

South Kohala Community Development Plan

WAIKOLOA VILLAGE PLAN

SUMMARY BACKGROUND DATA – DECEMBER 20, 2007

By: AC/Townscape

PURPOSE: To provide summary background data for the Waikoloa Village Plan. This draft will be submitted to the Waikoloa Village Focus Group for review, and will be discussed at the next focus group meeting scheduled for **January 26, 2008**. The preliminary draft will also be submitted to the South Kohala Steering Committee.

SOURCES: The information and ideas in this Working Paper came from: (1) two Waikoloa Village Focus Group meetings of October 12, 2007 and November 9, 2007, (2) the draft “South Kohala Community Profile” developed by Townscape during the period of June – September 2007, and (3) Follow-up research and consultation with various stakeholders.

Insert Map of Waikoloa Village area

2 SUMMARY OF THE PLANNING AREA

2.1 Brief Background and History of the Waikoloa Village

Anthropologists and archaeologists estimate that the first settlers arrived in the South Kohala region sometime between 750-1000 AD. (Clark,1986) The warm coast and beaches on the western boundaries of the South Kohala district were used seasonally by early Polynesians who eventually migrated onto the cooler plateau. Descendents of these early Polynesian explorers established fishing villages on the leeward coast of the district and along the western extremities of the plains and began cultivating lo`i kalo terraces along a series of streams at the southern base of the Kohala Mountains. Construction of the Waimea field system may have involved clearing and burning of the native forest. (Clark and Kirch, 1983)

Waikoloa Village, is unique compared to other South Kohala communities. While other communities such as Waimea and Puakō have had a long history of settlement spanning

several centuries, Waikoloa Village has only had a history of settlement spanning several decades. Established in 1971, the Waikoloa Village Association is an incorporated property owners' association whose purpose is "to provide for the management, maintenance, protection, preservation, architectural control and development of property...within the area known as Waikoloa Village and to promote the health, safety, and welfare of its members." The Association is responsible for the operation and maintenance of the common property within the development. Waikoloa Village was originally designed to be a retirement community, but today the community has grown to be a more family-oriented community.

Boise Cascade, the original developer of Waikoloa Village, agreed to convey approximately 10,000 acres of land and improvements to the Waikoloa Village Association (WVA). The Clubhouse, swimming pool, tennis courts, and approximately 2,000 acres of land were conveyed to the Association in 1975 and an additional 8,000 acres were conveyed in 1987. The predominant features of the community include single family homes, a golf-course, neighborhood shopping center, and elementary school. First opened in 1994, the Waikoloa Elementary School is a little more than a decade old. Several residents in the community consider Waikoloa Elementary School to be the "heart" of the community. Currently, Waikoloa Elementary School is not only the only school in the community, but it also serves as the unofficial community center for community meetings, activities, and gatherings.

2.2 Existing Natural and Cultural Resources

2.2.1 Climate

The climate of the Waikoloa area is arid and dry. The area receives between 10-15 inches of rainfall annually and has an average daily high temperature between 77-85 degrees Fahrenheit and average daily low temperature between 65-70 degrees Fahrenheit.

Drought has been a fairly common occurrence in South Kohala over the last two decades. Below Table 2.1 displays the number of times the mayor or the governor has issued disaster declarations because of drought conditions in South Kohala and the surrounding regions. In total, there have been 14 drought events that have affected South Kohala since

1981. Severe droughts reduce the drinking water supplies, and increase the chance of wildfire occurrence.

Table 2.1 Regional Drought Events Since 1981

Month / Year	Areas Affected	Disaster Declaration
July 2007	Statewide	Governor
July 1999	Ka'u, N & S Kona, N & S Kohala, Hāmākua	Mayor
January 1998	Countywide	Mayor
November 1996	N & S Kohala, Hāmākua	Mayor
January 1994	Countywide	Mayor
May 1993	Kohala, Ka'u, Kona	Mayor
February 1992	Countywide	Mayor
February 1986	Countywide	Mayor
December 1983	Countywide	Mayor
March 1983	Countywide	Governor
February 1983	Countywide	Mayor
July 1981	South Kohala	Mayor
June 1981	County wide	Mayor
January 1981	Hāmākua, South Kohala	Mayor

Source: County of Hawai'i Hazard Mitigation Plan

2.2.2 Geology

The Waikoloa area is composed of a mix of a'a and pahoehoe lava flows, the majority of lava flows originated from Mauna Kea between 65,000 and 250,000 years ago during the Pleistocene Age. More recent flows of lava were deposited on the southern portion of the Waikoloa area below Auwaiakeakua Gulch about 14,000 and 65,000 years ago. Also in the Waikoloa area, there have been at least ten major lava flows from Mauna Loa which has also created areas with fractured pahoehoe, areas of a 'a lava, and areas within which recent flows have been covered with eroded sediments. (Waikoloa Highlands EIS)

2.2.3 Natural Disasters: Brush Fires

Dry fountain grasses cover much of the inland and coastal areas in the southern portion of the district. Because of its dry physical characteristics, fountain grass is highly flammable and a significant fire hazard. Also located in these areas are small groves of Kiawe trees which are scattered throughout the landscape. Brush fire is a major threat to the health and safety of most South Kohala residents and is the most frequently occurring natural

hazard in the region. Brush fires can be defined as any non-structural fire in a wild area. The district's gusty winds, naturally dry and hot climate in the southern and coastal regions, and the large amounts of fountain grass that grow in these areas not only increases the likelihood of brush fire occurrence, but also contributes to the rapid spread of fire. Recently in July of 2007, a brush fire burned over 9,300 acres near the Waikoloa Rd. and Māmalahoa Hwy. junction.

The County Department of Public Works (DPW) has maintained a list of heavy equipment needed for fighting brush fires and updates this list on a weekly basis so that the equipment can be mobilized when needed. DPW strategically pre-positions the fire fighting equipment to prepare for brush fires according to the time of year or around special occasions such as long weekends. The West Hawai'i Wildfire Management Organization (WHWMO) has been working cooperatively with the Big Island Wildfire Coordinating Group and other agencies to increase community awareness about wildfire mitigation hazards. Several communities have begun to implement brush fire management strategies including Waikoloa, Puakō, Wailea Bay, The WHWMO received a wild land urban interface grant from the U.S. Department of Forestry to build an island wide inventory of wild fire resources. Primary government agencies involved in this effort include the County of Hawai'i Fire Department and the State Department of Land and Natural Resources Division of Forestry and Wildlife. (County of Hawai'i Drought Mitigation Strategies, 2004)

There are no County regulations that require residential subdivisions to participate in brush fire mitigation programs. However, mitigation measures, such as implementation of the national "Firewise" Program and the revision of certain building codes (i.e. discouraging the use of shake roof material) are in place. County regulations for new subdivisions to reduce brush fire hazard, such as requiring adequate fire access, hydrant placement, and water system sizing are also in place.

2.3 Major Trends: Land Use / Development and Demographics

2.3.1 Population

Waikoloa Village Population

1990	2000
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2,248	4,806
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Source: US Census,

Between 2000 and 2007, it is believed that the unofficial population of Waikoloa Village has increased to around 7,000 people.

Table 2.2 shows future population projections for the entire district of South Kohala with Projection A being the most conservative estimate and projection C being the least conservative estimate.

Table 2.3

Area	2000 Population	2020 Projection A	2020 Projection B	2020 Projection C
South Kohala	13,131	23,947	24,426	26,625
County of Hawai'i	148,677	213,452	217,718	237,323

Source: County of Hawai'i Planning Department

2.3.2 Land Use

Waikoloa Village is a rapidly growing suburban community. In 2000, the population of Waikoloa Village was approximately 4,000 people. Waikoloa Residents estimate the current 2007 population at about 7,000. There are several distinct subdivisions in the area. House lots range from 7,500 square feet to 10,000 square feet. Waikoloa Road is the only access road to Waikoloa Village. Currently, Waikoloa Road is the only access road to Waikoloa Village from Queen Ka'ahumanu Hwy. and Māmalahoa Hwy. The Waikoloa Shopping Center is located right off of Waikoloa Road at the entrance on the southern end of the community. The shopping center includes basic amenities such as a grocery store, gas station, and small shops and restaurants. The shopping center is the only commercial area within Waikoloa Village. The Waikoloa Village Golf course also sits at the southern end of the community. Housing subdivisions are interspersed along the golf course's edge. Because it is a young, growing community, Waikoloa Village does not have a hospital or medical clinic, community center, or major commercial centers other than the existing small shopping center.

Paniolo Ave. is the main avenue that cuts through the center of Waikoloa Village and runs from north to south. Located at the northern end of Paniolo Ave. is Waikoloa Elementary School and several community churches. The Ho'oko St. Park is adjacent to Waikoloa

Elementary School on the makai side of the school. The Waikoloa Community Park, the other park located in the village, is located between P'u Nani St. and Pu'u Nui St.

There are several major developments that are planned in the areas surrounding Waikoloa Village. Table 2.3 summarizes these planned build out of these projects (highlighted in gray) as well as the *potential* build out of other large-sized TMK parcels given the current County Zoning for these parcels.

Potential and Planned Residential Development in Waikoloa Area

TMK	Development Name	Owner(s)*	Acreage	County Zone	Planned Buildout	Potential Buildout	Status
368001006	***	Frank De Luz III Family Lmtd. Partnership	100	A-5a	***	17 units	***
368001024	***	TriKohala Development Company/ 1010 Puako LLC	661	A-5a	***	112 units	***
368001037	Bridge Aina Le'a	Banter Inc.	1,507	A-5a; RA -1a	1,924 units planned; 25 acre retail complex		Completed 1 mi. of the Hulu St. emergency access gravel rd; completed grading of 25 acre shopping center; awaiting approval of Project District Zoning and UIC permit
368001038		Banter Inc.	621	A-5a; RM-4; RM-7; RM-14.5;			
368001039		Banter Inc.	444	A-5a; RM-4; RM-7; RM-14.5;			
368001059	***	TriKohala Development Company/ Brillhante	100	A-5a	***	17 units	***
368001060	***	TriKohala Development Company/ 1010 Puako LLC	150	A-5a	***	25 units	***
368002001	***	Waikoloa Mauka LLC	1,170	A-20a	***	49 units	***
368002002	***	Waikoloa Mauka LLC	652	A-20a	***	27 units	***
368002004	***	Waikoloa Prop.	652	A-20a	***	27 units	***
368002005	***	Waikoloa Inv. Land Tr.	250	A-20a	***	10 units	***
368002006	***	TriKohala Development Company/ Globe Corp.	669	A-20a	***	28 units	***
368002007	***	Pu uiwaiwa LLC	400	A-20a	***	17 units	***
368002008	***	Kilauea Trust I, JMP, RCP, JBP, KBP Education Trust(s), Waimea LTD Partnership	343	A-20a	***	14 units	***
368002010	***	Kilauea Trust I, JMP, RCP, JBP, KBP Education Trust(s), Waimea LTD Partnership	741	A-20a	***	31 units	***
368002011	***	Partnership	912	A-20a	***	38 units	***
368002012	***	Pu uiwaiwa LLC	1,076	A-20a	***	45 units	***
368002013	***	Pu uiwaiwa LLC	803	A-20a	***	34 units	***
368002015	***	Waikoloa Village Association	1,690	Open	***		***
368002016	Waikoloa Highlands	Waikoloa Mauka LLC	744	RA -1a	398 Units	632 units	Final EIS Completed May 2007; Awaiting State LUC action on district amendment from Ag. to Rural
368002016	***	Waikoloa Mauka LLC	2,444	A-5a	***	415 units	***
368002017	***	Waikoloa Mauka LLC	2,153	A-5a	***	366 units	***
368002019	***	Waikoloa Village Association	4,908	Open	***	***	***
368002022	Waikoloa Heights	Waikoloa Heights Land Investors LP	867	RS-10	2,400 units.	3,210 units	Phase I increment One Subdivision Approved
368002026	Waikoloa Workforce Housing Project	Hawai'i Island Housing Tr. & Waikoloa Workforce Housing LLC	268	RS-10	1,200 units planned.	992 Units	Plan to break ground Dec. 2007
368002027	Kai	Castle & Cook	256	RS-10	756 units.	1,115 units	Under Construction
368002028	***	Waikoloa Inv. Land Tr.	333	A-20a	***	14 units	***
368002029	***	Waikoloa Inv. Land Tr.	154	A-20a	***	6 units	***
368002030	***	Waikoloa Inv. Land Tr.	155	A-20a	***	6 units	***
368002032	***		49		***	181 units	***
368002033	***	Waikoloa Village Association	268	Open	***		***
368002040	***	Waikoloa Dev,	180	RS-10	***	666 units	***
368003032	***	Waikoloa Mauka LLC	57	Open & Rm-1.5	***	?	Planned Shopping Center

* based on information from Hawai'i County Real Property Tax Office **TOTALS:** 25,776 6678 Units 8094 Units

Future Road Developments

Waikoloa Connector Roads – The Department of Public Works initiated the construction of an emergency evacuation road and completed construction in December 2006. In

addition, the Planning Department initiated a study to assess alternative financing schemes to construct permanent alternative connectors to parallel Paniolo Drive and to connect Waikoloa Village to Queen Ka’ahumanu Highway.

Hulu St. Extension

The County of Hawai’i Department of Public Works has proposed to construct a single-lane, gravel-surfaced roadway that would provide an emergency route from the end of Hulu Street in Waikoloa Village to Queen Ka’ahumanu Highway in order to evacuate the village during natural disasters, and other emergency situations, particularly wildland brush fires.

The gated, one-way road would be opened only during emergencies, as authorized by the County of Hawai’i Civil Defense Agency. The Waikoloa and Kohala Coast Fire Stations would have primary responsibility for opening the gate. The gravel road would be 12-15 feet wide, within a 50-foot cleared roadway easement. The roadway would have shoulder delineators for nighttime use. It would extend 2.13 miles from the end of Hulu Street to about the 72 mile marker of Queen Ka’ahumanu Highway. The project would utilize County of Hawaii funds and private lands with an easement in favor of the county. The gravel road is planned to be eventually replaced by a permanent paved road system when the Bridge ‘Āina Le’a project is developed.

Education Facilities

Waikoloa Elementary School is the only school in Waikoloa Village. The school services students from grades K-6. The school is relatively new, opening in the fall of 1994. The school’s library was completed in 2000 and the cafeteria was completed in 2001. In 2007, the school expanded to the sixth grade for middle school. With 75 employees, the elementary school is the largest employer in Waikoloa Village.

School Name	Grades	Enrollment (2006)	Enrollment Capacity
Waikoloa Elementary School	K-6	513	589

Sources: DHHL Lālāmilo / Pu’u Kapu Regional Community Development Plan; State Department of Education Facilities Development Branch

Waikoloa Elementary school is nearing its enrollment capacity. Also, the need for a new public middle school has been voiced by Waikoloa Village community members as the community's rapid population growth rate continues. Also, looking ahead to long term growth, Waikoloa Village may grow large enough to warrant the need for a high school.

2.4 Critical Problems and Issues

During the course of several months, several issues were identified as priority issues. The priority issues were:

1. Second Access Road/connection to Queen Ka`ahumanu Highway
2. Location and funding for a Waikoloa Community Center
3. Limiting "rural sprawl" development and preserving open spaces
4. Emergency preparedness – especially for wildfires
5. Sites for a future Elementary School #2 and a High School