the Lower Hāmākua Ditch, the IAL designation could establish this right.

### *Action 3: Develop Appropriate & Complementary Agricultural Visitor Experiences*

Agriculture visitor experiences include a range of activities, including but not limited to farm visits with retail sales of locally-grown produce; longer-term farm stays; bicycle, walking and automobile tours throughout a farming region; farm-related bed and breakfast accommodations; restaurants serving regional cuisine; agricultural fairs and festivals; farmers markets; and living history farms.

In 2002, eight farms in Hawai'i County (3.4% of all farms) were engaged in providing agriculture related experiences to visitors. In 2007, there were 58 farms (17.1% of all farms) involved in this activity. In 2002, income from agriculture tourism statewide accounted for 8.4% of gross farm income. In 2007, that percentage jumped to 49.2% of gross farm income. Statewide, small farms earned on average \$30,000 (for farms <9 acres) or \$80,000 (for farms 10 – 49 acres) per farm

from agriculture tourism. Large farms (50 – 1,999 acres) did considerably better with \$550,000 in agri-tourism income. This reflects a growing national trend of farms tapping diversifying their revenue options to ensure the viability of their farms.



*Volcano Island Honey Co. Farm Tour, Honoka'a*

The proposed strategy supports agriculture development by capitalizing on the growing trend of slow food and food security movement that emphasizes education and public awareness to better connect consumers with food producers. Components of this strategy include:

- **Heritage Corridor.** Farms located along the Heritage Corridor will have increased opportunity for agricultural tourism, benefitting by the passing traffic and the marketing provided by the Heritage Corridor.
- **Hāmākua's Regional Image.** The "Hāmākua" name will conjure an image where visitors would be drawn to and expect quality, tradition, environmental sensitivity, community-mindedness, and agricultural tourism establishments that conform their business practices to be consistent with that image in their unique way and cross-promote other Hāmākua businesses that share that image.
- **Permit Assistance.** The Rural Outreach Services Initiative (ROSI) at NHERC would be available to provide access to technical assistance, as needed, for farmers contemplating starting an agricultural tourism component by assisting with Plan Approval or Special Permit applications.

*Strategy 4: Support Value-Added Agricultural Production*

High input costs are a basic fact of doing business in Hawai'i. Value-added products with high profit margins provide an opportunity for increasing the sustainability and viability of local agriculture. Other benefits include longer shelf life and the possibility of using excess or lower grade produce that would have sold at much lower prices than the value-added price. However, the effort to establish agricultural processing facilities faces several challenges such as high capital and operational costs, ensuring food safety standards, and the creativity and food science to innovate products.



The CDP proposes to support agricultural processing as follows:

- Certified Kitchens. Support and promote the increased use of Certified Kitchens in the Planning Area.
- Food Science Technical Support. Through its ties with UHH and PBARC, NHERC would have the capability to facilitate technical support for product development and facility design.
- Support for the Anaerobic Digester Complex. The proposal under consideration for the anaerobic digester is to include a post-harvest processing component, as well as to seek large-volume purchasing agreements with the military and other customers. This facility would be available to the various agricultural clusters throughout the Planning Area.
- Support for Agricultural Clusters. With the encouragement of agricultural clusters, hopefully some of the cluster managers would provide processing facilities for their members.
- Enterprise Zone & Other Tax Incentives. The entire Planning Area is within an Enterprise Zone.

Agricultural production or processing is an eligible business to receive tax benefits under the Enterprise Zone program. Structuring the operating entity under appropriate federal nonprofit tax exemption designations could also provide additional tax exemptions (e.g., property and gross excise tax exemptions).

*Action 5: Support Farm-To-School Efforts*

The use of anchor institutions, like schools, hospitals, churches, and public entities, in the promotion of community wealth-building is a trend that is on the rise. By focusing these institutions on the prosperity of their local communities, their purchasing power can be leveraged to promote economic health and opportunities that enable communities to thrive. This strategy provides great opportunity to provide a stable market for locally produced food and enhance the economic viability of farms and ranches.



*Pa'auilo School Students Husking Macadamia Nuts  
(Courtesy of Hawai'i Homegrown Network)*

An example of this is the growing effort to support Farm-To-School initiatives. These initiatives connect independent family farms with programs to address the declining nutritional status of school meals. The Hawai'i Island School Gardens Network, the state-wide Hawai'i School Gardens Hui, and other entities are already working with the Department of Education, Department of Agriculture, and other relevant governmental agencies to advance this concept. For students, these initiatives provide increased access to fresh produce; a hands-on experiential learning opportunity; a link between the cafeteria, the school garden, and nutrition education; and a foundation for building life-long dietary health. It also works to raise public awareness about the importance of agriculture and the

need for local consumer support of the industry. Just as importantly, it lays the foundation for nurturing future farmers and agri-businesses by raising awareness, catalyzing interest, and building agricultural and entrepreneurial skills among Hāmākua’s youth.

**Articulate “Hāmākua” Image and Ethic**

An economic development strategy built on the distinctive qualities and assets of Hāmākua helps to attract viable economic ventures that take care of the land and its people as the means for generating further economic opportunity. There are many examples of rural communities across the nation successfully employing this Regional Flavor approach to encourage innovation and entrepreneurship and, thereby, strengthen their local economy (e.g., AORIC/ACEnet in Ohio, HandMade In America in North Carolina).

**Strategy 2: Develop Diverse & Synergistic Economic Sectors To Strengthen “Regional Flavor”**

This strategy involves the Hāmākua community in uncovering its unique assets – places to visit, restaurants, artisan businesses, history and heritage, local festivals, recreational activities, music, foods, and other aspects – and package these assets into experiences that attract people to live in or visit their community to help stimulate appropriate local economic growth.

**Action 6: Establish & Develop The Old Māmalahoa Heritage Corridor**

The draft Official Land Use Map in Chapter 3 shows the proposed Heritage Corridor route that features and connects several scenic and cultural treasures in Hāmākua including historic towns and villages, back roads through lush vegetation and waterfalls, Waipi’o Valley, former plantation landings, State Parks, farms offering agricultural tours, and selected trails that draw the visitor out of their vehicles to experience the natural beauty of the area. A designation of the Corridor under the State Scenic Byways Program would provide market promotion opportunities.

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

- Paving. The segment between Pepe’ekeō and Honomū is currently unpaved or has very narrow pavement. Since this segment functions as an emergency bypass in the event of the Belt Highway closure in this area, one potential source is Hazard Mitigation (FEMA) funding. To be eligible for such funding requires this project to be listed in the County’s Hazard Mitigation Plan. An additional cost-sharing source is to use Improvement or Community Facilities District mechanisms to fairly assess landowners who will benefit from road upgrades.
- Traffic Restrictions. The narrow and curvy route would require appropriate restrictions for safety or to mitigate traffic concerns (e.g., restrict access of large buses; designate and establish signage for road sharing with bicycles).
- Heritage “Story”. There are ongoing efforts at NHERC, Laupāhoehoe Train Museum, and other community organizations to record and share the history of the area. Integrating these efforts into a consistent, authentic “story” would bring to life the significant places and features along the corridor for residents and visitors alike. Interpretive signage would highlight relevant portions of the story to provide a meaningful experience.
- Permission/Acquisition for Privately Owned Corridor Segments or Features. Any privately owned segments of the Corridor require appropriate agreements with the landowners. The proposed route includes the following potentially private areas: Sugar Mill Road in Pepe’ekeō, Koholālele Landing, access to the proposed Pa’auilo slaughterhouse and agricultural processing complex, and access to Haina and Pā’auhau Landings.
- Scenic Byway Application. A Scenic Byway designation



View of Waterfall From the Belt Highway, Umauma

entails nomination, preparation and approval of a corridor management plan, and designation at the State level. With such a designation, the Corridor would be eligible for potential federal and State funding, technical assistance, and promotion.

*Action 7: Establish Gateways to the Planning Area for Appropriate, Cultural-Based, Personalized Visitor Experience*

Tourism is Hawai'i Island's primary economic driver with 1.6 million people visiting the island and generating \$1.4 billion dollars for the island's economy in 2008. Much of that spending, however, occurred at two poles – Hilo and Kona. The challenge for the region is how best to tap into visitor traffic at a scale appropriate for the region and in ways that perpetuate Hāmākua's traditions; strengthen its sense of community, history, and identity; protect sacred sites; and nurture real connections and relationships of reciprocity between residents, local businesses, and visitors.

The CDP proposes separate strategies for tour bus visitors and the small group or independent visitors (which includes local residents in this latter group). The Old Māmalahoa Heritage Corridor is intended for the small group and independent visitors. For tour bus visitors, the CDP proposes gateways at either end of the Planning Area primarily to introduce them to the Regional Flavor of the Planning Area. By locating the gateways at the intersection of the Belt Highway and the Heritage Corridor, visitors along the Heritage Corridor would also be able to share in the experiences of the gateways.

Since there are multiple suitable locations for such gateways, the CDP proposes to establish a Gateway Market Place Project District overlay to encourage development of marketplaces to feature Hāmākua products, capture visitor dollars that currently pass through the region, and promote the Hāmākua image.

A gateway would be located at either end of the Planning Area – one in Rural South Hilo and the other in the vicinity of Honoka'a. A rezoning application that meets the following specifications would qualify for processing under this Project District overlay:

- The project is located along the Belt Highway for accessibility to tour buses;

- Preferably, the project is also located adjacent to the proposed Heritage Corridor;
- The application includes a master plan that promotes products or services from the Planning Area, and embodies the "Hāmākua" image.

*Action 8: Encourage Health and Wellness Community-Based Business*

Hāmākua residents value a high quality of life that is rooted in their strong sense of 'ohana and community and affords them access to quality healthcare and elderly care. This core value provides a strong foundation to enhance Hāmākua's regional identity and local economy through community-based businesses that encourage the development of a health and wellness industry. A prime opportunity in this regard is developing entrepreneurial and employment opportunities through the "aging in place" sector.

By 2020, Hawai'i County's population of those 60+ is expected to increase by 38% to a total of approximately 54,050 individuals. The life expectancy in Hawai'i County is 77.3 years compared to the national average of 76.9 years. Hawai'i County also has a higher percentage of those 60+ who are living alone – 19.8% versus 16.5% overall for the State and 15.8% for Honolulu. Aging in place strategies have great potential for addressing the growing needs of Hāmākua's kūpuna population while creating economic opportunities for the region, including jobs in:

- Home Healthcare;
- Transportation;
- Adult day care; and
- Other associated services.

These strategies support seniors in our community through a continuum of housing, transportation, socialization, and personal care that stresses the ability to accommodate a wider spectrum of senior's needs. They minimize the provision of inappropriate care, and therefore overall costs, by offering a range of flexible services and calibrating those services to fit the needs of the individual.

*Strategy 9: Support and Diversify the Timber Industry*

The County property tax rate distinguishes between fast

(e.g., eucalyptus) and slow rotation (e.g., native hardwoods) forestry, with higher tax rates for fast rotation.

This distinction provides some incentive to diversify timber towards hardwoods. Since most of the fast-rotation assessed lands in the Planning Area are leased, landowner/lessors could play a key role if they could include provisions in their leases for the following mitigation measures:

- Conservation plans;
- Setbacks from the Belt Highway for aesthetic and utility clearance purposes;
- Buffers near settlement areas to mitigate wildfire threats;
- Coordination of wildfire response plans; and
- Reasonable contribution towards highway bypass lane construction if the level of timber trucking affects traffic on the Belt Highway.



*Koa Plantation, Kuka'iau Ranch*

The leases could also determine the extent to which these lands convert to other agricultural uses after the timber is harvested. In terms of productivity ranking, almost all of the fast-rotation lands are either LSB B or ALISH prime. The current timber use serves as a land-banking for future agricultural options as needs and markets change over time.

### ***Develop Support Networks***

To encourage on-going economic and entrepreneurial innovation within a Regional Flavor approach to economic development will require:

- Helping businesses innovate, set up new systems, and expand.
- Building long-term relationships with nearby urban markets and residents.

- Engaging many local entrepreneurs and residents, and through the process of their involvement, help to increase the sense of pride, engagement, and identity in the region.
- Helping businesses of all types to develop regional products and services.

### ***Strategy 3: Encourage On-Going Economic & Entrepreneurial Innovation***

To be effective, the Regional Flavor strategy requires “local” businesses to become “regional” businesses. To accomplish this, businesses must enhance their uniqueness and quality as well as reach out to a regional, not just a local, customer base. Examples of this strategy include:

- Identifying natural, heritage, and place-based assets and adding value to them;
- Helping towns and locally owned businesses be world class, unique, continually innovating, and quality job creators; and
- Catalyzing collaborations that weave Hāmākua’s towns, villages, assets, and regional businesses together into a network for on-going innovation.

The interdependent actions described below address the above strategy to help anchor Hāmākua’s community-based approaches to economic development in its unique sense of place, community, history, and identity. In this way, the Planning Area can realize a stronger local economy that is built on its own terms to mālama ‘āina and serve to truly benefit its residents.

### ***Action 10: Develop A Distinctive “Hāmākua” Regional Flavor***

The CDP proposes to articulate the ingredients of Hāmākua’s Regional Flavor in ways that underscore the synergistic relationship of the diversity of businesses in the area, and to establish a common ethical quality standard that binds these businesses. Examples of potential standards for products and services that would meet and enhance the areas Regional Flavor include:

- Respects the land-- business practices uphold the

beauty and environmental quality of Hāmākua;

- Perpetuates traditions and heritage-- the products or services are rooted in Hāmākua’s heritage;
- Promotes health and wellness-- the products or services enhance the health and wellness of Hāmākua;
- Committed to community-- the business is a good neighbor, supports other businesses in Hāmākua, and contributes to the Hāmākua community;
- Committed to quality-- the Hāmākua community takes pride in the services or products.

*Action 11: Revitalize Historic Towns*

The Plan proposes to capitalize on the initiative and energy of those who care – residents, landowners, and businesses – to revitalize historic towns. This approach reinforces the unique assets of the micro-regions (towns/villages) within the Planning Area to strengthen the overall identity and flavor of the Hāmākua Region to generate innovation and entrepreneurial opportunities.

The CDP proposes the means to implement revitalization plans. The County Planning Department and/or a community nonprofit would provide technical assistance to prepare a revitalization plan for towns and villages. Examples of characteristics that may be included in a town revitalization plan include:



*Downtown Honoka'a*

- A town or village center to encourage gathering and business opportunities; this center could be a cluster of businesses such as a Mom & Pop store, post office, bakery, farmer’s market; an open grass or paved area for informal play, picnicking, or events; a historic building such as a theater or

restored gymnasium.

- Pathways or improved sidewalks to offer safe and convenient connections to walk or bike to the center.
- Park & ride with coffee shops or other comfortable waiting areas for residents or visitors to catch the public transit;
- Improved road circulation for safety, connectivity, and landscaping or other features to make the road a pleasant place to walk or bike.
- Renovated historic buildings or building design guidelines to promote the character of the town/village.
- A mixing of uses such as living spaces above the ground floor retail spaces.
- Landscaping, street lights, outdoor café areas, or other improvements to the public spaces that invite customers.
- Initiatives that increase affordability or access to renewable energy.
- Reducing non-point source pollution sources through drainage and/or wastewater system improvements.

The means to implement the plan include:

- Incorporating the plan into a rezoning that would make it enforceable.
  - A rezoning application that meets the following specifications would qualify for processing under a Town/Village Project District overlay: [a] the subject area is within the G-3 and/or G-4 sectors of the official Map; [b] the application has been prepared by or endorsed by a community group comprised of residents, business owners, or landowners of the subject area; and [c] the Plan meets the current specifications of the Planning Department.
- Financing mechanisms such as Business Improvement Districts would be available.
- An organization with representation from the community could be established to oversee implementation.

For more information, a “toolbox” of ideas and suggested process has been compiled and intended to be continually refined. The CDP will include the current version of the toolbox in its appendices

### *Action 12: Establish A Plug The Leaks Approach To Entrepreneurial Development*

A “plug the leaks” approach to regional and town economic revitalization engages residents in a process that increases their awareness and understanding of where money outflows occur and how to turn those potential entrepreneurial opportunities into locally owned economic ventures. This helps to maximize the amount of money spent within the community. The principle behind this approach is that people who live and work in a place, and others who care about its future are best positioned to find enterprising solutions, implement them and reap the rewards. This approach is built around supporting community-based action towards developing a more sustainable local economy and can result in the following types of outcomes:

- A diverse range of local businesses and enterprises in terms of size and diversity of goods and services produced;
- Positive local money and resource flows – a high local multiplier and local re-use of waste;
- Strong local capacity and asset base including people’s attitudes, skills and knowledge as well as physical, financial, and natural resources; and
- A responsive public and business sector that works to strengthen and invest in the local economy.

The plug-the-leaks approach, however, goes beyond a “buy local” campaign by establishing an on-going organic process that engages, raises awareness of, and educates the community about opportunities that they have control over, either individually and/or collectively, to keep local dollars circulating in the economy. It provides easily accessible and understood information about the local economy and underlying concepts so that residents can become engaged, understand, begin taking concrete steps towards improving their local economy. This approach has proven to be effective in helping people realize how much power they actually have over the issues that impact their lives by starting “where people are at”; helping them identify “leaks” and brainstorm ideas for plugging them; and generating the energy and commitment for community action.

### *Additional Information*

- **Consistency with CDP Values & Vision** [[link](#)]
- **General Plan references** [[link](#)]  
Information pertaining to the Economic Development can be found starting on page 2-1; specific references to districts within the Planning Area are on pages 2-17 through 2-21. Related subjects can be found in the chapters on Land Use (14-1), and in the Transportation chapter (13-1).
- **CDP Community Profile References** [[link](#)]  
For more information on the Socio-Economic factors of the Planning Area, please see the Hamakua CDP Community Profile, starting on page 7-1.
- **County of Hawai’i’s Agriculture Development Plan** [[link](#)]
- **“Island of Hawai’i Whole System Project” (March, 2007)** [[link](#)]
- **Community Based Economic Development Approach** [[link](#)]
- **Case Studies of Successful “Regional Flavor” Projects**
  - Appalachian Center for Economic Networks - ACEnet (Athens, Ohio) [[link](#)]
  - HandMade In America (Asheville, North Carolina) [[link](#)]

### *Questions to the Reader*

1. Aggregator Concept-- The Aggregator concept is an adaption of existing businesses-- does this concept have traction to the agricultural business community for more widespread adoption? Are there other means to promote or support this concept?
2. Regional Flavor-- The development of a regional brand is an idea mentioned in several previous agricultural plans for the region. The specific development and control of such a brand is a business endeavor, but the CDP proposes to support the concept by laying a foundation which the CDP calls a Regional Flavor. Is this an appropriate role for the CDP to encourage the creation of a regional brand?
3. Lower Hāmākua Ditch-- There are no strategies specifically addressing the Lower Hāmākua Ditch, a State facility. Is there a need or a role for the CDP to support any changes or improvements-- physical, fiscal, or management?
4. Ag Tourism-- Any special mitigation required for ag tourism?
5. Institutional Procurement Systems--What is the appropriate role of the CDP to increase access to the procurement systems of institutions such as schools and hospitals?
6. Town Revitalization-- Will communities step up to prepare Town Revitalization Plans?
7. Employment-- Any existing constraints to employment opportunities (e.g., public transit for commuters, daycare services)?
8. Innovation-- Any ideas to spur innovation (e.g., wider broadband coverage, mentorships)?
9. Heritage Corridor-- Any concerns with the proposed Heritage Corridor route? Can you think of a way to measure a threshold of too many visitors? If this threshold is reached, what actions should be triggered?

## 5 NATURAL AND CULTURAL RESOURCES MANAGEMENT

*Desired Outcome: In 2035, the Hāmākua communities take pride in their restored forests and flowing clean streams abundant with native life made possible by watershed management measures that have been incorporated as part of the way of living and doing business in this area. Because of this reverence for nature and the past, the residents continue to rely upon and enjoy the bounties of nature through hunting, hiking, fishing, gathering, and other activities passed on from generation to generation. Waipi’o Valley thrives with its healthy streams, exceptional agricultural products, and a community that cares for the ‘Aina. The Waipi’o Valley Visitor Center supports the preservation of the Valley as a wahi pana. Other cultural resources have been woven into the story of the area that provide an educational experience for residents and visitors.*

### Objectives

The vision above translates into the following objectives:

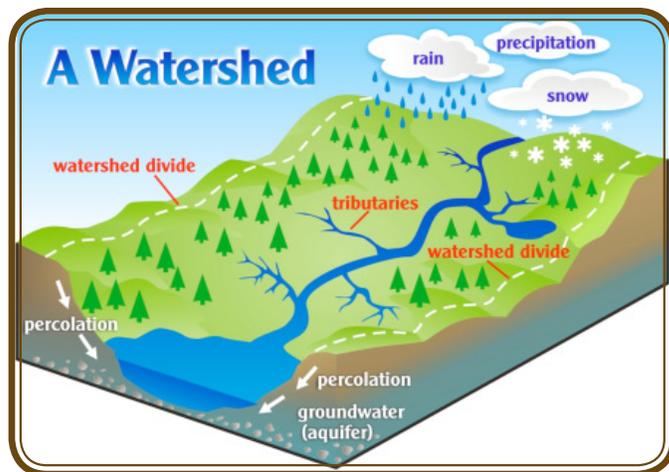
- **Watershed Management.** Encourage widespread adoption of Watershed Management Measures that result in improved stream and nearshore coastal water quality.
  - **Restoration.** Encourage restoration through incentives that make business sense.
  - **Living Culture.** Support and integrate the cultural assets that reinforce a sense of place for this region.
  - **Waipi’o Valley Special Management.** Recognize and sustain the unique resource values.
- the amount and how quickly rainwater flows to streams and gulches. Clearing, grading and development can increase the speed that water moves to streams, overtopping banks and increasing streambank erosion from the higher velocity flow.
  - **Habitat.** Native birds in the forests and aquatic species in the streams that are important to Hawaiian cultural heritage rely on healthy, biodiverse forests and streambanks. Human activity that clears forest land can fragment the patches of forest habitat. Stream corridors can serve as links between forested areas.

### Natural Resources Management

#### Importance of Watersheds

A watershed is the land area draining to a common stream, gulch, or receiving water. A healthy watershed provides benefits to communities in many ways that often go unnoticed and underappreciated:

- **Drinking Water.** Most of our drinking water comes from groundwater. The forests overlying the groundwater source allow clean rainwater to infiltrate into the ground to replenish the aquifer. When forest cover is disturbed, there is a risk of diminished aquifer recharge and increased pollution from dissolved pollutants.
- **Flood Management.** Natural vegetation moderates
- **Coastal Water Quality.** Clear coastal waters are a benefit to nearshore fisheries. The link between streams and the coastal waters are essential to aquatic life, such as the native ‘o’opu which spends its lifecycle in both streams and the ocean. Activities high in the watershed can affect marine



waters by delivering pollution to streams which eventually reach the ocean.

- Recreation. Environmental health throughout the watershed supports recreational activities such as swimming in cold ponds, surfing in clean water, and hunting and bird watching in native forests.
- Raw Materials. Forests provide raw materials for energy production, lumber, and artisan crafts.
- Carbon Sequestration. Growing forests absorb some of the excess carbon produced by humans. These forests may become a financial asset through participation in carbon credit programs.

### *Existing Watershed Conditions*

The Planning Area has one of the highest densities of streams in the State. The State's inventory of streams (Hawaii Stream Assessment) identifies 149 perennial streams in the Planning Area (not counting their many tributaries). Inventories of streams such as the Hawai'i Stream Assessment and the Atlas of Hawaiian Watersheds have identified several of the Planning Area streams to be of outstanding value due to their aquatic resources or the cultural and recreational services they provide. Nonetheless, several streams in the Planning Area have also been identified by the State Department of Health as "impaired", meaning that they do not meet basic water quality standards. Some streams, such as Honoli'i have been both identified as "outstanding" in state inventories due to their robust resources despite being listed at times as "impaired" due to turbidity.

The Planning Area has historically experienced sediment-laden streams and nearshore coastal waters. The mud wash and bagasse at the sugar mills were directly discharged or allowed to runoff into the ocean. Runoff from the fields during heavy rains resulted in turbid streams and nearshore waters. It is likely that in addition to sediment which was visible, other pollutants such as pesticides, herbicides and fertilizers were also delivered to the streams. Although some studies have been conducted, it is not fully known what legacy pollutants remain in the soils or in the hydrologic system from past agricultural activities.

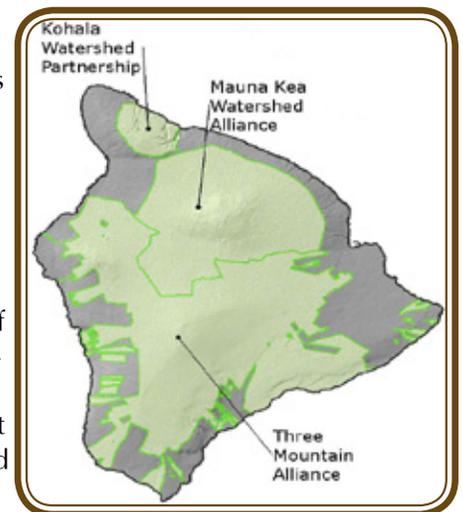
Human activities such as land development as well as agricultural and forestry activities can all contribute to pollution of streams. There are "point" or "nonpoint" pollutant sources that degrade water quality. Point

sources are discrete, such as discharges from a pipe.

Nonpoint sources are diffuse and may include agricultural fertilizer or pesticides, nutrients dissolved from concentrated dairy manure areas, accelerated erosion from land clearing where the sediment causes turbidity and sedimentation, trash and chemicals carried across impervious surfaces such as roofs and pavement, and cesspool seepage.

### *Strategy 1: Support Existing Watershed Management Initiatives*

Much of the mauka lands found in the Planning Area are within the boundaries of the Mauna Kea Watershed Alliance (MKWA), a voluntary watershed partnership. The MKWA has produced a draft watershed plan that offers insights to the issues and opportunities that the planning area faces with regard to the health of its watershed resources. The strategies considered for the CDP, such as Sector O-2 which suggests additional protection and Sector O-3 which encourages restoration, parallel the MKWA's plan which includes strategies to: protect ground and surface water; enhance terrestrial and aquatic ecosystems; promote economic sustainability in balance with habitat and watershed protection goals and; enhance community awareness and support of watershed values, resources and management activities. The MKWA also encourages use of landowner incentive programs for land management in agricultural and forested lands.



*Hawai'i Island Watershed Partnerships*

Another notable public effort in the Planning Area is the Laupāhoehoe Experimental Forest (<http://www.hef.us/page/laupahoehoe/>), over 12,000 acres managed in partnership by the State, the USDA Forest Service and Institute of Pacific Islands Forestry. The experimental forest is managed as

a Natural Area Reserve and is recognized on the Sector Map as O1 (already protected) and on the Stewardship Intent map as having both designated protection from conversion and a management plan in operation to maintain or restore to a natural state.

***Strategy 2: Prioritize Watersheds with Outstanding or Impaired Streams***

In addition to permits and conservation plans that regulate land disturbance, the federal and State governments offer funding to prepare watershed management plans. Watershed plans are technical and detailed plans for specific watersheds that identify the sources of pollution and the recommended remedies. Only two watershed plans have been prepared for this island: one for the Kawaihae area draining into Pelekane Bay, and the other for selected Hilo Bay watersheds. The Hilo Bay watershed plan includes Honoli'i, which is within the Planning Area. Unfortunately, only limited federal and State funds are available to prepare watershed plans. As such, strategies presented in the CDP will focus on management measures that can be implemented irrespective of formal watershed plans, but can only be strengthened should watershed planning funds become available. Recognizing the value of watershed plans, the CDP proposes to position selected watersheds for funding by officially recognizing these watersheds as priorities. The priority criteria are twofold:



*Honoli'i Stream*

The priority criteria are twofold:

- Watersheds where the streams or nearshore waters do not meet water quality standards and therefore are considered “impaired”;
- Watersheds where the streams are considered outstanding as recognized by the State’s Stream Assessment Study, by the State’s Atlas of Hawaiian Watersheds, or by other watershed health indices.

The watersheds that meet the above criteria are shown on the Priority Watersheds Map on the next page.

***Strategy 3: Strategy 3: Implement Watershed “Management Measures”***

Federal and state funds for the preparation of watershed plans are limited and competitive, therefore the CDP proposes to do what it can in the absence of formal watershed plans to encourage widespread awareness and voluntary adoption of practices typically recommended in watershed plans called “management measures.”

When land disturbance activity is related to construction, permits for grading, grubbing, and/or stockpiling are usually required in addition to a permit to comply with the State and Federal laws. When the land disturbance activity is related to agriculture, the producer, farmer or rancher is supposed to either get a grading permit or have an approved conservation plan. However, there is a lack of enforcement of conservation plan requirements. Even for those who want to comply, it is difficult to have a conservation plan prepared and approved due to the reduced funding to help pay for personnel at the soil and water conservation district which is staffed by a federal agency (NRCS) that reviews conservation plans.

To encourage widespread adoption of Conservation Plans, the CDP proposes the following:

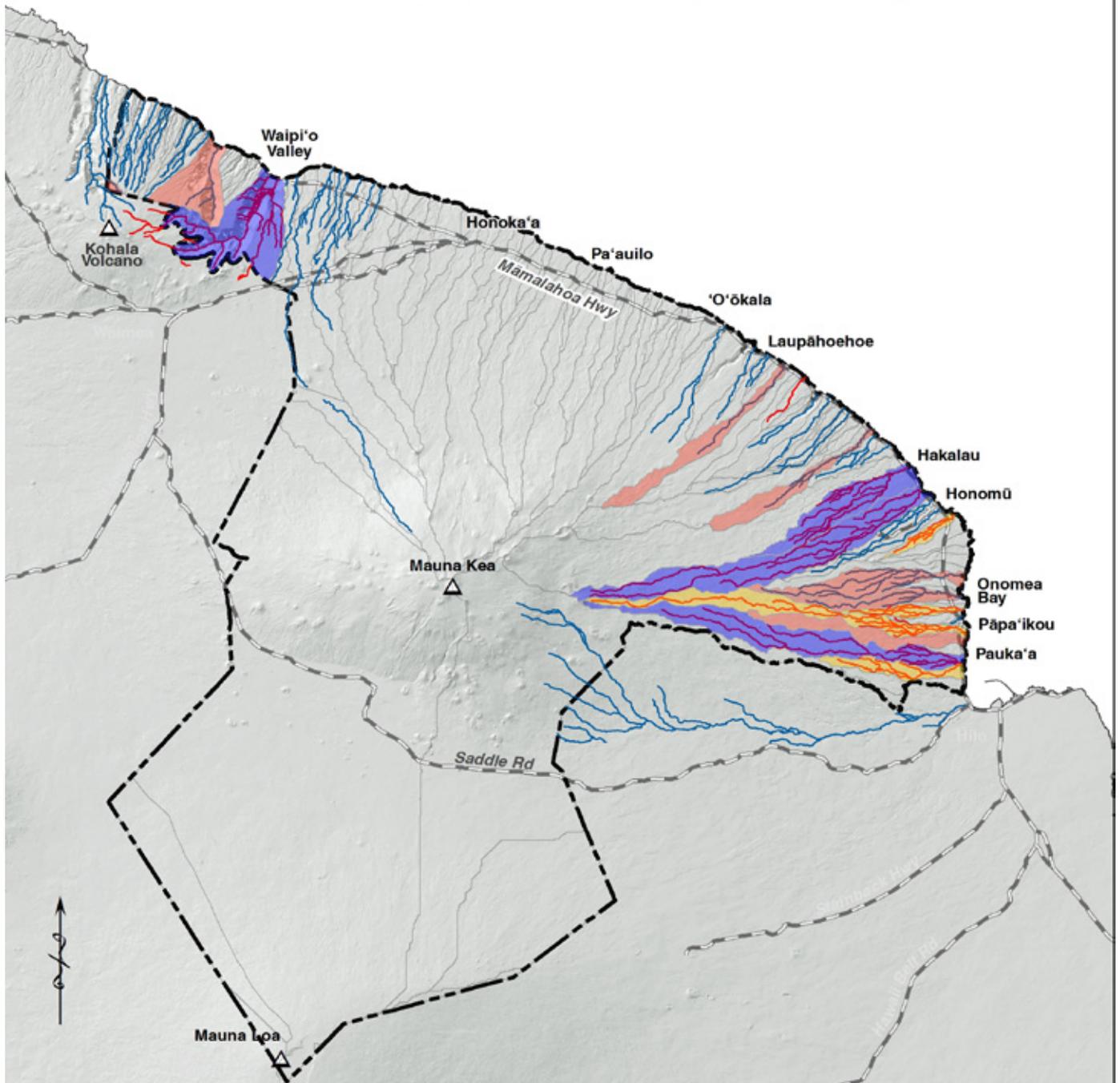
- Suggest NHERC setup a program where the UHH College of Agriculture, Forestry, and Natural Resources provide free service through its students to prepare Conservation Plans under guidance from professors or NRCS staff;
- Consult with the County Real Property Tax division to explore the feasibility of requiring Conservation Plans as a pre-requisite for property tax agricultural use or dedication rates;
- Consult with DLNR, Kamehameha Schools, and other large landowner/lessors of forestry lands on the feasibility to require Conservation Plans as a condition of their leases;
- Recognize those whose operations, guided by a Conservation Plan, exemplify the “Hāmākua” image described in section “A Model of Rural-Agricultural Regional “Flavor” and Networking” in Chapter 4.

Proposed Priority Watershed Map

### Priority Watersheds

**LEGEND**

- Hamakua CDP Planning Area
- 303d (Dept. of Health List of Impaired Streams)
- Streams with Outstanding Elements (Hawaii Stream Assessment)
- All other watersheds
- Watersheds with Impaired Streams
- Watersheds with Outstanding Streams
- Watersheds with Both Impaired and Outstanding Streams



For the urban areas, the “toolbox” for town revitalization plans described in Chapter 4 includes guidance that address the following management measures:

- Examine existing drainage systems to mitigate impacts on stream and nearshore water quality;
- Retrofit roads as necessary to reduce and control runoff from the road pavement;
- Examine alternatives to onsite wastewater disposal systems.

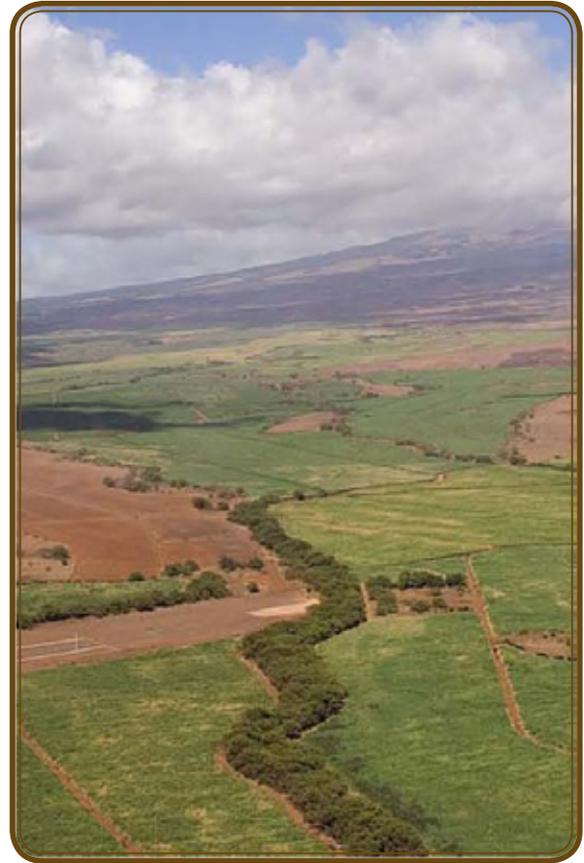
***Strategy 4: Create Streamside Buffers through the Conservation District or as Overlay Zones in Other Districts***

Streamside vegetation, serves several important functions in protecting stream water quality and other watershed values:

- Intercepts sediment, pollutants and trash that would otherwise runoff into streams during rain events;
- Stabilizes stream banks from erosion;
- Provides shade, leaf litter and woody debris to the aquatic ecosystem;
- Slows floodwaters when streambanks are overtopped in flood events;
- Connects terrestrial wildlife habitats that may be fragmented in different parts of the watershed;
- Serves as a sanctuary for native plants where the land is too steep for cultivation or grazing.

In recognition of the important role of healthy streamside vegetation to protect watershed health, the CDP proposes:

- For streams ranked “outstanding,” recommend reclassification to the Conservation District. The sector map entitled “Areas to Protect or Restore for Natural Values or Ecosystem Services (O-1, O-2, O-3)”, linked at the end of this chapter, designates these areas as O-2.
- For all other streams and gulches, the CDP proposes an overlay zone that delineates streamside buffers with appropriate management measures.
- For forestry lands, the proposed riparian buffer is detailed in the following table based on Stream-



*Agricultural Riparian Buffer*

side Management Zones in DOFAW’s Best Management Practices for forestry (<http://www.state.hi.us/dlnr/dofaw/wmp/bmps.htm>).

Soil Type	Percent Slope	Buffer Width (each side)
Slightly erodible	0-5 %	35 ft.
Slightly erodible	5-20 %	35-50 ft.
Slightly erodible	20%+	50-160 ft.
Erodible	0-5 %	35-50 ft.
Erodible	5-20 %	80 ft. minimum
Erodible	20%+	160’ minimum

- For agricultural crop lands, the recommended management measure is derived from the NRCS Conservation Practice Standard (393): Filter Strip & Conservation Practice Standard (391): Riparian Forest Buffer. See the table on the next page.

Bank Slope	Minimum Riparian Buffer Width	Notes
0-5%	30 feet	<ul style="list-style-type: none"> <li>• Use low-lying woody vegetation only</li> <li>• Unless treatment area is an ephemeral or intermittent stream, consider planting vegetative species with a wetland indicator status</li> <li>• Consider combining this practice with a fencing practice if riparian area degradation is due to grazing or feral ungulate damage</li> <li>• Consider combining this standard with Brush Management or Pest Management practice, if riparian area degradation is due to noxious weeds.</li> </ul>
6-10%	30 feet	<ul style="list-style-type: none"> <li>• Use low-lying woody vegetation only</li> <li>• Consider combining this practice with a fencing practice if riparian area degradation is due to grazing or feral ungulate damage</li> <li>• Consider combining this standard with Brush Management or Pest Management practice, if riparian area degradation is due to noxious weeds.</li> </ul>
11-20%	30 feet	<ul style="list-style-type: none"> <li>• Consider combining this practice with a fencing practice if riparian area degradation is due to grazing or feral ungulate damage</li> <li>• Consider combining this standard with Brush Management or Pest Management practice, if riparian area degradation is due to noxious weeds</li> <li>• Combine with Filter Strip</li> </ul>
21-30%	42 feet	<ul style="list-style-type: none"> <li>• Consider combining this practice with a fencing practice if riparian area degradation is due to grazing or feral ungulate damage</li> <li>• Consider combining this standard with Brush Management or Pest Management practice, if riparian area degradation is due to noxious weeds</li> <li>• Combine with Filter Strip</li> </ul>
31-40%	60 feet	<ul style="list-style-type: none"> <li>• Consider combining this practice with a fencing practice if riparian area degradation is due to grazing or feral ungulate damage</li> <li>• Consider combining this standard with Brush Management or Pest Management practice, if riparian area degradation is due to noxious weeds</li> <li>• Combine with Filter Strip</li> </ul>
41-50%	120 feet	<ul style="list-style-type: none"> <li>• Consider combining this practice with a fencing practice if riparian area degradation is due to grazing or feral ungulate damage</li> <li>• Consider combining this standard with Brush Management or Pest Management practice, if riparian area degradation is due to noxious weeds</li> <li>• Combine with Filter Strip</li> </ul>
Over 50%	Buffer not recommended	

***Strategy 5 : Seek Expanded Jurisdiction or Conservation Easement for Areas Needing Protection (Proposed O-2 Sector)***

The proposed O-2 areas fall into one of the following situations:

- Proposed expansion of the Hakalau Wildlife Refuge that would extend management jurisdiction through federal acquisition of State and private lands where the CDP would support and monitor this proposed action;
- State-owned land that may require a programmatic commitment or transfer of responsibilities to a

more appropriate program where no action by the CDP would be necessary;

- Private land where the CDP would encourage acquisition of fee simple or a conservation easement that could be facilitated to ensure long-term protection and management. See Additional Resources at the end of this chapter for more information.

***Strategy 6: Provide Technical Support to Access Incentive Programs for Restoration (Proposed O-3 Sector)***

To encourage a private landowner or lessee within the

enhances watershed health, the CDP proposes that NHERC serve as a technical assistance center to help the landowner/lessee evaluate feasibility, prepare any required plans, applications, and resolve any issues with the administering agency. Restoration incentives that could be considered in evaluating feasibility include:

- Federal income tax deductions including those for timber practices and conservation of threatened and endangered species;
- County property tax reductions for agricultural lands and native forests;
- Federal Conservation and Stewardship Grants;
- Immunity (safe harbor agreements); and
- Income generation

Various State and Federal incentive programs can be found in tables linked at the end of this chapter.

### *Historic and Cultural Resources Management*

***Strategy 7: Recognize the “Living” History Assets of the Planning Area***

The legacies of the past live on in the Planning Area through its places and people. Unlike many other places where the past is evidenced and preserved primarily through iconic archaeological or historical sites, the past carries on dynamically today in the Planning Area through the following cultural assets:

- Waipi’o Valley has continuously grown kalo (taro) for over 1,200 years from the earliest settlements of the Native Hawaiians through today. The CDP proposes special management measures due to the exceptional significance of Waipi’o Valley as discussed below.
- Historic towns and villages originated from the plantation days; some struggle today, but all have potential for revitalization. The CDP provides the basis for town revitalization plans (see Chapter 4).
- Plantation camps viably exist today, transformed from plantation-managed to self-managed, with their unique embodiments as model clustered rural communities. The CDP supports the con-

tinued role of the nonprofit Hāmākua Housing Corporation (HHC) to provide affordable housing within the camps (see section “Reinforcing and Expanding Homeownership” in Chapter 7) and recommends residential rezoning of some of these camps that are zoned agricultural to facilitate new residential construction or reconstruction.

- Vast agricultural fields, formerly in sugarcane, have dynamically changed in the products grown from timber to ranching to truck crops, but nevertheless remain in agricultural use. The CDP seeks to perpetually protect prime agricultural lands and encourage agricultural use on all other rated agricultural lands where there are willing bona fide agricultural users (see Chapter 3).
- Irrigation ditches built to serve the plantations have been repurposed to support today’s agriculture (e.g., Lower Hāmākua Ditch). The CDP supports the continued investment to maintain these facilities, provided the maintenance can be sustained by creative management without large public subsidies (see Chapter 4).
- Communities comprised of an ethnic mix have evolved largely from the plantation days, where residents celebrate each other’s festivals and foods, appreciating their common values as well differences. The CDP indirectly supports the continuation of this mix through policies on affordable housing (see Chapter 7), support for agriculture and related jobs (see Chapter 4), the strengthening of a community nonprofit for the community to work together (see Chapter 4), and the expansion of informal gathering places through Town Revitalization Plans to encourage interaction (see Chapter 4).



*Annual Mochi Pounding, Wailea*

***Strategy 8: Preserve Waipio Valley's Unique Values through Official Recognition as a Wahi Pana***

***Waipi'o Valley's Exceptional Significance is Attributed to:***

- Being one of the first settlements in Hawai'i;
- Continuously inhabited for over 1,200 years, supporting a population of several thousand with possibly 800 acres of cultivated taro;
- Served as the residence of a succession of nine Pili line rulers, the most noted being Liloa and his son, Umi-a-Liloa, who united the island of Hawaii under a single chiefdom, and despite later relocation of the power center, the Valley continued to be important as one of many royal residences up until the time of Kamehameha;
- One of the most sacred religious areas on the island, Paka'alana was a luakini and also a pu'uhonua, even retaining its renown after its destruction in 1791 by Kaeokulani, king of Kaua'i;
- Important akua worshipped in the Valley including Kane, Ku, Lona, and Kanaloa. Kane and Kanaloa believed to have lived in the Valley. Wakea, who is attributed to be the ancestor of all Hawaiian people, was said to have retired to the Valley. Lono's wife, Kaikilani, was said to be found by Lono's brothers beside Hi'ilawe Falls. A well-known legend tells of the creation of Hi'ilawe Falls;
- One of the largest valleys in the islands, the Valley is fed by five streams—Wailoa River, Waima, Koiawe, Alakahi, Kawainui, and Hi'ilawe—and nine waterfalls that still support native fauna;
- In spite of destruction by Kaeokulani and tsunamis of 1819, 1837, and 1946 (reported 55' waves that rolled inland more than 3000'), the Valley is still full of ancient habitation and burial sites, temples, trails, irrigation ditches, and fishponds dating back to pre-contact times;
- Overwhelming tranquility and powerful Mana.

***The Challenges facing the Valley include:***

- Uncontrolled access into the Valley that: pose a safety hazard along the narrow, curvy, steep access road; intrude on the privacy of the Valley residents; desecrate sacred sites; trespass; and change the respectful and peaceful character of the Valley;
- Restoring streamflow diverted by the Lower Hāmākua Ditch as determined by a Water Commission decision relating to Lalakea Stream;
- Potential development along the Valley rim that would be visible from the Valley floor;
- Development of an effective system for stream maintenance and to restore areas damaged by floods;
- Managing access to the Valley's shoreline for surfing, fishing, and sunbathing in a manner that is sanitary and safe;
- Regenerating taro productivity-- where about 150 acres of taro are grown today, restoring taro productivity to as much of the 800 acres of the past.
- Communications and disaster preparedness/evacuation difficulties.



*Waipi'o Valley Access Road*

To address the challenges, the CDP proposes to support two initiatives: designation of Waipi'o Valley as a Wahi Pana, and development of a Waipi'o Lookout Visitor Center.

There are several alternative designations at the County, State, National, and International levels (a link to a table summarizing the alternative designations is available in additional information at the end of this chapter). Official recognition in the CDP of Waipi'o Valley's significance as a natural, cultural, and scenic resource would strengthen the nomination process.

Input from the Waipi'o Circle and other interested groups is needed to develop a recommended designation in the CDP. The selected designation should meet

the following objectives:

- **Stature.** The more global the recognition, the more difficult to be selected, but the greater the stature;
- **Local Control.** The program should enable and encourage local control of management.
- **Priority Justification for Funding.** The designation should prioritize or open doors for funding from various grant programs for a range of natural, cultural, and economic initiatives such as stream ecosystem research or restoration, organic taro weed and pest control, stream maintenance and flood repair, or other appropriate endeavors related to the historic-natural-scenic values;
- **Technical Assistance.** An agency with resource management expertise such as the National Park Service should be available as a partner to provide technical, planning, and financial assistance, leaving decisionmaking authority in the hands of local people and organizations;
- **Justification for Special Regulation.** With official recognition, there is a stronger political justification at the County level to impose special regulations to protect the cultural values, such as a Valley Rim buffer setback to prohibit development within say 200' of the top of cliff (zoning code amendment), or vehicular access control measures for the access road into the Valley (traffic code amendment).
- **Justification for Water Commission Determination for Instream Flow Determinations.** With official recognition, there would be additional justification for more vigilant stream management.

### *Wahi Pana Implementation*

Usually, the first implementation step to seek any designation is the preparation of a feasibility study documenting:

- An assemblage of natural, historic, or cultural resources that together represent distinctive aspects of local/American/world heritage worthy of recognition, conservation, interpretation, and continuing use;
- A capable and representative managing entity;
- Widespread support and commitment from the public, government, private sector, and non-profit

organizations.

### *Strategy 9: Prioritize the Construction of the Waipi'o Valley Lookout Visitor Center*

The County has already purchased a 1.804-acre site for the Visitor Center at the Waipi'o Valley Lookout (TMK (3)4-8-004:006). The Waipi'o Circle, a group of Valley residents and others interested, have started the planning and manual site clearing for this facility.

The facility has the following potential functions:

- **Interpretive and Educational.** The Visitor Center would have displays, presentations, docents, publications, performances, and other means to engage and inform visitors of the historic, cultural, and natural treasures of the Valley. The information would be geared to school children, local residents, and visitors. The intent would be to provide a fulfilling experience without having to descend into the Valley. For those choosing to trek into the Valley, they would learn the proper protocols.
- **Research and Archival.** There is significant research already complete—the Visitor Center would be a repository of this knowledge base where sources or artifacts would be stored and/or easily accessed. There is also much still to be learned, and the Visitor Center would drive this research and be a place for discussion, working space with computer access, and integration of science and culture.
- **Ceremonial.** As appropriate, the Visitor Center can serve as a place for practitioners to pay respects to the akua of the Valley.
- **Valley Agricultural Products Sales/Distribution Center.** To expand the market demand for products grown by the existing Valley farmers, as well as to encourage a resurgence of increased taro cultivation, the Visitor Center could be a type of farmer's market, possibly exclusive to the Valley farmers, open 7 days a week. A portion of the revenues generated would be used for the overall management.
- **Management.** The management entity for the Visitor Center could be the same entity for man-

agement of the Valley. It could be an entity that already exists, such as the Waipi'o Circle, transformed as necessary with formal bylaws and elected directors. Ideally, this entity would incorporate the functions of other existing groups such as those related to stream management. This management entity would receive, account for, and determine the disposition of revenues for the overall management of the Valley.

- **Access Control.** A suggested idea for access control—that requires research, testing, and input—is to install a gate at the top or bottom of the access road with access controlled through a smart card system. A smart card looks and functions like a credit card that can be programmed to identify the person and their respective access rights. For example, Valley residents, landowners, lessees, or their designated guests would be able to access with no charge. On the other hand, visitors would pay a fee. The visitor would be required to go through the Visitor Center to pay the fee, understand the protocols, and obtain their temporary smart card. The management entity would determine whether and how much the fee would be for other classes of users such as the surfers, fishermen, area residents, or resident visitors. This fee could be paid upon each use, once a year, or any other time increment. There are many options to pay for the equipment and software. One option that requires no upfront payment to install the system would be for the private vendor to setup the gate, card control, and software at the vendor's cost, and the vendor would receive a portion of the revenues to recapture the capital costs over time. The vendor would also manage the software and provide accounting and usage reports to the managing entity. Because the system is unmanned, night fishermen or other authorized users would be able to enter at any time. Since all users would be identified by the smart card, this accountability should hold the user to follow the rules of conduct (see section "Proposed Community-Managed Public Access System" on page 38 on public access). The management entity could use the revenues generated to maintain the roads within the Valley, maintain the sanitation systems at the beach, or other appropriate uses.

The CDP proposes to support the development of the Visitor Center as follows:

- Priority for CIP funding to design and construct the Visitor Center;
- Coordination with the Department of Parks and Recreation to integrate the support facilities for the existing Lookout with the Visitor Center;
- Integration of the Visitor Center into the Heritage Corridor route and "story" (see section "Old Māmalahoa Heritage Corridor" in chapter 4);
- Support for community-based management of the Visitor Center through a lease or cooperative use agreement with the County Department of Parks and Recreation (Chapter 7 for more discussion of these alternative agreements);
- Support county code amendment or Council Resolution, as appropriate, for access control through the traffic code.



*Waipi'o Valley Kalo*

#### *Additional Information:*

- **Consistency with CDP Values & Vision** [[link](#)]
- **General Plan references** [[link](#)]  
 General Plan information pertaining to Natural and Cultural Resources can be found in the chapter on Natural Resources and Shoreline starting on page 8-1; related subjects can be found in the chapters on Environmental Quality (4-1), Historic Sites (6-1), and Natural Beauty (7-1).
- **CDP Community Profile References** [[link](#)]  
 For more information on Natural Resource Management, see the Hāmākua CDP Community Profile, starting on page 6-1; For more information on Special Management Area & Shoreline Setback Areas,

please see the Community Profile, starting on page 8-25; For more information on Coastal resources, please see the Community Profile, starting on page 4-1.

- **Hawai'i Watershed Guidance (Hawai'i Coastal Zone Management) [link]**
- **Natural Resource Management Program Tables**
  - **Federal and State Resource Management Tax-Related Incentive Programs Table [link]**
  - **Natural Resource Management/Land Acquisition Programs Table [link]**
  - **Natural Resource Management Incentive Programs for Land Owners Table [link]**
- **Coastal Zone Management (CZM) Resource Management Measures Adapted to Hāmākua Table [link]**
- **Waipi'o Valley Wahi Pana Alternative Designation Table [link]**

### *Questions to the Reader*

1. How can riparian buffers be managed so that they are not areas overrun with invasive species?
2. How can natural resource management and restoration make business sense?
3. What is the appropriate designation for Waipi'o Valley?
4. How can the CDP best or most appropriately support the Waipi'o Valley Visitor Center?

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## 6 PUBLIC ACCESS

*Desired Outcome: In 2035, the Hāmākua community has perpetual legal access to ocean and mountain resources, adding to the quality of life enjoyed by its residents and visitors and sustaining cultural traditions that have been conducted for generations by Native Hawaiians and all ethnic groups that migrated to Hawai'i to work in the plantations. Based on a sense of stewardship, rules of conduct are passed on to ensure that the natural and cultural resources are not depleted or degraded. For access to or over public lands, signage and appropriate facilities have been provided and maintained with the assistance of the community as needed. For access to or over private lands, the community has an organized entity to negotiate with and be accountable to the private owner to allow access.*

### Objectives

The vision above translates into the following objectives:

- **Public Lands.** (1) Identify appropriate public lands where resources of interest to the public are located or that provide access to such resources, (2) identify issues needing to be resolved, and (3) determine actions to ensure safe and responsible access, and long-term maintenance practices.
- **Private Lands.** Establish a feasible community organization template to enable communities to negotiate access terms with private owners.
- **Community-Managed Public Access Network.** Link the various community organizations to enable sharing of best practices and cross-member privileges.
- **Rules of Conduct.** Articulate a shared set of values that govern responsible access practices.

### Public Access Inventory

A comprehensive inventory of coastal and mountain accesses is being compiled and mapped. The inventory is a tool for identifying which accesses have higher potential for being opened to the public. Two key considerations are (1) ownership and control of the lands and whether they are connected to public roads, easements and/or trails and (2) whether the needed resources are available to manage the public use. (See maps on pages 43 and 44).

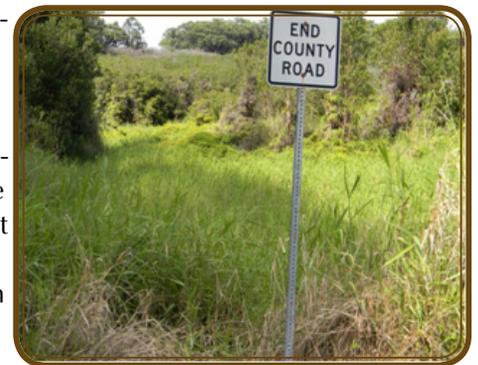
### Public Access Crossing Public Lands

#### Strategy 1: Identify Public Lands of Higher Potential for Public Access Use

#### Mountain Areas

Public forest lands serve multiple purposes such as native habitats and watershed purposes. Hence, public access to these areas for hunting, hiking, gathering or other uses needs to be managed compatibly with these other purposes.

Of the several types of public mountain lands, Forest Reserves usually do not require permission to enter. However, access problems related to Forest Reserves include inadequate signage to indicate parking areas and/or trail location, and inaccessibility when private lands (or privately leased public land) must be crossed before reaching the Forest Reserve. The table on the next page indicates public mountain lands that have been identified as having higher potential for public access.



*Additional signage recommended to mark a parking area and trail into the State Forest Reserve.*

TMKs of Public Mountain Lands	Public Owner	Permission Required	Access Issues & Needs
2-6-18:04 (via Kaiwiki Rd.)	State	None	History of harassment and vandalizing of parked cars. Signs & trail markers needed.
2-8-01:03 (Honomū)	State	Yes. Currently private	Subdivision pending for 2-8-03:01. Need State & County cooperation to create the access and manage it.
2-9-05:01 (Top of Kaiwiki Homestead Rd.)	State	None	County & State cooperation needed to post signs & mark a parking area & trail head.
2-9-05:01 (Top of Chin Chuck Rd.)	State	None	County & State cooperation needed to post signs & mark a parking area & trail head.
3-3-01:04 (via Pihā-Kahuku Rd.)	State	Road in Limbo	Road in Limbo continues from end of county-maintained road to Forest Reserve. Would need State and County cooperation to provide access.
4-3-10:01 (via Antone DeLuz Rd.)	State	Road in Limbo	Road in Limbo continues from end of county-maintained road to Forest Reserve. State and County cooperation needed to survey, post signs and trail markers.
TMKs: 4-7-06:03 and/or 4-7-06:09 (via County Kapulena Ag. Park)	State	Yes. Access would be through County Ag. Park.	State and County cooperation needed to provide access.

*Coastal Areas*

Due to the predominant sea cliffs in Hāmākua and the scarcity of public-owned oceanfront properties that are connected to public roads or known public trails, the few public areas that provide reasonably safe access to the ocean are precious.



View from Kaia'akea Point

These safer-access areas include a few County beach parks with existing public vehicular access at Honoli'i, Kolekole, Hakalau and Laupāhoehoe. Other public-owned coastal areas are located along cliffs and require assessment of their safety and suitability for public access, before they can be identified as having higher potential for improved public access. At this time one public oceanfront property has been identified as having higher potential for improved public access: Kaia'akea Point on TMK: 3-4-03:14 in North Hilo District.

*Historic Public Trails and Roads*

There are a handful of historic trails and roads that appear on maps and are remembered by long-time residents of the Planning Area. Certain historic trails and roads may be owned by government in fee-simple if research can confirm that those trails/roads existed in 1892 or prior. A finding of public ownership of historic trails/roads may be the only means of opening



Research into historic trails and roads requires Hawaiian language ability since archival documents and the earliest survey maps are often in Hawaiian.

public access to certain mountain and ocean destinations. Location of a historic route can be especially challenging if there is no surveyed description of its location and its physical remnants are overgrown or destroyed. Historic trails/roads that should be researched include Waipunalei Trail, Ka’ala Road to Mountain (a.k.a. Alanui Ko Wa’a), and Old Government Road to Pā’auhau Landing.

### Public Access Crossing Private Lands

Public access rights over private land usually fall into one of the following situations:

- A government road crosses private property. This includes old government roads that were laid out by government but never built (a.k.a. “paper roads”) and unmaintained old government roads (often called “Roads in Limbo”). It is against State and County laws to obstruct or impede public passage on “streets” or “highways,” including paper roads and roads in limbo. However, the community can only report the suspected obstructions to the responsible public agency and monitor the agency’s response;
- Ancient trails/roads that cross private property but are public rights-of-way under the Highways Act of 1892. To confirm that a public right-of-way exists, an abstractor under the State’s Nā Ala Hele trails and access program researches whether a government-owned road or ancient trail legally exists, and the State Department of Land and Natural Resources officially confirms the government’s property interest;
- A public easement has been granted or committed by law (e.g., via adverse possession or court settlement) or by permit condition, (e.g. a requirement

of subdivision, resort, or Special Management Area approval). Copies of permits are available for inspection at the Planning Department.

If none of the above exists, a landowner could voluntarily allow the public to access his/her land or enter into a private agreement with a community organization to manage an access under agreed-upon conditions. Otherwise, the public would need to acquire access rights by paying for them through the government’s powers of eminent domain or through the process established by the County through the Public Access, Open Space, and Natural Resources Preservation Fund. Another option would be to wait until permit applications enable government agencies to require public access as a permit condition.



Voluntary Open Access to Haina Landing

### Landowner Liability

To encourage landowners to voluntarily allow public access, State law limits the landowner’s liability if access is opened to the public on private lands without charging a fee (HRS Chapter 520). There are uncertainties with this State law that require action by the State Legislature to make it less ambiguous and risky to court interpretation. Liability is also a concern for government agencies and the community groups who volunteer to help with access management.

### Published Maps

Most of the desired access over private lands is to coastal areas. Although maps will be available for public review that include desired access areas identified during public meetings and workshops, the complete map record will not be published in the CDP but rather kept on file in the Planning Department. This is because many of the mapped accesses are on private lands, not legally open, could be hazardous and could be subject to vandalism and trespass if publicized before they are ready for public use. The maps published in the CDP

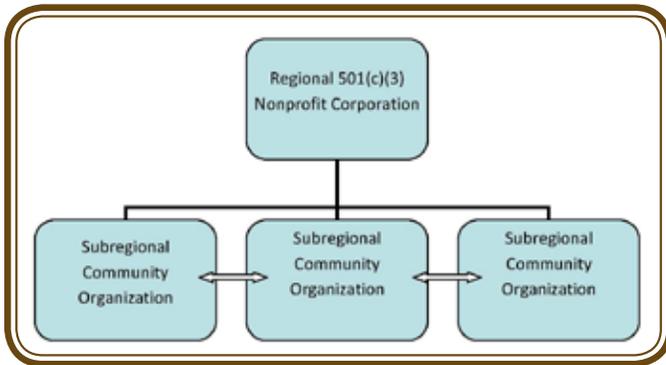
will show accesses that are presently legally open to the public and accesses that have been evaluated and recommended for opening in the future.

***Strategy 2: Create a Community-Managed Public Access System***

Government does not have the financial and staff resources to create and manage a public access program over private land. Public funding for management of public parks, roads, and trails is being cut back. It appears that the community needs to assist if access opportunities are to increase and improve. A successful community-managed public access system will require a capable organizational structure.

***Organizational Structure***

So that each community does not have to re-invent the wheel to setup, can secure technical support as needed, and can integrate into a regional system capable of linking and supporting individual community efforts, the following organizational structure is proposed:



There would preferably be just one Regional 501(c)(3) Nonprofit Corporation that would enter into all legal agreements. Since it can be an arduous task to obtain 501(c)(3) status, it would be ideal to secure the commitment of an existing 501(c)(3) nonprofit corporation. This Regional Nonprofit Corporation would need to have the stability and capacity to make a long-term commitment, enter into agreements with landowners, be accountable, carry liability insurance for itself and its members, and provide technical assistance to the local communities.

The Subregional Community Organizations would be

based in the subregions of Rural South Hilo, North Hilo, and Hāmākua. The organizations representing these subregions would be full members of the Regional Nonprofit. Since the local organizations know the residents, places, and landowners best, the local organization would prioritize the areas it seeks to access, negotiate with the public agency or private landowner (with assistance from the Regional Nonprofit as necessary), administer the rules of access without being discriminatory, and respond to complaints.

The establishment of this regional and subregional organizational structure is discussed in more detail in the section on “Community Regional Nonprofit” in Chapter 9 - Implementation.

***Components for a Successful Community-Managed Public Access System***

In order to succeed, the community-managed system should include:

- Template Legal Agreements that help each organization to comprehensively address all management details, rights, and responsibilities with full understanding of what they are agreeing to do.
- Liability Protections that include adequate insurance and Waivers of Liability for all involved, as well as risk management training and methods that will prevent accidents and injuries.
- Education Programs that establish clear and nondiscriminatory access rules and ensure that community members understand and agree to the rules as a prerequisite to participating in the access program, as well as understand the consequences for violating the rules.
- Access Control and Accountability (when needed) that involve low and higher- tech methods of accountability ranging from permits and sign-in logs to “smart cards” that are issued to qualified members and electronically record the times and dates of access use.
- Enforcement that is swift and decisive and based on established Rules of Conduct. With education and accountability built into the system, there should be fewer misbehaviors and an improved ability to

identify culprits.

- Financing to purchase insurance, purchase and maintain access control systems, administer the program, support volunteer programs, repair and maintain accesses, etc. The Regional Nonprofit will be able to seek tax-deductible contributions, as well as apply for grants. Membership and user fees may be necessary, but care must be taken not to lose the liability protections under HRS Chapter 520 when fees are charged. It is important to note that commercial access activities may be prohibited on certain lands or may require state and/or county permits beforehand. Liability exposure is also increased.



*Entrance Control Terminals that read "Smart Cards" may be effective in certain access locations*

- Partnership that enables more successful outcomes. Sharing ideas, technical expertise, membership privileges are among the benefits that can come from cooperation between the Regional Nonprofit and its member organizations, public agencies, landowners and land managers.

**Strategy 3: Forge Public-Private Partnerships**

Where management of public lands are concerned, community organizations can enter into "Stewardship Agreements", "Friends of the Park", and "Memoranda of Agreement" to assist and cooperate with the managing agency, e.g. notify the state or county agency of needed improvements and hazardous conditions, help to monitor the area, supply volunteers for specific work projects, etc. When public agencies are unable to assume new responsibilities, the help of a community organization could be crucial to keeping an area open to public use (or opening new accesses).

There are a few public lands with access potential that

are "unencumbered" by any lease or other agreement (e.g., Kaia'akea Point). Should public access management become necessary, the help of a community organization may be the only means of keeping the area open to public use. Again, a management agreement is recommended.

Many public and private lands with public access values are already leased or set-aside for non-recreation purposes, e.g. ranching, agricultural parks in Hono-kaia, and Pa'auilo, etc. Enabling access across such lands may require compensation of the lessees for loss of exclusive use of portion(s) of the property. Access terms would need to be carefully negotiated to enable access



*Volunteers on the Muliwai Trail*

to compatibly coexist with the existing uses. Such access arrangements may involve private access agreements between the landowner, lessee, and community organization that would be assuming the management responsibility.

**Strategy 4: Adopt Community Accepted Rules of Conduct**

Hawaiians often refer to the importance of "kuleana" or taking responsibility for your own behavior. If everyone conducted themselves responsibly while using public accesses, there would be little need for enforcement of the rules or cleaning up after access users. When people know and observe Rules of Conduct, nearby residents have fewer complaints about an access in their neighborhood; landowners have fewer objections to the public presence; accesses can remain open; and new accesses are more likely to be welcomed. Educational programs will be needed to inform and remind people of proper and safe conduct when outdoors in nature.



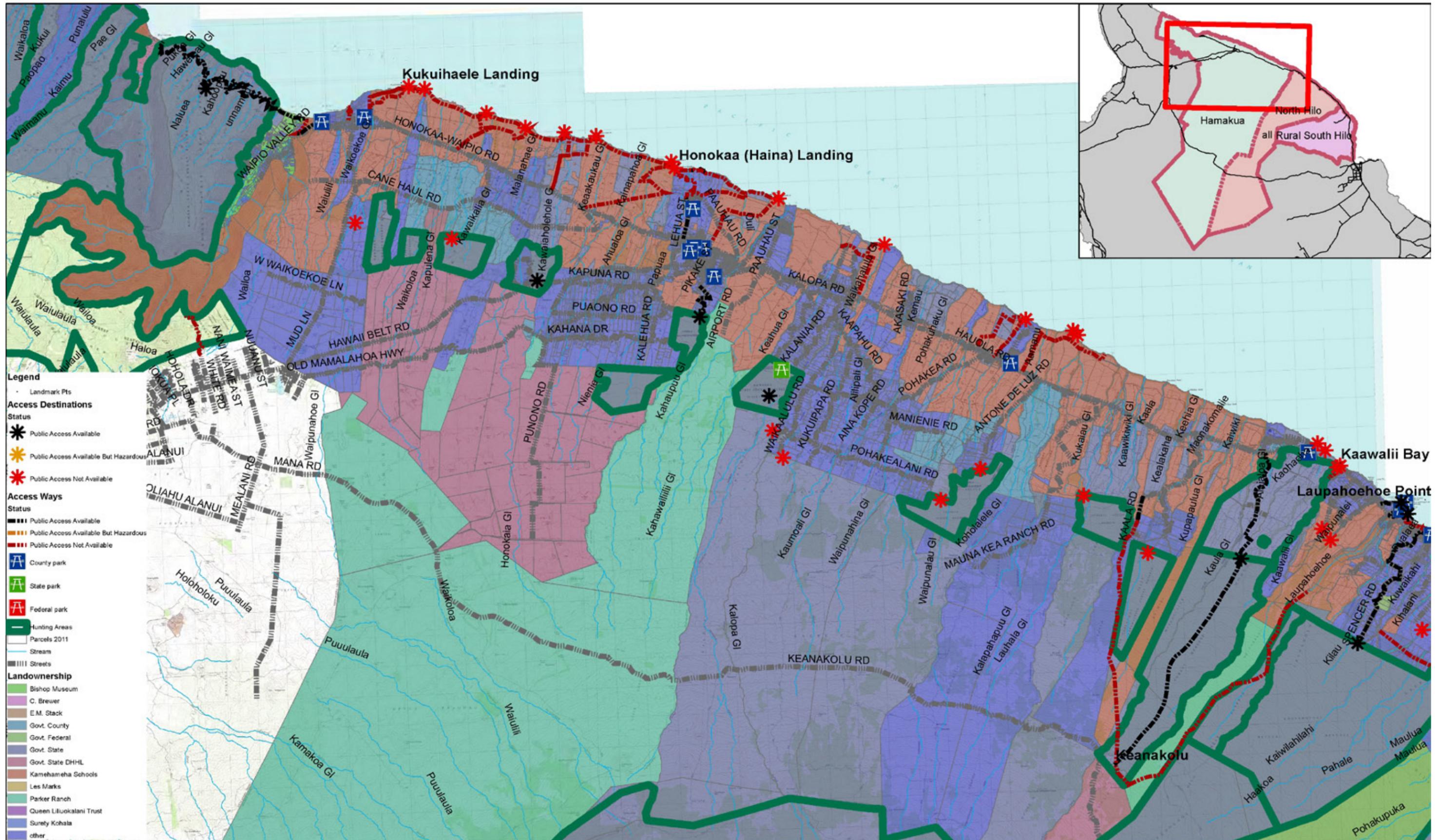
### *Additional Information*

- **Consistency with CDP Values & Vision** [[link](#)]
- **General Plan references** [[link](#)]  
 General Plan information relating to Public Access issues can be found in the chapters on Natural Resources and Shoreline (8-1), Recreation (12-1), Natural Beauty (7-1), and Historic Sites (6-1).
- **CDP Community Profile References** [[link](#)]  
 For more information on Public Access issues, please see the Hāmākua CDP Profile starting on pages 4-1 (Coastal Resources), 6-1 (Heritage Resources), and 8-1 (Land Use).
- **Public Access PowerPoint Presentation** [[link](#)]
- **Public Access Handout** [[link](#)]
- **Select Laws Related to Public Access**
  - Hawai'i Recreational Use Statute, which limits the liability of private landowners who allow the public to access their properties – HRS Chapter 520 [[link](#)]
  - County of Hawai'i's Public Access Ordinance, which enables the County to require public access in subdivisions, under certain conditions – HCC Chapter 34 [[link](#)]
  - County of Hawai'i Planning Department Public Access Rule, which governs the use of public accesses that are created through the Public Access Ordinance - Rule 21 [[link](#)]
  - Other Laws Related to Public Access [[link](#)]
- **County of Hawai'i Shoreline Public Access Program** [[link](#)]

### *Questions to the Reader*

1. **Priorities**-- The CDP proposes to give higher priority to opening public access to the mountains and the ocean over public lands that are connected to public roads, easements and trails. This is because public funds and resources are limited for acquiring and managing accesses over private lands and private roads. Do you agree with this priority? Why or why not?
2. **Community-managed system**-- The proposed community-managed system is a new idea. Is the community willing and able to take on this role? What do you like about the community-managed system? What do you dislike about the community-managed system?
3. **Rules of Conduct**-- The Rules of Conduct should come from the community-- what do you think should be among the rules of conduct when using a public access?

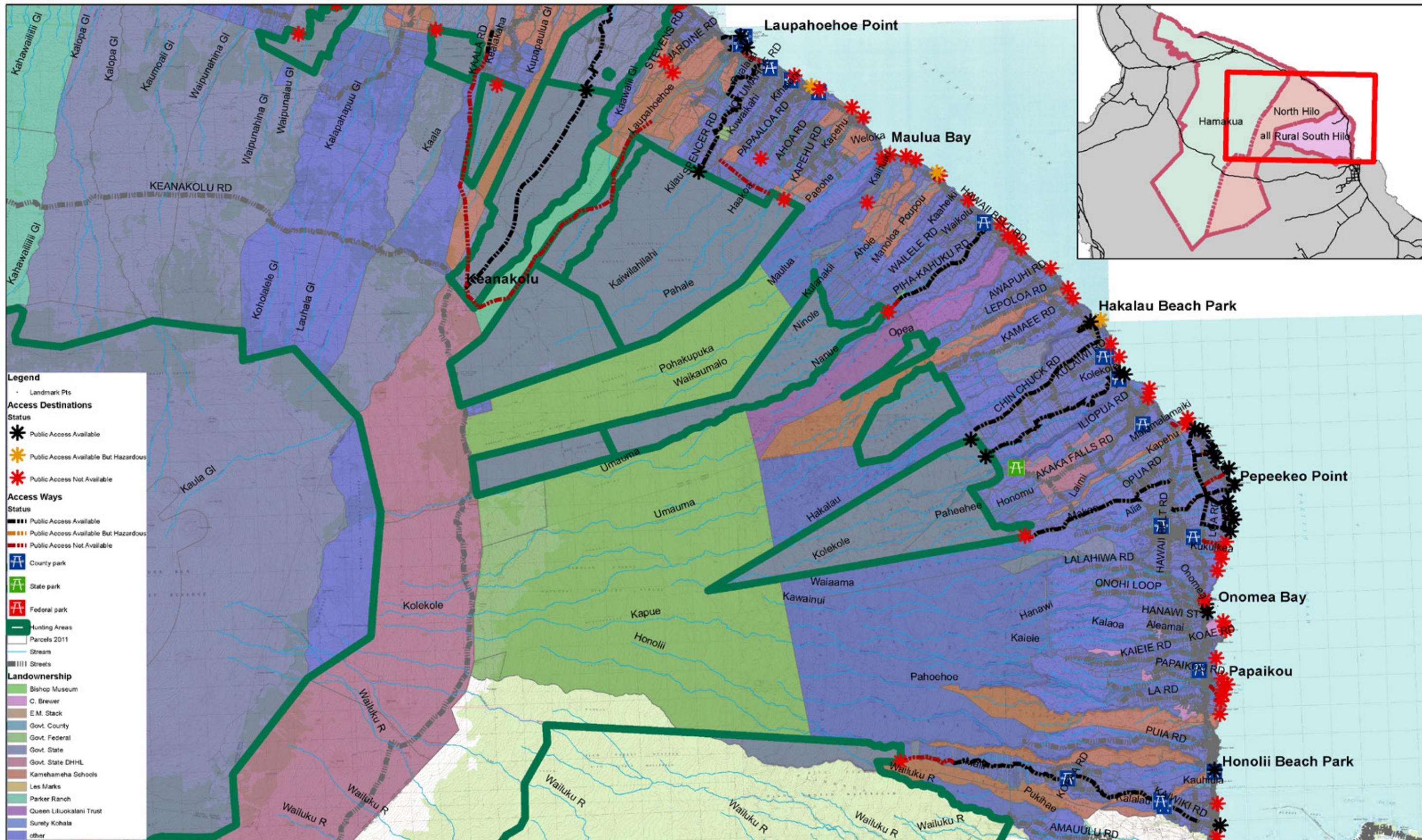
# Access Inventory and Availability\*



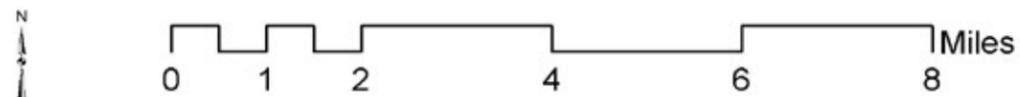
\*Note:  
 - Accesses noted as "Public Access Available" (black and yellow dots and lines) have been legally established for public use  
 - Access users should be aware that many public accesses have rules with which they must comply



# Access Inventory and Availability\*



\*Note:  
 - Accesses noted as "Public Access Available" (black and yellow dots and lines) have been legally established for public use  
 - Access users should be aware that many public accesses have rules with which they must comply



## 7 PUBLIC AND COMMUNITY FACILITIES

*Desired Outcome: In 2035, the Hāmākua community has partnered with the County to maintain gyms, playfields, and other public facilities, as well as to organize recreational programs. As residents grow older, there is a range of care available so that they have a choice to stay in the community and have expanded mobility choices. Schools play an active role in the community, a place where after-school activities take place for both children and adults in pursuit of lifelong learning and intergenerational interaction. A range of housing choices are available, from affordable to affluent, some of which are perpetually affordable, so that people of all income levels will have an opportunity to live in the area.*

### Objectives

The vision above translates into the following objectives:

- **Recreation Facilities.** Identify alternative facilities partnership options with the County to match the appropriate level of commitment from the community.
- **Aging In Place.** Clarify the existing roles and gaps in government services and specify the potential role of the community.
- **Affordable Housing.** Identify appropriate regulations, assets, and incentives to target first-time home buyers, workforce housing, and households under 120% of the County median income.
- **School-Community Relationship.** Clarify the mutual benefits and the means to initiate joint use programs.
- **Transportation Programs.** Provide a community self-help program to resolve roads-in-limbo issues; prioritize a transit shuttle service.



Honoli'i Beach Park

### Recreation Facilities

The majority of County-owned recreation facilities (Gyms, Playgrounds, Ball Fields, Community Centers, and Beach parks), were built and maintained by the sugar plantations and turned over to the County when the plantations closed. Because of this heritage, the Planning Area is fortunate to have the most facilities per capita of any area on the island. The convenience of having such facilities in proximity of the community plays an essential role for youth development, senior activities, and community gathering.

Over the past several years, some of these recreation facilities have fallen into disrepair, reflecting the limited maintenance resources and lower priority to receive funding relative to other County-wide needs.

*Strategy 1: Initiate partnerships through alternative county community arrangements*

In order to address facility maintenance needs, the CDP proposes alternative means for the community to take action and partner with the County. To optimize community use particularly of those facilities in disrepair (e.g., 'O'okala, Pāpa'aloa, Wailea/Hakalau, Honomū), the community has the following alternatives to partner with the County instead of waiting indefinitely for repair funds to become available:

- **Friends of the Park.** This program enables the community to make improvements, beautify, or assist with maintenance. The County has full control and super-

vision over the work and any ongoing programs. The community has no exclusive rights to the use of the facility.

Examples include the improvements and beautification of Honoli'i Beach Park and Hakalau Mill beach park by the nonprofit group, Basic Image, Inc. through it's Pakalove program ([www.pakalove.org](http://www.pakalove.org)).

- **Cooperative Agreement.** This program enables the community to make improvements as well as manage the facility. The County must still approve the improvements, but the County takes a back seat to the community on the planning and operations. An example is the Cooper Center in Volcano Village ([www.thecooper-center.org](http://www.thecooper-center.org)).
- **Lease.** This program enables the community to take full control of the facility to the extent of the terms of a lease agreement. Depending on the lease agreement, the County may have minimal funding and liability obligations under this arrangement with the community assuming those responsibilities.

*Laupāhoehoe Boat Ramp*

The Laupāhoehoe boat ramp is the only public boat ramp facility in the Planning Area. The closest public boat launch areas are located in Hilo and Kawaihae. The boat ramp is an important asset to subsistent fishermen and recreational boaters.

Originally constructed by the U.S. Army Corps of



*Laupāhoehoe Boat Ramp*

Engineers, the Laupāhoehoe boat ramp is managed by the County of Hawai'i Parks & Recreation Department. Due to damage caused by heavy wave activity, the

ramp floor has steel rebar protruding from crumbling concrete, making it hazardous for boaters and especially hazardous for swimmers (swimming is officially not an allowed use of the ramp, but the ramp continues to be a popular local swimming spot). The boat ramp has been officially closed since June 2009 to protect public safety.

***Strategy 2: Prioritize County CIP funding and identify additional funding sources to repair or replace the Laupāhoehoe Boat Ramp***

Parks and Recreation makes minor repairs to the rebar protrusions when they are reported and local residents have at times taken it upon themselves to make repairs and continue to use the ramp on a limited basis and at their own risk. It is commonly thought that the location of the ramp is part of the problem and until the ramp is relocated to its original position and orientation in the bay, the problems of significant wave erosion will continue to manifest themselves.

The County is currently assessing the ramp's condition in order to develop plans for restoring the ramp to a usable/safe condition, but currently there are no funds allocated for the repairs of this project.

***Aging In Place***

The Planning Area has the highest percentage of persons over age 65 in the County. This characteristic indicates a special need unique to this Planning Area, but also a great asset. Instead of the brain drain that many rural communities experience when their young people leave, the elderly population is a brain gain-- a population ready to contribute to the community by volunteering, supporting the arts, mentoring, and even continuing to work. These elders are our links to the past and transmitters of culture, knowledge, and values. However, as seniors help to sustain their communities, then need something in return: multi-generational places they love and help them age in place.

Three elements to age in place successfully include: affordable and appropriate housing, supportive community amenities and services, and adequate mobility options.

**Strategy 3: Revitalize towns to accommodate the needs of seniors and allow for aging in place**

The major deficiencies identified in the Planning Area seem to be affordable and reliable transportation for those who are not ill or disabled, and walkable communities with a mixed diversity of services including employment and volunteer opportunities. To address these deficiencies, the CDP proposes to:

- Recommend a shuttle bus service and/or para-transit (e.g., shared-ride taxi) that would target the elderly but be available to the general public;
- Coordinate mitigation, preparation, or evacuation assistance for disasters (see section “Enhanced Community Emergency Response Teams” in Chapter 8);
- Revitalize the towns with complete streets and connected sidewalks;
- Encourage the community nonprofit (see More information in Chapter 9) to investigate the feasibility of a senior-operated mom & pop store chain that could operate at a lower margin and get a foothold in the towns that may not have the existing market demand to support a conventional profit-based store. This store could serve as a gathering place for seniors and the community, foster intergenerational interaction, provide an additional market for neighborhood farmers, and a walkable place to buy convenience items.



*Downtown Honoka'a is a good example of a walkable community*

**Affordable Housing**

**Affordability Factors**

The U.S. Department of Housing and Urban Development (HUD) include use to following factors to calculate housing affordability:

- Percent of income used for housing costs. Housing costs such as rent, mortgage, and utilities should comprise no more than 30% of gross income;
- Household size. The size of the housing unit should be able to accommodate the household (e.g., 2-bedroom for family of four);
- Interest rate. For homebuyers, an assumed interest rate approximates the projected average commercial mortgage interest rate for the year.

The County Code defines the upper limit of an affordable sales price as an amount affordable (assuming the above factors) to a household earning 120% of the County median income. Based on 2011 guidelines, the affordable sales price for a 4-person household earning 120% of the County median is \$332,800 (income of \$82,440). The sales price affordable to a 4-person household earning 100% of the median income is \$277,400 (income of \$68,700).

**Existing Housing Assets**

The Planning Area has four affordable rental facilities. Three of these are for lower-income elderly (target income of 50% of median): Hale Hauoli in Honoka'a (40 units), Pāpa'aloa Elderly Housing (10 units), and Kula'imano Elderly Housing in Pepe'ekeo (50 units). Currently, there are waiting lists for most of these facilities which is an indication of the demand for this type of housing. The fourth affordable rental facility is for lower income families (target income of 60% of median): Kauhale Olu I, II, and III in Pepe'ekeo (124 units).



*Kauhale Olu III - Pepe'ekeo*

The Planning Area has a good supply of affordable owner-occupied housing in various former plantation camps, including Haina, Pā’auhau, Pa’auilo, Nakalei, ‘O’ōkala (Niu and Kukui Camps), Kekoa (Pāpa’aloha), Honomū, and Pepe’ekeō that are affordable to a 4-person household earning 60% of the median (income of \$43,400) according to the 2011 guidelines. Although most of the total values of homes on homestead lots exceed \$230,000, it is possible to purchase these pre-existing large-acre lots at an affordable price especially for those homesteads without County water service.

Another asset in the Planning Area is the the Hāmākua Housing Corporation (HHC), an existing housing non-profit corporation, that can advance community-based housing initiatives. This nonprofit still owns land that could be potential sites for housing projects.

***Strategy 5: Expand Homeownership Opportunities and Include Affordable Rental Options Into Town Revitalization Efforts***

In recognition of the importance of homeownership in establishing pride, commitment, and sense of community, the CDP proposes to encourage affordable homeownership by:

- Promoting existing first-time home buyer down payment assistance and home repair programs available to lower income households available from the County Office of Housing & Community Development (<http://www.hawaiicounty.gov/office-of-housing/>);
- Highlighting the unique character and functional design of the plantation homes to encourage preservation of these features upon rehabilitation and to serve as a model for new construction;
- Encourage the Hāmākua Housing Corporation to use its existing assets and appropriate government land for land trust homeownership to ensure a housing stock of long-term affordability.

In order to offer a choice of housing options, the CDP proposes to include affordable rental housing tools in the town revitalization toolbox. These would focus on higher-density, town core areas and provide a choice for households who prefer convenience and proximity to services and mass transit.

### ***Redefine the School - Community Relationship***

During the plantation era, the neighborhood/community school played an integral part in the daily life of residents. In addition to educating keiki, the community’s school was important for sports and recreation, libraries and learning, and a focal point for community gatherings.

As the plantations closed and population decreased, a number of community schools also closed their doors (Kukuihaele, Pepe’ekeō, Honomū, Hakalau, ‘O’ōkala, and Pā’auhau) and public schools consolidated into a more regional model. Today, only five public schools remain to serve the Planning Area.



While the remaining schools continue to play an important role in the community, the CDP will explore ways to bolster the mutual school/community benefit in the following ways.

- Improve transportation options for students
- Facilitate school access to County recreational facilities and personnel
- Support and expand the partnership between the community, County, and NHERC

In the past, elementary school children could walk to and from a neighborhood school that was close to their home. With the consolidation and closure of several of these schools and the greater distances students have to travel, most students are now bussed or driven to school.

*Safe Routes to School*

One Planning Area school, Pa’auilo Elementary/Intermediate, has been working toward greater mobility options by embarking on a Safe Routes To School plan.

***Strategy 6: Improve Transportation Options for School Students***

Safe Routes to School (SRTS) is a national and international movement and to create safe, convenient, and fun opportunities for students to walk, bike and skate to and from school. The SRTS movement became a federal mandate in 2005 with the passage of the Safe, Accountable, Flexible, Efficient Transportation Equity Act, and since then nearly \$800 million has been allocated to encourage more biking and walking by improving safety conditions around schools and offering educational programs.

Working with People’s Advocacy of Trails, Hawai’i (PATH - [www.pathhawaii.org](http://www.pathhawaii.org)), Pa’auilo school and community stakeholders surveyed parents to determine how kids got to and from the school and some of the impediments to walking/biking. Chief among the parent’s concerns were distance, speed of traffic, amount of traffic, and weather/climate.

Based on these concerns and other information gathered, the planning team drafted a SRTS plan in 2010 and has been working on prioritizing solutions to those concerns. Pedestrian safety improvements in the Pa’auilo area is one of only three Hawai’i island projects selected for State DOT Statewide Pedestrian Master Plan funding in 2011 based on the work done through the SRTS planning process. The CDP encourages other schools to go through a similar process to allow for more varied transportation option for area students. (A link to this draft plan is available at the end of this chapter.)



*2011 Pa’auilo Walk to School Day, 53 Students Participated*

*After-School Activity Transportation Options*

Most students who participate in after school activities need to be driven home by parents as most of the DOE busses have already left by the end of the school day. In order to better service after-school student transportation needs, the CDP will work with the County Department of Mass Transit to determine feasibility of initiating a shuttle service.

***Strategy 7: Facilitate School Access to County Recreational Facilities and Personnel***

County of Hawai’i gymnasiums, community centers, and swimming pools provide various after-school youth activities and programs. In addition to after-school programs, in locations where the gymnasiums and swimming pools are located in close proximity to schools, the County recreation specialists work in cooperation with the school to help provide physical education opportunities during school sessions. This either involves the Recreation Technician being invited to enter the school campus to provide physical education to a specific class, or it may involve classes of students walking to the County facility.



*Honoka’a Swimming Pool*

Currently, this resource-sharing is done on a limited basis and at the request of the school administration or individual teachers. Particularly in regards to the schools using the swimming pool facilities in Laupāhoehoe or Honoka’a, there are legal entanglements relating to liability issues that can be cumbersome for teachers to navigate. However, due to DOE budget cuts and a shortage of teachers who are trained in physical education, this resource-sharing between schools and County becomes all the more crucial in maintaining and encouraging physical activity in our young people.

The CDP encourages and supports this resource-sharing relationship and recommends that these partnerships between the school and the County be strengthened and expanded to become part of the standard school curricula, and that legal paperwork can be streamlined to facilitate increases in shared use of County facilities.

*North Hawai'i Education and Research Center (NHERC)*

NHERC ([www.hilo.hawaii.edu/academics/nherc/](http://www.hilo.hawaii.edu/academics/nherc/)) is a branch of UH-Hilo founded in 2006 and located in the former hospital in Honoka'a. This facility and connection to the University of Hawai'i system is a unique and tremendous asset to the rural region. The center offers both credit and non-credit courses on site and through distance learning to serve college students, advanced placement (AP) high school students, adult learners, trade union members, seniors, and displaced workers. NHERC plays a key economic development role in terms of workforce development with in-service training for professionals, agricultural extension support services and training, and computer classes. Additionally, the center is an important community gathering place hosting special events, programs, conferences, retreats and town meetings.

***Strategy 8: Support and expand the partnership between the community, County, and NHERC***

Various educational services provided by NHERC include:

- Rural Outreach Services-- The Rural Outreach Services initiative is a public-private partnership of agencies supported by the DLIR Workforce Development Division, University of Hawaii at Hilo NHERC, Hāmākua Partners in Eldercare, Hawaii County's Kapulena Lands project, and the Department of Education's East and West Hawaii Community School for Adults;
- Personal Development & Lifelong Learning-- including courses on healthcare issues, arts, language, and other cultural enrichment courses;
- Professional Development-- including grant writing, business computer applications, and entrepreneurial small business development;

- Agricultural Education-- including agricultural extension services, and hosting Practical Agriculture Courses in partnership with HHDCDC;
- Running Start Program-- enabling qualifying High School students to take college courses in Honoka'a;
- Computer Lab for UH students and community use;
- Hāmākua Heritage Center-- home to a growing collection of historical photos and stories from Hāmākua's Native Hawaiian and Sugar Plantation era residents chronicling the history of the region.

***Transportation Programs***

***Roads In Limbo***

A "road in limbo" is defined as:

- A government road (under the Highways Acts of 1892), all roads existing at that time were declared to be public highways and title thereto vested in the government (In Re Application of Kelley, 50 Haw. 567 (1968)); in addition, "All roads, alleys, streets, ways, lanes, bikeways, bridges, and all other real property highway related interests in the State, opened, laid out, subdivided, consolidated, and acquired and built by the government are declared to be public highways. (HRS §264-1(a));
- A road that is not part of the State Department of Transportation's state highway system (a public highway is not a state highway unless it is designated for inclusion in the state highway system under §264-41. Santos v. Perreira, 2 H. App. 387 (1982));



- A road not on the County’s road inventory (the County Department of Public Works maintains an inventory of undisputed roads that the County owns and has the responsibility to maintain, and for which fuel tax proceeds can be used for maintenance or improvement);
- A road owned, built or laid out by government (either an existing road or “laid out” but unbuilt paper road, see letter to DLNR from the State Attorney General’s office dated 7/21/99);
- A road transferred to county ownership by operation of law (“The ownership of all county highways is transferred to and vested in the respective counties in which the county highways lie.” HRS §264-2).

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

***Strategy 9: Establish a Revolving Loan Fund for Community Initiated Road In Limbo Improvement Programs***

Recognizing that the initial \$2M provided by the State would not go far, the County Council passed Resolution No. 320-10 directing DPW to partner with communities where the County would provide maintenance material from County-owned quarries. However, the status of this program’s implementation remains unclear.

For roads that require extensive improvements beyond patching with County-provided materials, it is not likely that these roads will receive priority for capital improvements `funding due to their very local benefit. Hence, if those benefitting from the respective road-in-limbo are willing to pay a portion of the cost to improve or repair the road, provided the payment is spread over time to be affordable, the CDP proposes

the following policies and actions:

- The County would establish a Revolving Loan Fund to pay for preliminary engineering, feasibility study, design (if necessary), and construction costs;
- the Revolving Fund would be repaid through an Improvement District;
- roads that meet the rural dedicable standard would be added to the County’s road inventory, thereby including these roads in the calculation to determine the Planning Area’s proportionate share of the Fuel Tax that would enable the County to thereafter maintain these roads.

***Strategy 10: Determine Feasibility to Initiate Park-and Rides, Bus Stops, and a Shuttle Service***

The Hele-On Bus ([www.heleonbus.org](http://www.heleonbus.org)) currently has runs through the Planning Area (Hilo to Honoka’a). This route offers 13 trips (9 Daily) and begins/ends in the Honoka’a Gym Complex upper parking lot and leaves the highway to go throug the following Neigh- borhoods/communities: Pauka’a, Pāpa’ikou (stop at Post Office), Pepe’ekeō (stop at Kula’imano Apartments), Honomū (Stop at Ishigo Store), and Honoka’a.

Currently, there is one county constructed bus shelter in Pepe’ekeō and two other community-built (with materials provided by the County) shelters in Pāpa’aloo and ‘O’ōkala. Also There is only one official “Park-and -Ride” facility (Honoka’a) which allow transit riders to park their vehicles in a secure area and access to reli- able transit. The CDP will determine the steps necessary to construct these facilities within the Town Revitaliza- tion Toolbox (see chapter 4) and determine the prioritiza- tion for bus shelter construction in the Planning Area.

Coordinated Services for the Elderly (CSE) provides transportation for those unable to use conventional transportation (ill or disabled). For those who are not ill or disabled, Hawai’i County Economic Opportunity Council (HCEOC) provides paratransit services throug- out the Planning Area on contract with the County Mass Transit Agency. The CDP will explore the feasibil- ity to initiate a shuttle service which would particularly benefit seniors and students participating in after-school

programs as well as the potential expansion of the shared-ride taxi program to the Planning Area.

### ***Additional Information:***

- **Consistency with CDP Values & Vision** [\[link\]](#)
- **General Plan references** [\[link\]](#)  
 General Plan information pertaining to Public and Community Facilities can be found starting in the Public Facilities chapter starting on page 10-1, and references for Park resources are located in the Recreation chapter starting on page 12-1.
- **Community Profile References** [\[link\]](#)  
 For more information on Infrastructure and Public Facilities, please see the Hāmākua CDP Profile starting on pages 5-1.
- **Recreational Facilities Table** [\[link\]](#)
- **Hawai'i County Office Of Aging 2011-2015 Area Plan On Aging** [\[link\]](#)
- **Coordinated Services for the Elderly Resource Directory** [\[link\]](#)
- **State Of Hawai'i Affordable Housing Inventory** [\[link\]](#)  
 (please note all of the affordable housing facilities in the CDP Planning Area are highlighted in Yellow)
- **2011 Hawai'i County Affordable Sales and Rent Guidelines** [\[link\]](#)
- **School-Community Relationship Case Studies and Resources**
  - Opening School Grounds to the Community After Hours [\[link\]](#)
  - Addressing Childhood Obesity through Shared School Facilities [\[link\]](#)
  - Community Use of Schools - Policy Issues and Joint Use Agreement [\[link\]](#)
  - Innovative Physical Activity Joint Use Agreements [\[link\]](#)
- **Pa'auilo Elementary/Intermediate Safe Routes To School Plan** [\[link\]](#)

### ***Questions to the Reader***

1. Is finding affordable housing a problem? What types? How much is affordable per month to pay for housing (rent or mortgage)?
2. Any ideas for an appropriate role for the CDP to support educational quality and/or workforce development?
3. Are residents with roads-in-limbo problems willing to pay a fair assessment?



## 8 DISASTER READINESS

*Desired Outcome: In 2035, critical emergency facilities in Hāmākua are better able to withstand earthquake and hurricane events and maintain operations. Critical infrastructure such as water, power, and bridges have been “hardened” to minimize damage for uninterrupted service or quicker recovery. Shelters are able to safely withstand disaster events and have the capacity and manpower to accommodate evacuating resident’s needs. Communities collaborate to develop and maintain a community-based resource list of assets and are prepared to implement action plans to address those in need of assistance such as the elderly or disabled and are prepared to assist them with evacuation or other appropriate response. The communities are also trained and prepared to confidently self-respond in an emergency adding to quick recovery and resumption of their community and supporting Civil Defense and emergency first responders before, during, and after the disaster event, especially if the community becomes isolated due to closed roads or damaged communication systems. The community has pre-identified emergency bypass roads and has backup communication systems such as ham radio capability to maintain communications with its residents, Civil Defense, and community responders. The community has worked together to retrofit the many older post-and-pier plantation homes to mitigate damage from earthquakes or hurricanes. In recognition of increased vulnerability to coastal hazards due to climate change and resulting sea-level rise, shoreline safety zones define special building restrictions or guidelines to mitigate damage from tsunami inundation, storm waves, hurricane surge, or coastal bluff erosion.*

### **Objectives**

The vision above translates into the following objectives:

- **Critical Facilities, Infrastructure, and First Responders.** Harden the hospital, fire stations, water systems, electrical systems, and bridges to better able withstand earthquakes and hurricanes. Identify emergency bypass roads and ham radio resources. Equip North Hilo with EMS services at the Lāupahoehoe Fire Station. Identify a suitable site for Pa’auilo Volunteer Fire Station.
- **Emergency Shelter Improvements.** Harden shelters that have adequate capacity, provide general, special needs, and pet-friendly capability; ensure adequate manpower to staff the shelters.
- **Enhanced Community Emergency Response Teams.** Establish trained teams of residents and local leaders that will take part in the overall community organization system to share best practices for an expanded role beyond the CERT program to include various community-based initiatives such as coordinating home retrofits, compiling directories of community resources and needs, assisting in ham radio networks and staffing shelters, and

adding to the overall resiliency of the community.

- **Shoreline Safety Zone.** Identify a shoreline safety zone that integrates the best knowledge and factors sea level rise potential for tsunami inundation/evacuation, hurricane storm surge, and coastal bluff erosion.

### **Critical Facilities and Infrastructure**

The Planning Area’s hospital, medical clinic, and fire stations ranked as follows (according to an all-hazards rapid visual screening of approximately 70-80 critical facilities in the County reported in the County’s 2010 Multi-Hazard Mitigation Plan):

- Hale Ho’ola Hāmākua, which provides emergency and long-term care services: Ranked #3 in terms of estimated dollar loss from earthquake or hurricane.
- Hāmākua Health Center: Ranked #22 in terms of earthquake damage and #10 in terms of hurricane damage.
- Honoka’a Fire Station: Ranked #7 in terms of loss of use from hurricane damage.
- Laupāhoehoe Fire Station: Ranked #2 in terms of

loss of use from hurricane damage.

Of the above facilities, the Multi-Hazard Mitigation Plan included only the Honoka‘a Fire Station on its short list for further action. The CDP will lobby to fund improvements to the hospital and Laupāhoehoe Fire Station, and support ongoing efforts to harden the bridges along the Belt Highway and the rockfall prevention measures at the three horseshoe curves—Ka‘awali‘i, Laupāhoehoe, and Maulua Gulches.

***Strategy 1: Prioritize Hardening of Critical Facilities and Infrastructure***

The CDP proposes to list the following capital improvement needs for CIP or Hazard Mitigation funding:

- Honoka‘a Fire Station upgrade
- Hāmākua Hospital hardening
- Laupāhoehoe Fire Station hardening and EMS services
- Shelter hardening evaluation for Honoka‘a High and Intermediate School and Kalaniana‘ole School.
- Determine the steps needed to create an emergency shelter at Laupāhoehoe School and evaluate hardening needs.

***Strategy 2: Improve First Responder Services***

The Fire Department provides fire-fighting, rescue, emergency medical services (EMS), and hazard materials response. The three fire stations located in the Planning Area (Honoka‘a, Laupāhoehoe, Pepe‘keo volunteer station), together with the several Hilo fire stations provide response coverage within the Planning Area that meets the National Fire Protection Association guidelines of a fire station every 10 miles.

Since Laupāhoehoe Fire Station does not have EMS capability, the CDP will consult with the Fire Department on the feasibility of adding such capability to that station, especially because of the approximately 20-mile distance of that area to the nearest hospital. Although

the Pepe‘keo Fire Station also does not have EMS capability, the area can be served by the Hilo fire stations.

***Pa‘auilo Colunteer Fire Company***

Pa‘auilo’s volunteer fire company 8-A has been in service since 2002. This company services the area between mile marker 32, at Kealakaha Gulch, and mile marker 47 near Boy Scout Camp Honokaia and runs from the shoreline to the flanks of Mauna Kea.

Currently, the company has two vehicles (a tanker and a brush truck) with which to respond to emergencies, but does not have a permanent fire station to house their equipment and offer trainings/drills for their volunteer force. The CDP will consult with the Fire Department and the Office of Property Management to determine a suitable location for the volunteer fire facility.

***Strategy 3: Prepare Emergency Bypass Road Map***

During emergencies, the Civil Defense has the power to open private roads for evacuation. Because of the vulnerability of the Planning Area to bridge failure, rock slides, or other reasons for closure of the Belt Highway, the CDP proposes to inventory these bypass routes, provide notice to private owners or lessees who control access on these roads, recommend periodic inspection by Civil Defense to ensure that the road is passable for 2-wheel vehicles, and determine a follow-up protocol if maintenance is required.



***Emergency Shelter Improvements***

According to the County of Hawai‘i Department of Civil Defense, the Planning Area has official shelters located at either end of the Planning Area (Honoka‘a

High & Intermediate School and Kalanianaʻole School). Laupāhoehoe School is not currently considered an official emergency shelter. Additionally, there are currently no special needs or pet-friendly shelters located in the Planning Area (the only pet-friendly shelters are located in Kona at Konawaena High & in Hilo at Hilo High School).

***Strategy 4: Prioritize Shelter Condition Studies, Improvements, and Ensure Staffing Capacity***

Ideally, emergency shelters should be hurricane-resistant; however, detailed structural assessments have not yet been conducted for shelters in the Planning Area.

The American Red Cross would manage and staff general shelters in Honokaʻa and Kalanianaʻole because they are State-designated shelters. The Department of Health is tasked with managing “Alternative Care Sites” for special needs populations, and the Humane Society is tasked with managing Pet Friendly sites. The County will utilize Laupāhoehoe as needed and staff with Parks & Recreation staff. Ideally, all shelters should be hurricane-resistant; however, detailed structural assessments have not yet been conducted for these shelters.

The CDP recommends pursuing improvements to enable designating Laupāhoehoe School as an official emergency shelter to ensure that North Hilo residents have a shelter in their community. The CDP also recommends prioritizing condition studies as per the County’s 2010 Multi-Hazard Mitigation Plan. These studies would involve assessing what structural improvements and what additional staffing would be required to upgrade the existing shelters to be adequately hardened, staffed, and capable of qualifying as special needs shelters.

***Enhanced Community Emergency Response Teams***

The CDP proposes to encourage the community nonprofit to organize CERTs throughout the Planning Area with an enhanced mission beyond the regular CERT responsibilities in recognition of the vulnerability of the Planning Area to become isolated, the prevalence of single- and double-wall constructed homes, and to promote a sense of community of looking out for one

another.

***Strategy 5: Encourage Enhanced Community Emergency Response Teams (CERT)***

The County’s Civil Defense Agency administers the Community Emergency Response Team or CERT program and the County’s Fire Department conducts CERT training. CERTs are community-based, comprised of residents and business persons that have the local knowledge of their community and the fundamental skills to properly respond to an emergency. CERTs fall under the authority of and can be activated by Civil Defense and can be self-activated in an emergency until professional responders arrive.

Because of the vulnerability of the Planning Area to become isolated from the closure of the Belt Highway, there is a significant need and relevance for CERT



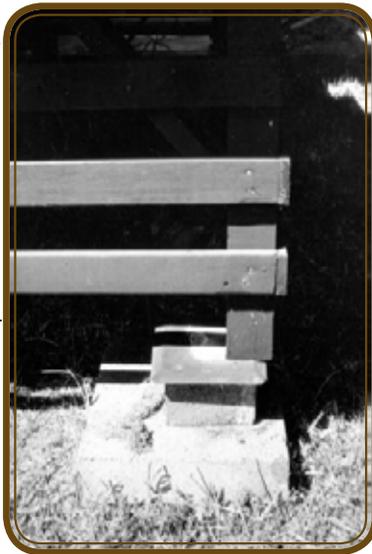
within the Planning Area. Besides its formal first-aid and light-rescue responsibilities, the CDP proposes to enhance the CERT mission by encouraging the following:

- To share best practices and provide a more stable institutional framework, organize CERTs to be subcommittees of the regional nonprofit described in Chapter 9;
- Have CERTs lead the home retrofit effort in whatever capacity they are willing;
- Have CERTs work with County Civil Defense to educate and provide assistance to residents on Emergency Notification sign-up;
- Have CERTs compile and maintain a directory of useful community resources, and those households that may need special assistance;
- Assist as appropriate and requested by responder agencies such as Fire or Police and response support organizations such as Red Cross;
- Train CERTs in ham radio so their community can have communication backup capability.

**Strategy 6: Assist Retrofit of Post-and-Pier Single-Wall Construction**

Single- and double-wall constructed homes built prior to 1999 were not structurally required to meet updated hurricane and earthquake standards. Since most of the homes in the Planning Area are single- or double-wall homes built prior to 1999, the CDP recognizes this special relevance to the Planning Area to retrofit these types of homes to mitigate potential damage from earthquake or hurricane.

After the Kiholo earthquake in 2006, the State funded the development of alternative design plans to retrofit these types of homes; these plans are available at no cost. Although no tax incentives or grant programs are currently available to financially assist, the CDP proposes to encourage an enhanced CERT program described above to facilitate retrofitting through technical assistance, volume purchasing, organizing work parties, or other creative means. In the meantime, the Hazard Mitigation Plan includes priority actions to expedite the permit process if the homeowner uses the standard recommended plans and to encourage insurance companies to give homeowners insurance credits for implementing these retrofits.



**Hazard Zones**

Beyond the existing regulatory setbacks, the CDP proposes to establish an advisory hazard area for coastal bluff erosion as a disclosure measure until better scientific knowledge becomes available, at which time the policy would be revisited.

**Strategy 7: Designate An Advisory Coastal Bluff Hazard Zone**

There are several existing regulatory shoreline zones that determine whether, where, and how a building could be constructed near the shoreline:

- Shoreline setback area—no construction allowed within 40’ inland of the shoreline without a shoreline setback variance;
- Coastal flood hazard zone—a zone designated on the Flood Insurance Rate Map where special construction standards would be required to mitigate potential damage from high waves and tsunami inundation;
- Special Management Area (SMA)—a permit is required for major development within the SMA zone; first residences are usually exempt from the definition of development and do not require a permit.

The above regulations provide adequate controls over development in low-lying areas. Within the Planning Area, the unique concern is development along the top of pervasive coastal bluffs. Because the bluffs are susceptible to erosion, there is a potential risk from building too close to the cliff edge. The dynamics causing this rock slope failure are not well understood. A scientific study has been proposed in the Planning Area, but until there is a more scientific basis for a regulation, the CDP proposes two interim measures until more scientific knowledge becomes available:



*Hāmākua Coastal Landslides  
(Courtesy of Hawai’i Civil Defense Agency)*

- Forego the requirement for a certified shoreline survey if the applicant is willing to accept the top of cliff as the shoreline for purposes of determining the shoreline setback area; and
- Establish an advisory zone of a half-foot setback from the top of cliff for every foot of cliff height, where real estate agents, lenders, and insurance companies will be advised of the erosion risk within this advisory zone. An owner could still build within this area with or without mitigation measures at the owner's discretion. This interim measure would be revisited when scientific studies are available.

### *Additional Information:*

- **Consistency with CDP Values & Vision** [[link](#)]
- **General Plan references** [[link](#)]  
 General Plan information pertaining to Disaster Readiness can be found in the chapter on Flooding and other Natural Hazards starting on page 5-1, and Natural Resources and Shoreline (8-1) – specifically in regard to policies protecting shoreline encroachment.
- **CDP Community Profile References** [[link](#)]  
 For more information on Natural Hazards, please see the Hāmākua CDP Community Profile, starting on page 3-1; For more information on Special Management Area & Shoreline Setback Areas, please see the Community Profile, starting on page 8-25.
- **County of Hawai'i Multi-Hazard Mitigation Plan** [[link](#)]
- **Community Emergency Response Team (CERT) Materials** [[link](#)]
  - Brochure
  - CERT Member & Team Applications
  - Cert Training Registration Form

### *Questions to the Reader*

1. Enhanced CERTS-- Are communities willing to take on this proposed enhanced CERT role?
2. Advisory coastal bluff setback-- Any concerns with a disclosure requirement for this advisory coastal bluff setback?

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## 9 IMPLEMENTATION

The 2035 vision can become a reality using the implementation strategies described in this chapter.

### Objectives

The CDP proposes to use the following tools to implement the objectives and policies:

- **Community partnership institution** to implement community initiatives;
- **Coordinated technical support** to facilitate access to expertise primarily to advance economic development;
- **Rational justifications for General Plan amendments** to align the LUPAG map with the needs of the Planning Area as set forth in the CDP.
- **Prioritized capital improvements** to better position projects to compete for County-wide funding;
- **Special regulatory standards or procedures** for permit reviews;
- **Leverage County-owned land for CDP objectives** recognizing these lands as unique assets to the Planning Area.

### *Strategy 1: Organize a Community Regional Nonprofit*

The purpose of a community regional nonprofit institution is to provide an effective means for community-initiated action. To be successful, this institution should have the following characteristics:

- **Tiered representation.** The organization should be able to flexibly represent the community and respond to issues at different levels as appropriate—from regional, to subregional, to community. The regional level is important for efficiency, stature and scale to attract funding, and to foster a regional sense of identity. The sub-regional level responds to geographically unique needs and issues. Traditionally, the subregions have been

organized by districts—Hāmākua, North Hilo, and Rural South Hilo. Within these subregions, there are numerous community organizations that could be coordinated and represented at the subregional level.

- **Tax-exempt, nonprofit corporation.** To attract contributions, qualify for various grants, and to have legal standing to enter into contracts, the institution should be a 501(c)(3) nonprofit corporation. To obtain and maintain the tax-exempt status is an arduous task. Although there can be multiple nonprofits serving different roles, if there is just one 501(c)(3), it should be a regional entity that can serve as an umbrella organization with subregional entities as affiliates. For such a regional nonprofit, the organizational documents (e.g., corporate charter, bylaws) need to articulate the mission, establish the relationship among the regional and subregional entities, create a board of directors with the proper representation and skills, and enable membership and a voice for each interested household within the Planning Area.
- **Hired staff.** Many community organizations falter because volunteer members lack time or skills. There needs to be at least a hired executive director who can pay attention to details on a daily basis with the skills to get things done.
- **Steady source of income.** There needs to be a steady source of income to at least be able to support the administrative costs. This source of income could be a large initial grant that can sustain operations a specified time period, an endowment contribution where the income from the invested principal is able to sustain the operations, and/or membership dues. This steady source of income would be supplemented with grants or other funding sources for project-specific purposes.

The CDP suggests several roles for this community nonprofit:

- Town revitalization planning facilitation.
- Community-managed public access.
- Partnership agreements for public facility renovation or maintenance.
- Project management for new construction.
- Affordable housing coordination.
- School-community coordination.
- Enhanced CERT coordination.
- Grant writing.

After adoption of the CDP, the County will appoint an Action Committee comprised of members from the Planning Area. The role of the Action Committee, which differs from the community regional nonprofit, is as follows:

- CDP monitoring. The Action Committee will monitor the overall progress of implementing the CDP focusing on the government actions and work with the Planning Department and community to produce an annual report;
- CIP priorities. The Action Committee will provide input to the Planning Department and/or County Council on priorities for County-funded projects within the Planning Area;
- Land Use and Growth Trends. The Action Committee will monitor land use and growth trends through periodic briefings from the Planning Department;
- General Plan and CDP amendments. Where amendments are needed to the General Plan or CDP, the Action Committee will provide recommendations to the Planning Department;
- CDP Update. When it is time for the CDP to be reviewed and updated, the Action Committee will take on the role of the Steering Committee in the update process.

***Strategy 2: Establish Centralized Technical Support***

As needs for expertise or training arise, a central place for technical support would facilitate this transfer of knowledge or assistance. The Planning Area is very

fortunate to have the North Hawaii Education and Resource Center (NHERC), which is an extension of the University of Hawaii at Hilo. NHERC already plays this role; the CDP just officially recognizes NHERC to serve as a one-stop clearinghouse for expertise and training. The idea is that all expertise and training would at least be publicized through NHERC, such as assistance from PBARC or Ag Extension agents.

To further the goals and objectives of the CDP, the CDP has proposed needs for training and expertise as follows:

- Conservation plans preparation
- Agricultural Clusters Coordinators training
- Certified Nursing training for elderly care

***Strategy 3: Propose General Plan Amendments***

The Land Use Sector Map has identified the following conflicts with the existing LUPAG that require amending the General Plan:

- Conservation [to be listed and/or mapped]
- Medium Density Urban [to be listed and/or mapped]
- Low Density Urban [to be listed and/or mapped]
- Industrial [to be listed and/or mapped]
- Rural [to be listed and/or mapped]

***Strategy 4: Prioritize Capital Improvement Needs***

To further the goals and objectives of the CDP, the CDP has identified the following County projects in order of priority:

- Waipi’o Valley Visitor Center
- Old Māmalahoa, between Pepe’ekeō and Honomū—pave;
- Laupāhoehoe boat repair—repair or relocation;
- Gym repairs (Honomū, Hakalau, Pāpa’aloa,

‘O‘ōkala);

- Honoka‘a Fire Station upgrade
- Pa‘auilo Volunteer Fire Station
- Laupāhoehoe Fire Station EMS
- Roads-in-Limbo Revolving Fund
- Shelter evaluations

The priority is subject to the County Council judgments and to the vagaries of funding opportunities where a project of lower priority may be in a better position to be funded. The community realizes that the lower-priority projects have slim chance of funding, and will take action as motivated.

***Strategy 5: Propose Special Regulatory Standards or Procedures***

The CDP has identified the following standards or procedures that will require special attention by the Planning Department when it processes certain permits:

- Shoreline setback variances or SMA approvals. Consider coastal bluff setback, identified public access to resources of community value;
- Special permits for roadside stands and ag processing;
- Plan approval for agricultural tourism;
- Roads-in-limbo rural dedicable standard.

The CDP proposes the following uses or disposition of County-owned lands:

- Kapulena: [to be determined]
- Pa‘auilo: [to be determined]
- Koholālele: [to be determined]
- ‘O‘ōkala: [to be determined]

***Strategy 7: Propose Special Programs***

The CDP has identified the following County programs that the County administration should consider:

- Expansion of shared-ride taxi to the Planning Area

- Shuttle bus routes, especially after-school hours.

***Strategy 8: Monitor the Plan***

Is the Plan just sitting on the shelf? Are the proposed strategies working? Indicators are thoughtful and selective measures that track the Plan’s progress, evaluate the effectiveness of policies, or monitor threshold impact levels. If the selected measures are meaningful, the data readily obtainable, and the list of indicators concise, someone could generate a simple report every year to provide feedback to the community and County. The report could be formatted like a report card:

+ Good progress, effective results, or not approaching a threshold; therefore, continue current actions.

√ No progress, no effectiveness assessment, or approaching a threshold; therefore, action needed.

- Negative progress (conditions worsened), not effective, or surpassed a threshold; therefore, consider change in strategy.

For an example of how a community has used indicators, see Measuring What Matters for Kaua‘i: Community Indicators Report 2010 (<http://www.kauainetwork.org/programs/community-indicators/>).

***Questions to the Reader***

1. Community Regional Nonprofit-- Would you support such a regional community nonprofit? Do you think the concept of a community regional nonprofit could succeed? What would it need to be successful?
2. Capital improvement projects-- What should be the priority order for these projects?
3. Indicators-- If you are interested to help develop Indicators, please contact the Planning Department (see contact information in the Preface). There may also be information or discussion group at the planned Regional Workshop.

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