6 KAWAIHAE COMMUNITY PLAN

6.1 CURRENT AND FUTURE PLANS AND DEVELOPMENT

6.1.1 POPULATION

The majority of people who work in the Kawaihae area do not live in the area. Instead, these people commute to work from neighboring communities such as Waimea or Waikoloa. The Kawaihae population figures were estimated from adding population totals for census block groups that were located around the Kawaihae Harbor area. The estimated population of Kawaihae and the nearby Mauna Kea Resort is **321** people, which is approximately 2.4% of the entire South Kohala population.

6.1.2 DEVELOPMENT PATTERNS AND LAND USE

The main development feature of the area is the Kawaihae Harbor. The Kawaihae canoe club utilizes the area north of the commercial harbor. To the south of the commercial harbor is the Kawaihae Small Boat Harbor which will be used by recreational boat users once the harbor's construction is completed. Further south of the small boat harbor is the Pu'ukohola Heiau. Still further south of the small boat harbor and the *heiau* is Spencer Beach Park.

A small commercial center is located on the *mauka* side of Kawaihae Road directly across from the commercial harbor. The businesses in the commercial center include a restaurant and several other smaller stores and shops. Small residential subdivisions are also located in the Kawaihae area to the south and east of the commercial center.

Kawaihae Harbor

Commercial Harbor

The main development feature of the area is the Kawaihae Commercial Harbor. It is the only harbor in West Hawai'i and the only other harbor in the County besides Hilo Harbor. The harbor has two piers and offers combined space for berthing of approximately 1,600 feet. The main pier has a berthing space of 1,150 feet. Barges load and unload at the smaller pier.

The harbor is facing a significant shortage of pier and storage space caused by recent events and also from the anticipated arrival of the Superferry. Pier 1 and Pier 2a were damaged during the October 15, 2006 earthquake and are currently not useable. Only the Hawaiian Cement Co. operates out of Pier 1 with a special use permit from the Coast Guard. Repair monies for the piers from FEMA and insurance companies have not been released because those piers were previously in disrepair prior to the earthquake. It is difficult to distinguish earthquake caused damages from other damages that may have resulted from a lack of pier maintenance.

The recent success of mining and desalinating deep sea water and exporting the desalinated sea water to Japan has maxed out the capacity of the harbor. Currently, Young Brothers ships six barges per week carrying the bottled water to Honolulu. In previous years, the company only needed three barges per week to ship bottled water to Honolulu. However, it is difficult to determine if this trend of high Japanese demand for bottled deep sea water will continue.

Kawaihae Harbor does not currently handle passenger traffic. However, the harbor will soon have to accommodate significant amounts of passenger traffic, as the Hawai'i inter-island Super Ferry is scheduled to begin service to the Big Island in 2009. The Superferry will be able to transport a maximum passenger load of 866 people and 282 passenger cars daily. (Hawai'isuperferry.com) It

was originally planned to have the Superferry dock at Kawaihae Harbor's Pier 1 where passengers disembarking from the ferry could exit the harbor through a separate access gate instead of the main harbor access gate. However, due to the earthquake damage, the Superferry will have to use an alternative pier and disembarking passengers will most likely have to use the main harbor access gate to exit from the harbor. The commercial harbor is also currently being used by 23 light draft recreational vessels. As the commercial harbor operations expand, these vessels will need to be relocated to the DLNR Small Boat Harbor.

South Small Boat Harbor and "Coral Flats"
To the south of the commercial harbor is the Kawaihae South Small Boat Harbor which is planned to be used by recreational boat users. DLNR's Division of Boating and Ocean Resources recently completed a Master Plan for the South Small Boat Harbor. At full project build out, the master plan for the Kawaihae South Small Boat Harbor will provide a main floating dock along the existing revetted coastline with finger piers, a concrete two lane boat launch ramp, loading docks, accessible boat trailer parking in near proximity to the boat launch ramp, accessible comfort stations, buildings for a Boat Club, retail shops, restaurants and administration space, ice-fish storage and fuels docks, and approximately 318 parking spaces to support future growth and development in the Kawaihae South Small Boat Harbor.

A draft EA has been completed for Phase 1 of the small boat harbor improvements. Phase 1 improvements include construction of a 45-feet wide concrete two-lane boat ramp that accesses one of the two fixed loading docks, a main floating dock with an accessible gangway and mooring blocks to berth approximately 30 boats, boat washdown area, a parking area, comfort station, and shower. Phase I of the South Small Boat Harbor is about to enter the bid process. Currently, recreational boaters utilize the North Small Boat Harbor.

The DOT-Harbors division is considering the transfer of ownership of a portion of the land referred to by local residents and users as "Coral Flats" to DLNR-DOBOR. The amount of land that DLNR-DOBOR would receive is dependent upon the type and extent of land utilization that is proposed. The land transfer has not been finalized and is still in negotiation. Currently, the YMCA and a local surf club utilize a portion of the Coral Flats area for educational and recreational programs. The YMCA has partnered with Kanu o ka 'Āina Charter School in Waimea. The YMCA and the school share and maintain an outdoor learning lab at Coral Flats.

Further south of the small boat harbor is the Pu'ukohola Heiau. The heiau is on the register of national historic sites. A little farther south of the small boat harbor and the heiau is Spencer Beach Park.

Department of Hawaiian Home Lands
Up the road to the north of the harbor is the Kawaihae Industrial Park located on DHHL owned lands. DHHL has minimal plans to expand the industrial park. The DHHL industrial park is connected to the Lālāmilo Water System. However, the industrial park was only allotted nine water meters by the County, limiting future development. DHHL plans to offer one water meter for potential industrial use in 2008, but after that meter is in use, there will be no more water meters available for future expansion.

DHHL owns the 10,000 acre Kawaihae ahupua'a that extends from the top of the Kohala Mountains to the sea. DHHL's 2002 Hawai'i Island Plan calls for portions of their Kawaihae tract to be developed for residential, agricultural / pastoral, industrial, and community uses. Currently, DHHL has a partially developed 90-acre park and residential lot subdivision in this area. There are 217 residential homesteads on DHHL Kawaihae land. DHHL has no current plans to develop more residential homestead lots due to lack of potable water. DHHL plans to build two parks along the future Kawaihae Bypass. The makai park will be a larger gathering place and the mauka park will be a smaller playground sized park.

Queen Emma Lands

The Queen Emma Foundation owns approximately 10,200 acres in South Kohala near Kawaihae Harbor. Located on a portion of Queen Emma Lands is the Kawaihae Transitional Housing Program operated by the Catholic Charities of Hawai'i. The transitional housing program consists of a 24-unit facility that has a bed capacity of 104 for families with children. The facility is slated to be closed on June 30, 2009 because it will be too costly to remove its cesspool system and replace the system with an EPA approved wastewater system. The Kawaihae Transitional Housing Program is currently the only shelter program for homeless families in all of West Hawai'i. Residents of the transitional housing program have provided a reliable supply of labor for several of the area's local businesses. The future planned Kaloko Housing Program is planned to help ease the loss of the Kawaihae Transitional Housing Program. However, the Kaloko Housing Program is located in the district of North Kona. Currently, the Queen Emma Foundation has no plans for future development nor does the County have any plans for low-income housing or shelters in South Kohala. The Queen Emma Foundation is considering building a Kawaihae historic museum next to the location of the Kawaihae Transitional Housing.

County Land Use Designations

The maps on the following pages illustrate the General Plan LUPAG and the County zoning designations for the Kawaihae area.

FIGURE 6.1: GENERAL PLAN LUPAG FOR THE KAWAIHAE AREA

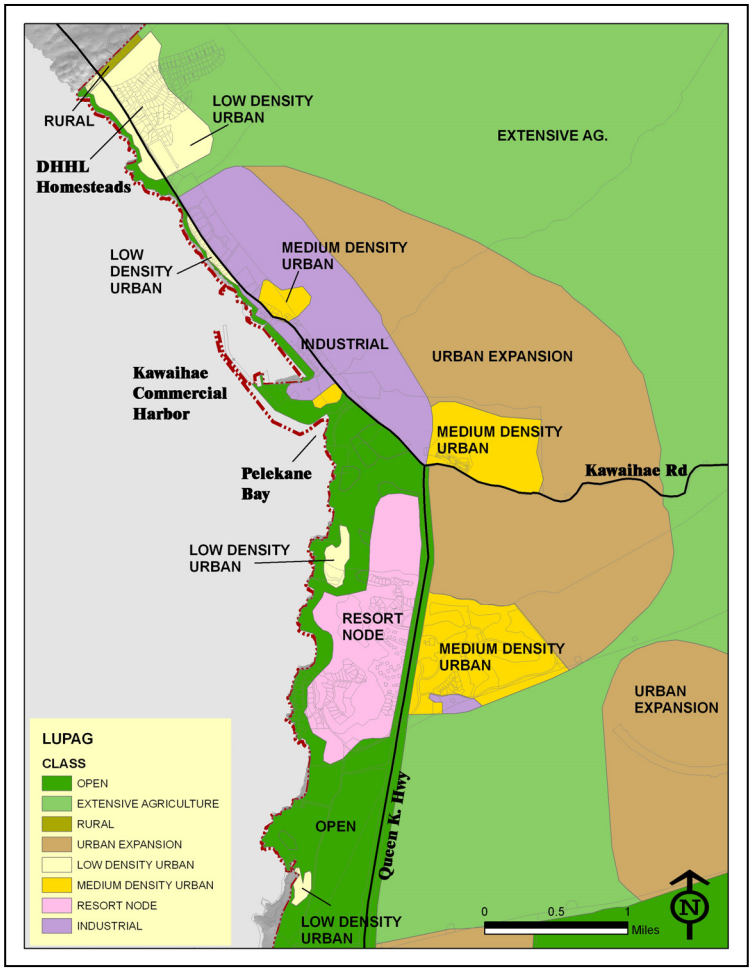
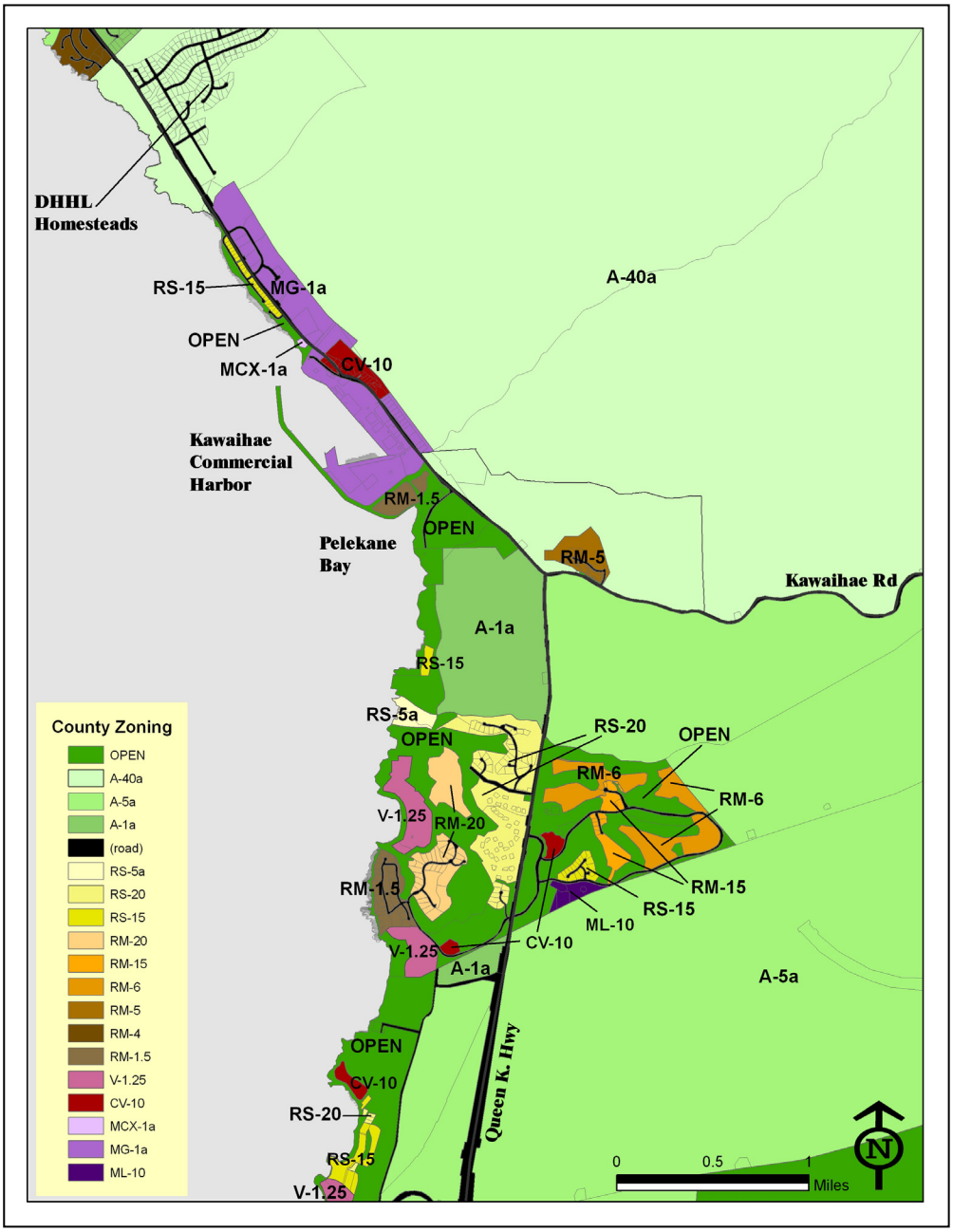


FIGURE 6.2: COUNTY ZONING FOR THE KAWAIHAE AREA



6.2 KAWAIHAE TOMORROW: KAWAIHAE CONCEPTUAL PLAN & POLICIES

Suggested overall Goals for Land Use for the Kawaihae Community are:

Kawaihae Policy 1. The County and State Governments shall work closely with the Kawaihae Community to create a balance of recreational, commercial, and industrial uses around the harbor area while preserving the cultural and historic importance of the area.

Kawaihae Policy 2 The County Water Department shall seek new sources of potable water for the Kawaihae area.

Kawaihae Policy 3. The County shall work with the Kawaihae Community and other State and Federal agencies to improve the ocean water quality along the Kawaihae coast.

Kawaihae Policy 4. The County and State Governments shall work closely with the Kawaihae Community to improve traffic safety for both vehicular and non-vehicular transportation along Akoni Pule Highway.

Important elements of the Kawaihae Conceptual plan are summarized below. The text and graphics are not exactly reflective of each other. Some elements in the text may not be reflected in the graphics and some elements in the graphics may not be explained in the text.

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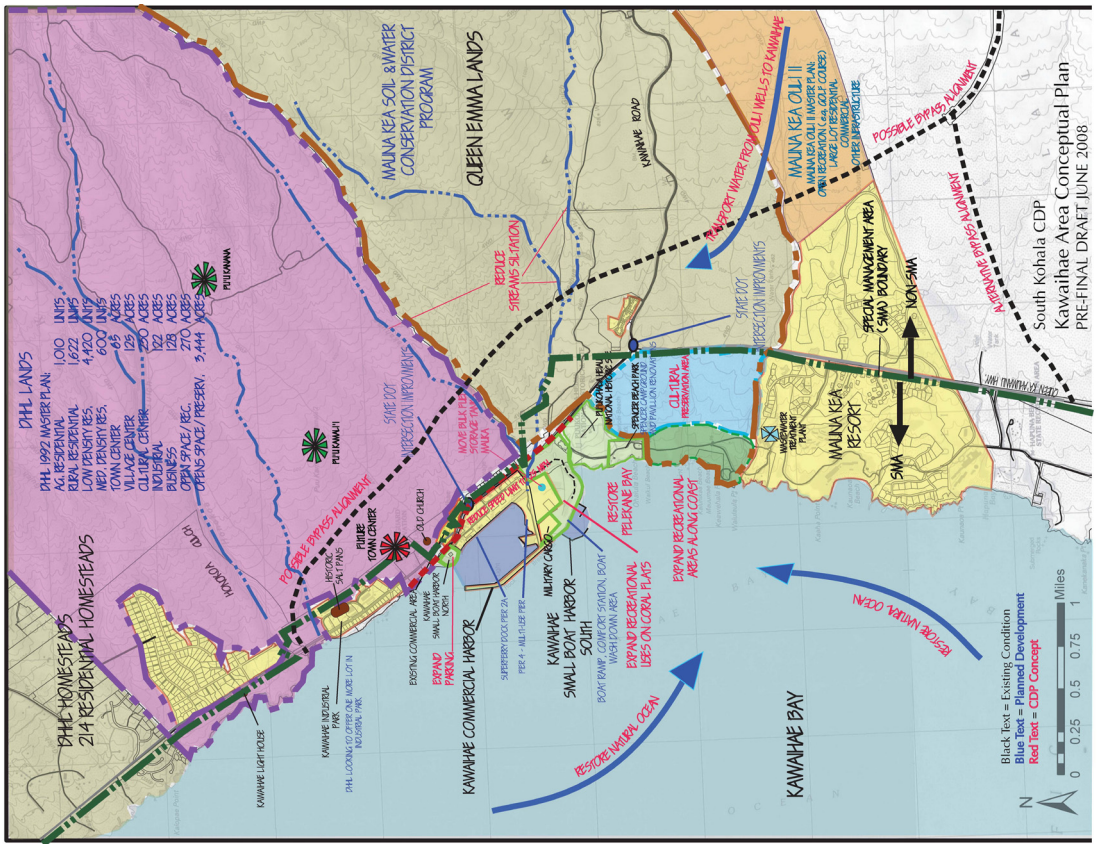
FIGURE 6.3: KAWAIHAE AREA CONCEPTUAL PLAN



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POLICY 1 CREATE A BALANCE OF RECREATIONAL, COMMERCIAL, AND INDUSTRIAL USES AROUND THE HARBOR AREA WHILE PRESERVING THE CULTURAL AND HISTORIC IMPORTANCE OF THE AREA.

Strategy 1.1: Encourage State DOT to build the Kawaihae Road Bypass through the Kawaihae area During the November 1, 2007 Focus Group meeting, community members preferred the most mauka alignment alternative for the Kawaihae Bypass. Routing heavy traffic around the village center would allow for the development of a real village center with a sense of place and pedestrian friendly streets.

Strategy 1.2: Encourage the development of a regional industrial park at Kawaihae -- One of the policy recommendations from the County of Hawai'i General Plan is to encourage the development of a regional industrial park. An industrial park in the Kawaihae area would benefit from its close proximity to the Commercial Harbor. The industrial park would also provide more jobs for residents in the region.

Strategy 1.3: Support DOT Commercial Harbor expansion mauka of Akoni Pule Highway -- Another policy recommendation from the County of Hawai'i General Plan is to support the expansion of the DOT Commercial Harbor mauka of Akoni Pule Highway. Current harbor facilities are nearing capacity for cargo storage and as population and economic activity of West Hawai'i increase, there will be a need for more cargo storage space and other harbor facilities. DOT should also be encouraged to move its bulk fuel storage tanks mauka of the highway out of the tsunami inundation zone.

Strategy 1.4: Expand commercial activities around the harbor area -- Focus group members expressed the desire for more commercial activity around the harbor area. Currently, the harbor area is dominated by industrial uses. More commercial activity would help to preserve the "small harbor" quality that community members desire and also allow for more local area businesses to expand.

Strategy 1.5: Expand recreational activities around the harbor area and encourage canoe club activities -- Currently, the DLNR has plans to improve its South Small Boat Harbor facilities as part of its Kawaihae Small Boat Harbor Master Plan. The Master Plan also calls for development of other facilities such as a boat club, restaurant, and open areas to accommodate more recreational users. The County of Hawai'i General Plan also calls for the improvement of picnic and camping areas at Spencer Beach Park. The General Plan LUPAG map also delineates land south of Spencer Beach Park and mauka of Spencer Beach Park as "Open". These "Open" lands could be used for recreational use.

Strategy 1.6: The County shall encourage and support revitalization of Kawaihae's cultural and historic resources -- With the establishment of a County Historic Preservation Commission, the County can work with the community to identify fish spawning locations, burial grounds, church sites, areas that have been historically used for salt making, or other special areas and resources deemed important by the community for preservation and protection.

Preservation of these cultural sites also includes installing proper signage to identify these resources. The preservation and protection of these cultural sites, in particular, the Pu'ukohola Heiau, includes the preservation of view planes for these sites. The Pu'ukohola Heiau should be the dominant visual element of the Kawaihae area. Future developments in the area should preserve viewing planes to the heiau.

Strategy 1.7: Mitigate the effects of industrial sprawl around the harbor and industrial areas -- Industrial sprawl negatively impacts the visual resources of the area. Future utility lines should be placed under ground where feasible in order to protect the visual scenery of Kawaihae. Wires, poles, and transformers block the view of the coastline. Future expansion of harbor and industrial uses should occur in a way that mitigates the impact on view planes and scenic beauty of the area.

Strategy 1.8: Decide on site locations for a community center, affordable housing, and school -- The 1992 DHHL Kawaihae Homestead Master Plan outlined the locations for several of these developments. However, DHHL is encouraged to review and update the 1992 Kawaihae Homestead Master Plan as needed to reflect the changes that have occurred in the region over the last decade and a half.

POLICY 2. ESTABLISH ADDITIONAL SOURCES OF POTABLE WATER FOR THE KAWAIHAE AREA

Strategy 2.1: Complete the development of the Ouli Well Field and transmit the water from Ouli to the Kawaihae area -- The lack of potable water severely limits any new type of development whether it is recreational, commercial, or industrial. Any significant expansion of any of these uses will require a larger amount of potable water. The completion of the development of the Ouli Well Field could provide the Kawaihae area with more water that would allow for more development in the area.

Strategy 2.2: Conduct studies to analyze the economic feasibility of constructing a desalination plant and the environmental impact a desalination plant may have on the surrounding environment -- Future feasibility studies should determine if desalination is worth pursuing from an economic standpoint and also take into consideration the environmental impact a desalination plant may cause, such as the disposal of brine and other by-products of the desalination process.

POLICY 3. IMPROVE THE MARINE WATER QUALITY ALONG THE KAWAIHAE COAST

Strategy 3.1: Engage the Queen Emma land managers, Parker Ranch, Department of Hawaiian Home Lands, National Park Service, watershed experts and the Kawaihae community in a program to re-vegetate the mauka areas of the watershed and reduce erosion and sedimentation -- Improving the near shore water quality along the coast will help to restore fish spawning areas and also remove silt from the underwater Hale o Kapuni Heiau. In addition to maintaining existing partnerships between the large land owners and government agencies in the Kawaihae area, the Pelekane Bay Watershed Sediment Run-off Analysis also recommended the following mitigation strategies:

1. Continued promotion of partnerships among landowners, government agencies, and other stakeholders as a means for addressing the complex and interrelated issues of watershed management.
2. Increase ground cover density into Pelekane Bay from upland watershed use
3. Implement feral goat management and continue to monitor grazing management
4. Minimize the number of fires within and adjacent to the watershed
5. Restoration of Pelekane Bay
6. Implement monitoring programs to measure the success and effectiveness of watershed restoration and protection activities

Strategy 3.2: The community and County shall coordinate with the Army Corps of Engineers and State agencies to dredge Pelekane Bay -- Pelekane Bay is filled in with silt from storm water runoff over the course of many years. While reducing the amount of new sediment that enters the bay will help with the long term health of the bay, the existing sediment needs to be removed in order to restore the bay to its natural condition.

Strategy 3.3: The County of Hawai'i shall work closely with State and Federal Agencies and with the Kawaihae community to design solutions to restore ocean circulation along the Coast through the creation of a washout channel -- In the long run, it may be necessary to restore the natural circulation of the harbor in addition to reducing sediment runoff into Pelekane Bay and dredging Pelekane Bay. If sediment run off into the bay is reduced significantly over time but large amounts of silt still collects in the bay, then restoration of the natural ocean circulation may still be necessary to "wash out" the silt from the bay.

It will take a collaborative interagency approach that involves community participation to restore the natural ocean circulation along the coast. State agencies such as the DOT and DLNR as well as the Army Corps of Engineers will need to participate in the process. The County and the community can help to initiate the process by bringing all the players to the table.

POLICY 4. IMPROVE TRAFFIC SAFETY FOR VEHICULAR AND NON-VEHICULAR TRANSPORTATION ALONG AKONI PULE HIGHWAY

Strategy 4.1: Reduce the Speed Limit from 35 mph to 25 mph along Akoni Pule Highway in the vicinity of Kawaihae Harbor as indicated on the Conceptual Plan Map -- Upon completion of the Kawaihae Bypass, the speed limit along Akoni Pule Highway should be reduced in order to improve safety for both vehicular and non-vehicular traffic.

Strategy 4.2: Prohibit parking along the shoulder of Kawaihae Road to allow more room for pedestrians and bicyclists -- Often, the shoulder along the roadway is blocked by parked cars, forcing pedestrians and bicyclists to walk or bike dangerously close to on-coming traffic. Restricting cars from parking along the highway would give pedestrians and bicyclists more room to travel safely along the highway.

Strategy 4.3: Form an agreement with DLNR to utilize the land by the old cattle loading area for overflow parking from local businesses -- Many of the people who park their cars along the highway are patrons of local businesses and shops. Alternative spaces for parking will be needed. A possible site for more parking is the space near the old cattle loading area. The area is directly across from existing commercial shops

Strategy 4.4: Construct pedestrian paths and bikeways along Akoni Pule Hwy. through the Kawaihae corridor and add appropriate signage to increase safety -- Well designed pedestrian and bike paths will not only clearly designate these areas for non-vehicular traffic, but well designed pedestrian and bike paths will also encourage more people to walk and bike along the roadway. Also, more signage is needed on the Kawaihae Road to increase safety for bikers and pedestrians.

6.3 ACTION PROGRAMS FOR KAWAIHAE

Action Program details are provided for the following Conceptual Plan elements:

1. **Provide for additional sources of water for the Kawaihae area**
2. **Restore the ocean water quality along the coast**
3. **Implement traffic safety measures**

6.3.1. ACTION PROGRAM - PROVIDE ADDITIONAL SOURCES OF POTABLE WATER FOR THE KAWAIHAE AREA

The Need for Action

As mentioned previously, the lack of potable water severely limits any new type of development whether it is recreational, commercial, or industrial. In 1992, the Department of Hawaiian Home Lands completed its Kawaihae Ten-Year Master Plan. Since then, very few of the DHHL Kawaihae Master Plan's elements have been implemented, primarily due to the lack of potable water. The Kawaihae community would like to see more opportunities available for more commercial, residential, recreational, and community activities in the area. Expansion of any of these activities will require more potable water.

Strategy 1.1: Complete the development of the Ouli Well Field and transmit the water from Ouli to the Kawaihae area

Overview

There are three wells in the Ouli Well Field. Bridge 'Āina Le'a estimates the sustainable yield of the Ouli well field at approximately 2.2 MGD. Each of the three wells is estimated to provide 1.1 MGD of water. However, one well will be used as a back-up well and will not be in regular use. 2.2 MGD of water would be enough to provide for the needs of about 9,000 people *or* 4,000 households.

The County negotiated a water development agreement with Bridge 'Āina Le'a in 2006. The agreement calls for Bridge to develop the Ouli Well Field and design and construct a transmission system to connect the water from the Ouli Wells with the Lālāmilo Water System to service the Mauna Kea Resort and Kawaihae areas. The County would receive **20%** of the water source while Bridge would receive **80%**. The Lālāmilo Water System would receive an estimated additional 0.8 MGD (2.2 MGD x 20% = 0.8 MGD), enough water to accommodate 3,200 people or 1,600 households.

In addition, Bridge 'Āina Le'a would also provide 2 million gallons of water storage capacity. More importantly, the DWS Lālāmilo Water System would become a dual source system, as the Ouli wells would provide a back-up source of water to the system. In exchange for developing the Ouli Wells, Bridge would be allowed to connect to the water system facilities in Lālāmilo.

It should be noted that over 15 years ago, the County Department of Water Supply commissioned a preliminary engineering study for the development of well fields in North Kohala and a major water transmission line that would transport that water to the South Kohala Resorts. Based on 1993 costs, the estimated cost for this major project was $80 million. That number would be in the range of $200 million in 2008. The project was discontinued when exploratory wells indicated that the potential North Kohala well fields had significantly lower yields than had been assumed.

The **Action Program** for developing an alternative source of water for the Lālāmilo Water System is as follows:

- **Who will take the lead** – Bridge ʻĀina Leʻa LLC with assistance from the County Department of Water Supply.

- **What needs to be done** – Bridge ʻĀina Leʻa LLC needs to plan, finance, and construct the water infrastructure at Ouli.

  Bridge could also form a partnership with the Department of Hawaiian Home Lands to help finance the development of the well field in exchange for allowing DHHL Kawaihae Homesteads to be connected to the Lālāmilo Water System.

  Development of this well field would include construction of the three wells, construction of water storage reservoirs and transmission lines, and water system hardware to tie the system to Kawaihae Harbor and the DHHL Kawaihae Homesteads.

- **When will actions take place** – Upon enactment of the CDP, initial agreements between the parties could be reached within one year – provided that Bridge ʻĀina Lea LLC is prepared to move forward with the Villages of ʻĀina Leʻa project. In the event that this project does not move forward – which may well be the case, given the slowing of development projects throughout the U.S. and the growing scarcity of loan monies – it may be possible for the County and DHHL to work out a lease or purchase agreement with Bridge ʻĀina Lea LLC.

- **How much will it cost** – Full development of the Ouli Well Field may cost in the range of $10 million to $20 million.

- **Intended Outcome** – With the Ouli Wells as an additional source of water for the Lālāmilo Water System, there will be additional water that can be provided to Kawaihae Harbor, the DHHL Kawaihae Homesteads, and other future commercial, residential, recreational, and industrial uses in the area.

6.3.2 ACTION PROGRAM - IMPROVE OCEAN WATER QUALITY ALONG THE KAWAIHAE COAST

The Need for Action

Kawaihae was known for its pristine marine waters. The waters off of Kawaihae once supported a diverse array of marine life. Local residents would like to see Kawaihae continue its tradition of fishing for years to come. The waters off of Kawaihae were also used extensively for recreational purposes; it was one of Kamehameha's favorite surfing spots and old timers reminisce that the coastal waters were once their "playground."

Puʻukohola Heiau overlooking the muddy waters of Pelekane Bay

However, the marine waters off of Kawaihae have become stressed from significant alterations to the coastline from the development of the commercial harbor and also from increased sedimentation that enters the coastal waters from area streams. The manmade Coral Flats and the breakwater block the natural ocean circulation along the coast.

Consequently, silt and other pollutants are trapped at Pelekane Bay. Before the harbor was built, the ocean currents cleaned out the waters of the bay. Actions to improve the marine water quality along the coast involve **moving forward with feasibility studies to examine different alternative strategies or a combination of strategies for improving marine water quality**. Previously proposed mitigation strategies included but were not limited to: mitigating the amount of sediment run off that enters the ocean, dredging Pelekane Bay to remove the existing silt buildup, and restoration of the natural ocean circulation along the coast line by constructing a "wash-out" circulation channel.

Strategy 2.1: Move forward with feasibility studies to examine different alternative strategies to improve marine water quality along the coast.

Overview

The 2005 Pelekane Bay Watershed Management Plan (PBWP), prepared by Mauna Kea Soil and Water Conservation District (MKSWCD), outlined several actions to help reduce sedimentation including: the creation of a sediment/catchment basin(s), dredging Pelekane Bay to remove silt, or creating a "washout" channel to restore ocean circulation. All of these potential actions would require significant amounts of funding to implement. In addition, these activities would require intensive inter-agency collaboration at federal, state, and county levels.

There have been differing views over which course of action would be most efficient, feasible to implement, or cost effective. Several community members feel that the loss of near shore circulation is a major reason for the current polluted condition of the bay because the current used to "wash out" the sediments from the bay. However, the State DOT has stated that a circulation channel may not be the most effective solution for restoring the waters of Pelekane Bay. Restoring ocean circulation may not be sufficient to wash out the sediment in the bay and may also cause tidal problems within the harbor. Instead, the State DOT recommends reducing the amount of sediment that enters into the bay through actions that minimize soil erosion. Before any actions are implemented, the Pelekane Bay Watershed Management Plan recommended that studies be undertaken to determine if any of these concepts deserve further attention.

In 2002, the Corps of Engineers, with the Mauna Kea Soil and Water Conservation District (MKSWCD) as the local sponsor, began a feasibility study to assess feasibility of restoration actions, including sediment reduction facilities, erosion control measures, and a circulation channel connecting Kawaihae Harbor with Pelekane Bay. The purpose of the study was to reverse degradation to the coral reef ecosystem and to improve water quality in Pelekane Bay to conditions that existed prior to the development of the Kawaihae Deep Draft Harbor. The Pelekane Bay Watershed Sediment Runoff Analysis, completed in January 2008, was a technical study for the feasibility investigation.

While no funding was required on the local sponsor's part until the project was approved to continue into the design phase, MKSWCD was seeking an agency with funding to co-sponsor the project. In February 2008, after finding no co-sponsors to financially support the project, the MKSWCD requested termination of the feasibility study due to the lack of sponsor funding.

Unless a new local sponsor is found, the feasibility study investigations of Pelekane Bay will not resume. Currently, no federal funding is being budgeted for the study. The earliest funding that could be available would be in the Federal 2010 fiscal year. A new sponsor will be responsible to cost share the existing phase 50:50 (including past expenses accrued). Should the State DOT assume local sponsorship of the Pelekane Bay Restoration Project, federal funding would still not be available until fiscal year 2010 at the earliest. However, the State DOT is working with the Army Corps of Engineers to utilize the existing Kawaihae Deep Draft Harbor Navigational Study to analyze the circulation channel as it may benefit the circulation of Pelekane Bay and its impact on Kawaihae Harbor. By pursuing this course of action, both State & Federal funds are currently

available to proceed with this specific study. The Army Corps of Engineers will analyze various channel connection alternatives between Kawaihae Commercial Harbor and Pelekane Bay.

The **Action Program** for moving forward to improve the ocean water quality is as follows:

- **Who will take the lead** – State Department of Transportation Harbors Division in coordination with the Army Corps of Engineers, County of Hawai'i and the Kawaihae community.
- **What needs to be done** – The State DOT is working with the Army Corps of Engineers to analyze various alternative channel connections between Kawaihae Commercial Harbor and Pelekane Bay. In conjunction with the analysis, navigational and water circulation impacts within Kawaihae Commercial Harbor will be addressed. .

  Currently, the involvement of the State DOT is limited to determining the feasibility of a circulation channel between Pelekane Bay and Kawaihae Harbor. While this is certainly a step in the right direction, other actions in addition to studies of the circulation channel as outlined in the PBWP need to be taken . Other local sponsors will be needed to co-sponsor additional feasibility studies and restoration projects to reduce sedimentation runoff into the bay and also to possibly dredge Pelekane Bay in order to remove existing sediments. Local residents need to organize and ask County elected officials to co-sponsor other Pelekane Bay restoration studies and projects with the Corps of Engineers.

- **When will actions take place** – The State DOT is currently working with the Army Corps of Engineers. Community members need to organize now and speak with elected officials and also with candidates who are seeking elected office and convince them the County should help to sponsor future restoration projects.

- **How much will it cost** – **The cost to complete feasibility studies** will be cost shared 50:50 with the local sponsor and Corps of Engineers. **Design and construction** of restoration projects will be cost shared 25:75 with the local sponsor paying 25% and the Corps paying the remainder 75%. Design and construction costs cannot be estimated at this time for Pelekane Bay restoration projects.

Intended Outcome - Completion of all feasibility studies should identify the best option or combination of options to help with the restoration of Pelekane Bay

6.3.3 ACTION PROGRAM - IMPLEMENT TRAFFIC SAFETY MEASURES

The Need For Action
Although a relatively small traffic corridor, the Akoni-Pule Highway that runs through the Kawaihae area is not a safe roadway due to large industrial vehicles coming and going from the commercial harbor, no clear designated areas for pedestrians and bicyclists to travel, and poor roadway design at several intersections. The community's desire for a balance of commercial, recreational, and residential uses would be better realized if the roadway that passes through the area is safer for both vehicular and non-vehicular traffic.

Strategy 3.1 Reduce the Speed Limit from 35 mph to 25 mph along Akoni Pule Highway in the vicinity of Kawaihae Harbor as indicated on the Conceptual Plan Map.

Overview
Since the Akoni-Pule highway is a major highway connecting North and South Kohala, vehicles that travel along the highway usually speed through Kawaihae. Slowing down the traffic through this corridor would increase the safety for all travelers through the corridor. Well designed pedestrian

and bike paths will not only clearly designate these areas for non-vehicular traffic, but well designed pedestrian and bike paths will also encourage more people to walk and bike along the roadway.

The **Action Program** for developing for reducing the speed limit is as follows:

- **Who will take the lead** – Akoni Pule Highway is a State highway, so the State DOT will set the speed limit for this section of road.

- **What needs to be done** - The County will need to send a formal request to DOT to change the speed limit from 35 mph to 25 mph.

- **When will actions take place** – After enactment of the South Kohala CDP.

- **How much will it cost** – Costs to the State will entail new signage and administrative expenses. These costs should be relatively minor.

- **Intended Outcome:** Slower moving traffic will increase traffic safety along Akoni-Pule Highway through the Kawaihae area and allow for pedestrian friendly streets that will contribute to establishing a village center and sense of place for the area.