



Introduction



Top left: 'Upolu, N. Kohala; top right: Captain Cook Monument, Ka'awaloa, S. Kona; bottom: Mahukona, N. Kohala. NPS photos

Chapter 1: Introduction

Purpose and Need for the Plan

The Ala Kahakai National Historic Trail (NHT) was added to the National Trails System on November 13, 2000. The legislation authorizing the trail identifies an approximately 175-mile portion of prehistoric *ala loa* (long trail) on or parallel to the seacoast extending from 'Upolu Point on the north tip of Hawai'i Island down the west coast of the island around Ka Lae (South Point) to the east boundary of Hawai'i Volcanoes National Park. (See Appendix A). A conceptual depiction of the trail as a corridor, "Vicinity Map and Location of the Ala Kahakai," was contained in the January 1998 *Ala Kahakai National Trail Study and Environmental Impact Statement (Feasibility Study)* and is represented in map 1. (Map 1 also depicts the priority areas on which focus will be placed for the approximate 15-year life of this plan.) The Ala Kahakai NHT, as authorized by Congress, combines surviving elements of the ancient and historic coastal *ala loa* with segments of later *alanui aupuni* (government trails), that developed on top of or parallel to the traditional trails, and more recent pathways and roads that create links between the historic segments. The National Park Service administers the Ala Kahakai NHT.

PURPOSE OF THE PLAN

National trail comprehensive management plans are intended to be long-term documents that articulate a vision for the future of the trail, including the management philosophy and the framework to be used for decision-making and problem solving. This comprehensive

management plan (CMP) will provide guidance for approximately the next 15 years.

The purpose of this CMP is to establish the administrative objectives, policies, processes, and management guidelines needed to fulfill the preservation and public use goals for the Ala Kahakai National Historic Trail (NHT) in accordance with the National Trails System Act (16 USC 1244, § 5(f)).

This Act requires development of a comprehensive plan "for the acquisition, management, development, and use" of the national historic trail. The Act requires that this plan include the following items:

- Specific objectives and practices to be observed in the management of the trail, including identification of all significant natural, historical, and cultural resources to be preserved, details of anticipated cooperative agreements with government agencies or private interests, a carrying capacity assessment, and a plan for its implementation,
- The process used to implement the marking requirements established in § 7[c] of the Act,
- A protection plan for high potential sites and route segments⁹, and
- General and site-specific development plans and their anticipated costs.

In addition, Public Law 106-509, titled "An Act to amend the National Trails System Act to designate the Ala Kahakai Trail as a National Historic Trail," includes these special requirements:

⁹ As defined by the Act, high potential historic sites mean "those historic sites related to the route, or sites in close proximity thereto, which provide opportunity to interpret the historic significance of the trail during the period of its major use. Criteria for consideration as high potential sites include historic significance, presence of visible historic remnants, scenic quality, and relative freedom from intrusion."

High potential route segments "means those segments of a trail which would afford high quality recreation experience in a portion of the route having greater than average scenic values or affording an opportunity to vicariously share the experience of the original users of a historic route."

- No land or interest in land outside the exterior boundaries of any federally-administered area may be acquired by the U.S. for the trail without the consent of the owner of the land.
- Communities and owners of land along the trail, Native Hawaiians, and volunteer trail groups are encouraged to participate in the planning, development, and maintenance of the trail.
- Affected federal, state and local agencies, Native Hawaiian groups, and landowners shall be consulted in the administration of the trail.

This CMP complies with the requirements of the National Environmental Policy Act (NEPA) of 1969 and includes a programmatic environmental impact statement (EIS) following from the 1998 *Feasibility Study* prepared by the National Park Service, on which Congress based its decision to establish the trail. The *Feasibility Study* provided a history of the trail, statements of significance and purpose, a vision for the trail, and offered four alternatives for future protection, interpretation, and management of the Ala Kahakai, considered to be part of the *ala loa* system that traditionally passed around the circumference of the Island of Hawai'i (cf. Malo, 1951; I'i, 1959; and Kamakau, 1961). The examined alternatives included a no action alternative, a national historic trail (continuous), a

state historic trail, and a national historic trail (discontinuous). The *Feasibility Study* recommended alternative B, National Historic Trail (continuous), as the environmentally preferred alternative. The *Feasibility Study* constituted the first phase of a tiered planning and environmental review process. This CMP, the second phase, remains general and programmatic containing reconnaissance-level information necessary to make broad policy and planning decisions.

THE NEED FOR THE PLAN

This CMP is needed to provide long-term direction for natural and cultural resource preservation, education, and trail user experience along the Ala Kahakai National Historic Trail. It primarily provides a framework for management and a vision to be fulfilled through future, more specific resource studies and site and segment management plans. It was developed in consultation with National Park Service park and program managers and resources staff; state and local government agencies; interested parties including landowners, Native Hawaiian individuals and groups, area residents, trail user organizations, and other individuals; and the general public. A mutually agreed upon plan helps coordinate partners to work together with specific goals in mind.



Kīholo Beach, Pu'u Wa'awa'a, N. Kona, NPS photo



"Ahu", Kaloko-Honokōhau NHP, N. Kona, NPS photo

The CMP represents the commitment by the NPS and its partners to the public on how the national trail will be administered and managed. To meet those ends, the CMP accomplishes the following:

- Confirms the purpose and significance of the trail.
- Defines trail classifications, resource conditions, and visitor uses and experience to be achieved.
- Identifies the necessity of partnerships with others in protecting trail resources and providing appropriate trail user services.
- Provides a framework for NPS administrators and its partners to use when making decisions about such issues as how to best protect resources and values, how to provide quality visitor use and experience, how to manage visitor use, and what kinds of facilities, if any, will be needed to make the visitor experience a positive one.

Federal ownership and management of the Ala Kahakai NHT is limited to portions of the four national parks along its route: Pu'ukoholā Heiau National Historic Site (NHS) in the South Kohala district; Kaloko-Honokōhau National Historical Park (NHP) in the North Kona district; Pu'uhonua o Hōnaunau NHP in the South Kona district; and Hawai'i Volcanoes National Park in the Puna district. (See map 1.) Approximately 17% of the NHT is within the boundaries of these national parks. With trail authorization these trail segments came under federal jurisdiction in compliance with § 3(a) 3 of the National Trails System Act.

This CMP outlines a process whereby nonfederal trail sites and segments may become official parts of the Ala Kahakai NHT through specific site and trail segment management plans and implementation options. The impacts of each subsequent management plan, construction project, trail program, and various other projects will be considered in compliance with the National Environmental Policy Act (NEPA,) Sections 106 and 110 of the National Historic Preservation Act (NHPA), the implementing

regulations set forth in the Code of Federal Regulations (CFR), other federal, state, and county regulations as applicable. In all cases, planning for the trail and trail facilities will be conducted in close consultation with the landowners, the Native Hawaiian community, trail organizations, community interest groups, area residents, and state and local government.

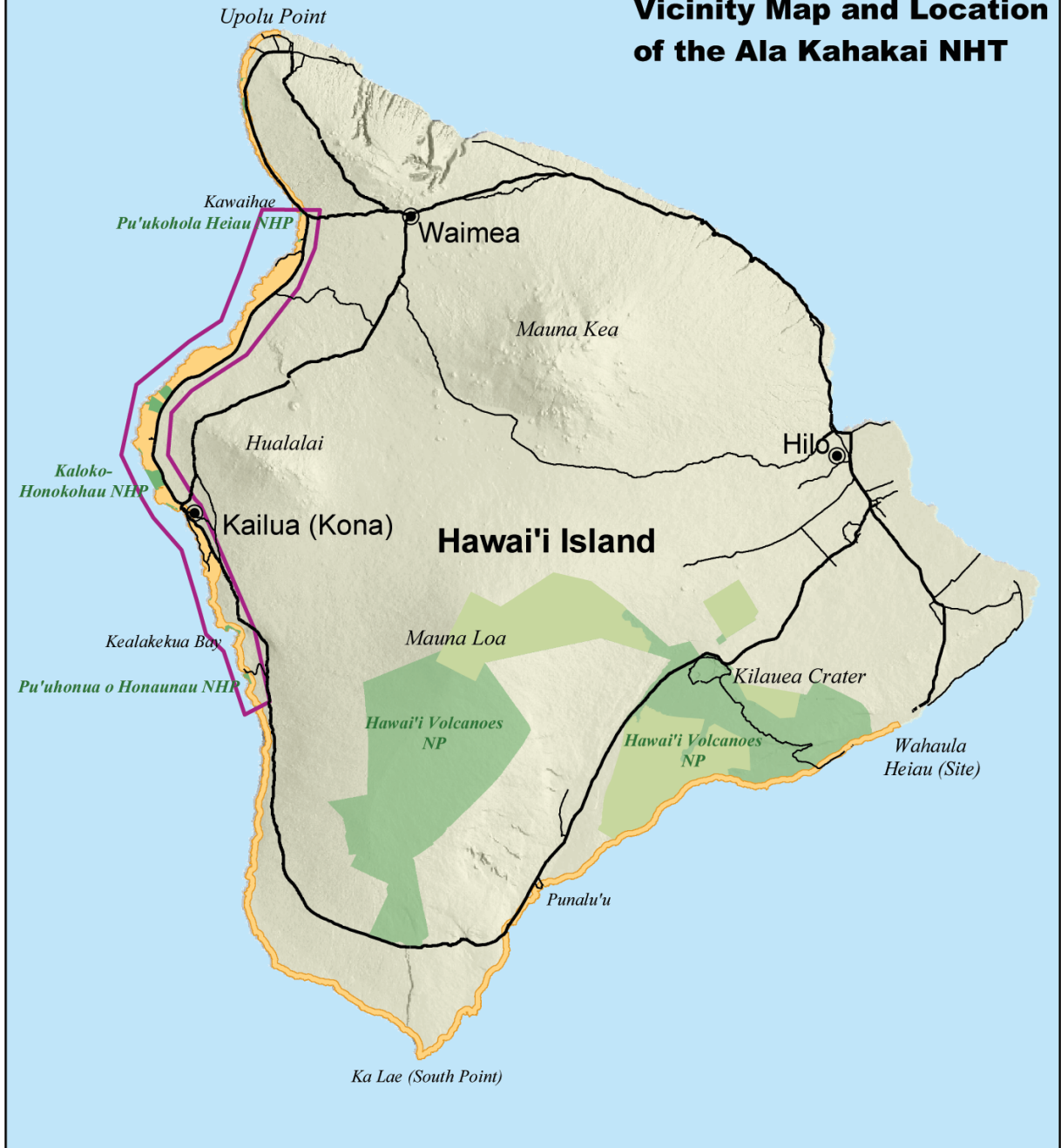
NEXT STEPS AND PLAN IMPLEMENTATION

A public review and comment period will follow the distribution of the *Draft Comprehensive Management Plan/Environmental Impact Statement*. After this comment period, the NPS planning team will evaluate the comments and make appropriate changes to produce a *Final Comprehensive Management Plan/Environmental Impact Statement* (FEIS). The final plan will include letters from governmental agencies, and substantive comments on the draft plan, and NPS responses to those comments. Following distribution of the FEIS and a 30-day no-action period, a Record of Decision (ROD) approving the final plan will be signed by the NPS Pacific West Regional Director. The ROD documents the NPS selection of an alternative for implementation. With its signing, the plan can be implemented.

The CMP is a long-term plan that NPS administrators and partners would take incremental steps toward reaching its goals. Once the CMP is approved, additional resource studies and more detailed planning and environmental documentation would be completed as part of site and segment management plans.

The implementation of the CMP could take many years. Most components of the plan would require additional funding for implementation. Once the plan is approved, those components will be prioritized and implemented as funding becomes available. The Ala Kahakai NHT staff and its partners would actively seek sources of funding outside of the NPS operations budget, but there is no guarantee that all the components of the plan would be implemented.



Map 1
Vicinity Map and Location
of the Ala Kahakai NHT



Legend


 Ala Kahakai NHT Corridor

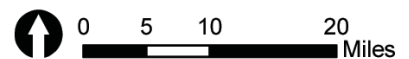
Roads

 Primary
 Secondary

 Parks

 Wilderness

 Priority Area for implementing
the 15-year planning period for
all alternatives.



*Ala Kahakai National Historic Trail
Working Map 3/22/07*

HISTORIC OVERVIEW

An understanding of the Hawaiian land management system, the trail system, and the uses and evolution of the coastal *ala loa* provide a foundation for consideration of management alternatives.

Hawaiian Land Use and Resource Management Practices: Definition of the Ahupua'a¹⁰

Over the generations, the ancient Hawaiians developed a sophisticated system of land and resource management which included larger districts and smaller regions. Of all the land divisions, perhaps the most significant management unit was the *ahupua'a*. These were subdivisions of land usually marked by an altar (*ahu*) with an image or representation of a pig (*pua'a*) placed upon it, thus the name *ahu-pua'a* or pig-altar. *Ahupua'a* may be generally compared to pie-shaped wedges of land that extended from the ocean fisheries (the wide section) fronting the land unit, to the mountains (the narrow section) or some other feature of geological significance such as a valley, hill, or crater. The boundaries of the *ahupua'a* were generally defined by the topography and cycles and patterns of natural resources occurring within the lands (cf. Lyons, 1875; in "The Islander").

The *ahupua'a* were divided into smaller manageable parcels of land, controlled by a hierarchy of chiefs with the *konohiki* or lesser chief at the lowest level. Cultivated resources could be grown and natural resources harvested on these smaller parcels. As long as sufficient tribute was offered and *kapu* (restrictions) were observed, the common people, who lived in a given *ahupua'a*, had access to most of the resources from the mountain slopes to the ocean. These access rights were almost uniformly tied to residency on a particular piece of land, and earned as a result of taking responsibility for stewardship of the natural environment, and



Keopuka, S. Kona, NPS photo

supplying the needs of ones *Ali'i* (cf. Malo 1951:63-67; Kamakau 1961:372-377; and Boundary Commission Testimonies – ca. 1865-1891). The *ahupua'a* resources supported not only the people who lived on the land (*maka'āinana*), but also contributed to the support of the royal community of regional and/or island kingdoms.

In ancient Hawai'i, access to resources of the *ahupua'a* was restricted. Generally, only residents of the *ahupua'a* could use the fisheries of shallow nearshore waters and could gather resources and birds from the forests. Outsiders (for example, related kinsmen or friends) might be allowed by the local chief or by residents to use these community resource areas, but theoretically, permission must have been obtained. Also, residents had their own use rights to specific field plots and house lots. Travelers, thus, could pass through *ahupua'a* on the *ala loa*, which circumscribed the entire island, but they did not have open access to the resources of the *ahupua'a*.

With this Hawaiian form of district subdividing as a means of resource management planning, the land provided fruits and vegetables and some meat in the diet, and the ocean provided a wealth of protein resources. Also, in communities with long-term royal residents, divisions of labor

¹⁰ Information on this section provided by Maly, 2005.



Trail at Pu'uhonua O Honaunau, NPS photo

(with specialists in various occupations on land and in procurement of marine resources) developed and were strictly adhered to.

The Hawaiian Trail System¹¹

Throughout the years of late prehistory, A.D. 1400s-1700s, and through much of the 1800s, transportation and communication within the Hawaiian kingdom was by canoe and by major trail systems. The major trails linked the 600 or so *ahupua'a* of the kingdom's six districts on Hawai'i Island. These districts were Kohala, Hamakua, Hilo, Puna, Ka'u, and Kona. Today, the ancient districts remain with the exceptions that Kohala, Kona, and Hilo each have two parts, north and south. (See Map 2, Districts of Hawai'i Island with *Ahupua'a* and Ancient Royal Centers).

Although the canoe was a principle means of travel in ancient Hawai'i, extensive cross-country trail networks enabled gathering of food and water and harvesting of materials for shelter, clothing, medicine, religious observances, and other necessities for survival. Ancient trails, those developed before western contact in 1778, facilitated trading between upland and coastal villages and communications between *ahupua'a* and extended families. These trails were usually narrow, following the topography of the land. Sometimes, over 'a'ā lava, they were paved with waterworn stones ('alā or pa'alā).

Until the 1840s, overland travel was predominantly by foot and followed the traditional trails. By the 1840s, the use of introduced horses, mules and bullocks for transportation was increasing, and many traditional trails—the *ala loa* and *mauka-makai* trails within *ahupua'a*—were modified by removing the smooth stepping stones that caused the animals to slip. Eventually, wider, straighter trails were constructed to accommodate horsedrawn carts. Unlike the earlier trails, these later trails could not conform to the natural, sometimes steep, terrain. They often by-passed the traditional trails as more remote coastal villages became depopulated due to introduced diseases and the changing economic and social systems. Sometimes, the new corridors were constructed over the alignments of the ancient trails, or totally realigned, thus abandoning—for larger public purposes—the older *ala loa*. In addition to these modifications in trail location and type due to changing uses, trails were also relocated as a result of natural events such as lava flows, *tsunami*, and other occurrences. The Hawaiian trail system was and will remain dynamic.

Traditional Uses of the *Ala Loa*

Community Interaction

Residents of the *ahupua'a* around the island of Hawai'i resided at various localities, generally within a quarter mile of the shore, for access to fresh water and fisheries; and in the uplands—to areas near the 3,000 foot elevation—where extensive fields of diverse crops could be cultivated. The *ala loa* connected these land units and settlements, encircling and crossing in-land over the entire island, and providing for economic and social interaction between people of adjacent communities and districts.

¹¹ The following sections are taken from the *Ala Kahakai: National Trail Study and Final Environmental Impact Statement*, NPS, 1998.

Royal Centers

Nearly all of the royal centers of the kingdom lay along the coastal *ala loa* at Waipi'o in Hamakua; Hilo Bay in Hilo; at Punalu'u and Wai'Ahukini in Ka'u; at Hōnaunau, Kealahakua, Kahalu'u, Holualoa, and Kailua in Kona; and Kawaihae and Pu'uepa (at 'Upolu Point) in Kohala (Cordy, 1997; 2000). (See map 2 for approximate locations.) In addition to the residences of the king and high chiefs, these centers each had major sacrificial temples (*luakini*), refuge areas (*pu'uhonua*), and sporting grounds, and in two cases royal mausoleums (the Hale o Liloa in Waipi'o and Hale o Keawe in Hōnaunau). Other large *heiau* were present in some centers. Large populations were focused around these centers which were used steadily over successive generations.

Chiefly Travel

Travel along the *ala loa* was often done for chiefly affairs. Messengers (*kukini*, or swift runners) were sent along the trails or by canoe to call in other chiefs for meetings, to call for tribute, to summon warriors in for battle, to gather in laborers to build public works projects such as temples, and to spy on rival chiefs. Occasionally, the ruler and the court circled the island to check on the state of affairs of production, population, or potential rivals, or to rededicate temples. This circuit might be at a brisk pace, or a leisurely movement from one of the favored royal centers to another over the period of several months. The highest chiefs (*Ali'i nui*) traveled the *ala loa* to reach their own residences and smaller courts in their own *ahupua'a* which they occasionally used when not at the royal court.

Tax Collection

In addition, portions of the coastal *ala loa* were the route for the ruler's tax collectors during the *Makahiki* season, a ritual period spanning approximately four months, from the last month of the dry season through the first three months of the wet season (from October or November to January or February). During this period, worship of Kū, the god of war, ceased. War was prohibited. Ceremonies at the *luakini heiau* were halted.

Other religious ceremonies and special sporting events were held honoring Lono, the god of Agriculture. For tax collection, a procession of priests, attendants, and athletes carried a wooden image of Lono clockwise around the island on the *ala loa* in a circuit of 23 days. In theory, the procession halted at the *ahu* or altar of each *ahupua'a*, collected tribute, and traveled on. In practice, several of the 600 *ahupua'a* most likely gathered their tribute in one place to expedite collection.

Historical narratives by I'i (1959) and Kamakau (1961), and in testimonies before the Boundary Commission from 1873 to the 1890s, also record that portions of the *Makahiki* route were inland rather than along the coastal trail through Kona and Kohala. The *mauka* (upland) route roughly coincides with the "*mauka* government road," now the Māmalahoa or "Belt Road."

Warfare

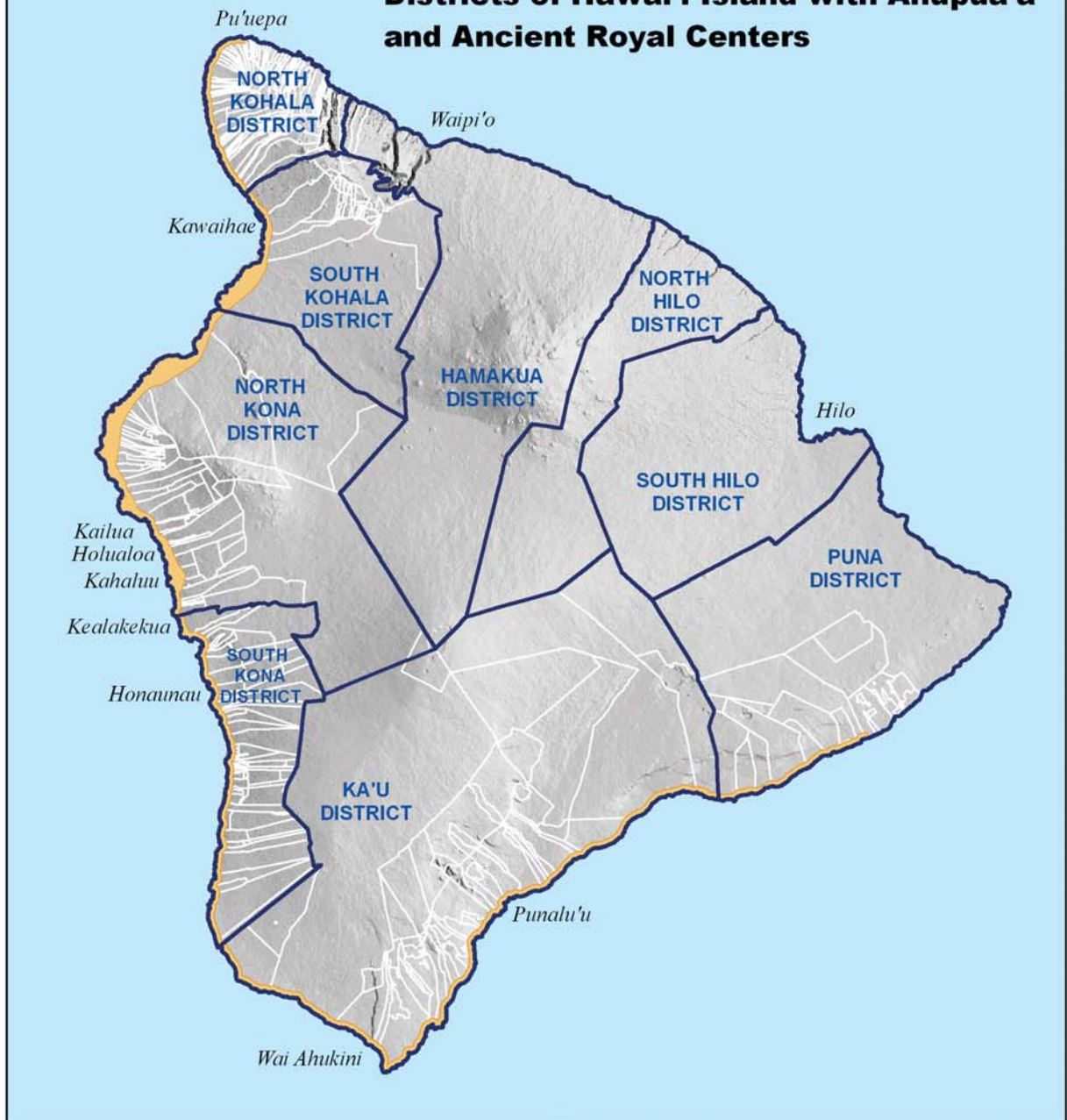
In times of war, travel to battle was either by canoe, the *ala loa*, or other trails. Local chiefs brought their warriors to the king's or high chief's residence, where the forces were gathered. An example of land travel occurred when Lonoikamakahiki gathered his forces to oppose his rebelling brothers, ca. 1640-1660. His Ka'u forces came up the mountain trail to Ahu a'Umi where they were met by Lonoikamakahiki and his Kona men. The army then descended into south Kohala and fought a series of battles up the *ala loa* to Kawaihae and up into Waimea, restoring Lonoikamakahiki's control over the island.



Ka'awaloa Road, S. Kona, NPS photo

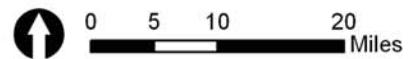
Map 2:

Districts of Hawai'i Island with Ahupua'a and Ancient Royal Centers



Legend

- Ala Kahakai NHT Corridor
- Hawai'i Island Districts
- Ahupua'a



Ala Kahakai National Historic Trail
Working Map 12/21/06

Kamehameha, Island Unification, and the *Ala Loa*

Kamehameha I, high chief of Hawai'i Island, unified all of the islands of Hawai'i and reigned as the first king of a monarchy that would rule the Kingdom of Hawai'i through the reign of Kamehameha V. His life spans the precontact and historic periods.

Major events in Kamehameha's life occurred along the *ala loa*. He was born near the northern end of the Ala Kahakai NHT at 'Umiwai Bay near 'Upolu Point. At the time of Captain Cook's arrival at Kealakekua Bay in 1779, Kamehameha was a military leader and high-ranking chief in the court of his uncle, Kalani'opu'u. After the death of Kalani'opu'u in 1782, Kiwala'o became king, and the Hilo chiefs were granted many of the lands of the kingdom. As a result, with Kamehameha as their leader, the Kona and Kohala chiefs revolted and fought the battle of Mokuohai at which Kiwala'o was slain. The kingdom broke into three: Kamehameha controlled Kona, Kohala, and Waipi'o; Keōua Ku'ahu'ula (Keōua) controlled Ka'ū and part of Puna; and their uncle, Keawema'uhili, controlled all of Hilo, and parts of Hāmākua and Puna (Kamakau, 1961).

For about a decade, Hilo and Ka'ū were in alliance against Kamehameha. When a falling out occurred, Hilo allied with Kamehameha. While he was off-island battling the Maui kingdom, Keoua invaded Hilo, slew Keawema'uhili, and expanded his Ka'ū kingdom to include the former land of the Hilo kingdom (Cordy, 1997).

Kamehameha consolidated his rule of the island when Keoua was killed along the shoreline *ala loa* below Pu'ukoholā Heiau in 1791. Pu'ukoholā was Kamehameha's temple of destiny. Early in the days of his drive for supremacy of Hawai'i Island, he began a reconstruction of Mailekini Heiau at Kawaihae for consecration to the family god Kuka'ilimoku, whose favor he sought. However, a great *kahuna* (seer) told him that

victory over Keoua and eventual mastery of the Hawaiian Islands would be his if he built an immense temple to the war god at Pu'ukoholā on the crest of the hill just above Mailekini Heiau ('I'i 1959:17).

When the temple was finally completed in 1791, Keoua was among the chiefs invited by Kamehameha to dedicate the temple and to discuss possible joint rule of a unified Hawai'i kingdom. When Keoua stepped ashore on the beach below Mailekini Heiau, a scuffle ensued, and he and the companions in his canoe were killed. Thus, the body of Keoua Kuahu'ula became the principal sacrifice on the altar of Pu'ukoholā. Kamehameha was now the sole ruler of Hawai'i Island, fulfilling the prophecy that required the building of the great temple. Kamehameha reconquered Maui, Lana'i and Moloka'i by 1794, and O'ahu in 1795. The unification of the Hawaiian Islands was complete in 1810 when Kaua'i diplomatically ceded to Kamehameha I.

Kamehameha I lived out his final years from 1813-1819 at the chiefly complex of Kamakahonu in Kailua along the *ala loa*.

The *Ala Loa* and Abolition of the Kapu

Kamehameha was succeeded by his son, Liholiho (Kamehameha II), and as co-regent for his short reign, Ka'ahumanu, Kamehameha I's favorite wife. Six months later the ancient religious system, the *Kapu* was abolished at Kamakahonu. Forty years had passed since the death of Captain Cook at Kealakekua Bay, during which time it became increasingly apparent to the chiefly classes that the *Kapu* system was breaking down; social behavior was changing rapidly and western actions clearly were immune to the ancient Hawaiian *kapu* (taboos). Kamehameha II sent word to the island districts, and to the other islands, that the numerous *heiau* and their images of the gods be destroyed.

The abolition of the *Kapu* in 1819 provoked the last historic battle to be staged along the *ala loa*.

Leading a faction that opposed the overthrow was a high chief, Kekuaokalani, who in December 1819, with his supporters took arms to overthrow Kamehameha II, his government, and to reinstate the *kapu*. The ensuing battle took place at Kuamo'o and Lekeleke, south of Keauhou Bay. Kamehameha II's forces were victorious and Kekuaokalani was slain. The bodies of those who fell in the battle were interred along the *ala loa* and covered with rocks. The *pū'o'a* (stone mounds) remain to the present day.

Evolution of the *Ala Loa*¹²

By the middle 1820s, significant changes in the Hawaiian Kingdom were underway. The missionaries, who arrived in May 1820, selected key stations on the island of Hawai'i from which to oversee and instruct the Hawaiian people in matters of the "spirit" and western life—these localities were accessed via the *ala loa* and smaller *ala hele* (paths) from neighboring *ahupua'a*. The mission stations generally coincided with the traditional chiefly centers, which by this time, were also developing as trade points with foreign vessels. As a result, and under the tutelage of the missionaries, Governor Kuakini and Chiefess Kapi'olani, instituted a program of public works on the island of Hawai'i. The development of trails to western-style roadways was initiated to facilitate access to mission stations, landings, and to key areas of resource collection.

By the 1830s, the King (Kamehameha III) initiated a program of island-wide improvements on the *ala loa*, and in 1847, a formal program for development of the *alanui aupuni* (government roads) was initiated. By the early 1850s, specific criteria were developed for realigning trails and roadways, including the straightening of alignments and development of causeways and bridges. This system of roadwork, supervised by district overseers, and funded through government appropriations—with labor by prisoners and individuals unable to pay taxes in another way—evolved over the next forty

years. With the passing of time, emphasis was given to areas of substantial populations. Because of the on-going decline of the Hawaiian population, and the near abandonment of isolated communities formerly accessed by the *ala loa* and earlier *alanui aupuni*, the later government road between Kohala, Kona and Ka'ū often diverged from, and abandoned, the older alignments.

In the later years of the Hawaiian monarchy, the need to define and protect Hawaiian trails and roadways was recognized, particularly in support of native tenants living in remote locations. Often these native tenants' lands were surrounded by tracts of land held by single, large landowners who challenged rights of access. In 1892, Queen Lili'uokalani and the Legislature of the Kingdom of Hawai'i signed into law an "Act Defining Highways, and Defining and Establishing Certain Routes and Duties in Connection Therewith," to be known as The Highways Act, 1892. The Act reads in part:

Section 1. This Act may be cited in all public proceedings as "The Highways Act, 1892."

Definition of Public Highway

Section 2. All roads, alleys, streets, ways, lanes, courts, places, trails and bridges in the Hawaiian Islands, whether now or hereafter opened, laid out or built by the Government, or by private parties, and dedicated or abandoned to the public as a highway, are hereby declared to be public highways.

All public highways once established shall continue until abandoned by due process of law... [p. 68]

Ownership of Public Highways in the Government

Section 5. The ownership of all public highways and the land, real estate and property of the same shall be in the

¹² Information on this section provided by Maly, 2005.

Hawaiian Government in fee simple...
[Chapter XLVII. An Act, October 15,
1892:69]

The Highways Act of 1892 is a critical legal tool used by the state to claim public trails, but may be subject to a legal challenge by a private landowner. It is subsumed in Chapter 264-1, HRS. Sections 2b to read

All trails, and other no vehicular rights-of-way in the State declared to be public rights-of-ways by the highways act of 1892, or opened, laid out, or built by the government or otherwise created or vested as no vehicular public rights-of-way at any time thereafter, or in the future, are declared to be public trails. A public trail is under the jurisdiction of the state board of land and natural resources unless it was created by or dedicated to a particular county, in which case it shall be under the jurisdiction of that county.

Effects of the Highways Act of 1892 on the Ala Kahakai NHT

Much of the Ala Kahakai NHT may prove to be in the public domain due to the Highways Act of 1892. All public accesses that can be verified to have been in existence prior to 1892 continue to be owned in fee simple by the state of Hawaii. This law applies even if the trail is not physically on the ground because in many instances trail segments have been destroyed over time due to various land uses or natural processes.

The burden of proof rests with the state under the Nā Ala Hele Trails & Access Program (See Appendix G for information on this program and on the meaning of the Highways Act of 1892), which conducts an “abstract” of a particular land area or trail to document ownership.

Qualified proof includes archeological reports, historic maps, historic accounts, early surveyor’s notes, land deeds, boundary testimonies, cultural

impact assessments, or other verifiable sources of information that would lead to a determination of state ownership. Then the historic record must be reconciled with a metes and bounds survey to confirm that the identified trail is the same alignment that was in existence prior to 1892. Through this process, an ancient or historic trail that otherwise runs through private property may be declared property of the state and in some cases is managed for use by the public. However, the research used to document the claim by the government may be legally challenged for a variety of reasons if the claim is adverse to a private landowner. The trail ownership may ultimately be adjudicated in court.

Opening a state trail to the public requires a cultural survey and preservation or construction, management, maintenance, and signage plans. If resources are lacking to open them to public use, often the trails with historic and public value may be “land banked,” that is held by the state without a management entity and not open to the public. Several state-owned segments with potential to be components of the Ala Kahakai NHT are land banked at this time. The *Feasibility Study* identified 35 miles of potential state trail crossing private lands eligible for inclusion as part of the Ala Kahakai NHT.



Shoreline Trails, Makalawena, N. Kona, NPS photo

PLANNING ISSUES AND CONCERNS

The NPS received several hundred ideas and comments during scoping and alternatives review meetings held with the public, government agency representatives, Native Hawaiian groups, trail organizations, and individuals. (See appendix J for a record of public comments.) Other comments came by letter and comment form. Every comment was considered. Several concerns raised about trail management can appropriately be addressed in the CMP, while others are beyond the scope of the CMP or would be better handled at more detailed levels of planning.

Issues Addressed in the Plan

Trail Administration and Operations

The trail is administered by the NPS, but the NPS owns and manages only 17% of the trail corridor. The trail passes through federal, state, county, Hawaiian Homelands, and private lands each with their own regulations for use. Even within state lands, Nā Ala Hele and State Parks operate under different rules. Consistent preservation, development, management, and marking the trail through varying jurisdictions will be a challenge.

Changes to the Historic Scene

Development, weather, and alien plants have significantly impacted the ancient and historic trail in some areas. New trails and jeep roads have taken their place. The plan needs to address how these sections of trail would be incorporated into the Ala Kahakai NHT.

Vulnerability of Cultural and Natural Features

The Ala Kahakai NHT connects hundreds of cultural sites and traditional use areas. Desecration of cultural sites on private and adjacent public lands by persons accessing these sites via coastal trails is an ongoing problem. The plan needs to address how trail management can protect these sites.

Effects on Native Hawaiians

Native Hawaiians have deep concern for protection of natural and cultural resources, which are one and the same to them. For them, the trail is a part of a way of life. It includes not only the pathway but also the network of resources beside the trail. They are concerned that increased public access and use could impact areas of deep spiritual significance and their use of these areas to practice their cultural traditions. They also have concerns for the effect of federal recognition of the trail on their gathering and subsistence rights.

Landowner Concerns

Landowners point out that public access across their properties could lead to trespass, litter, vandalism, and misuse, and that the burden of trail maintenance and protection could fall disproportionately on them. Landowners also have concerns for their liability. Even though they are relieved of liability for public recreational uses through state law, claimants may still file suit in the event of injury. In some cases, the state may defend and indemnify owners from claims made against them by public users of the owner's land. (See Appendix A for the state of Hawaii liability law.) Even if the trail is state-owned and the state becomes liable, there is still the potential for trespass onto private land from the state trail. Finally, landowners are concerned about the potential of added federal oversight of their lands.

Undesirable Trail User Behavior

Private landowners and public land managers have suffered the effects of trespassing, vandalism, theft, littering, unauthorized off-road vehicle use, and illegal dumping due to open and largely unregulated access along and to the shoreline. In some cases, coastal resources such as *'opihi* (limpet), *limu* (seaweeds), fish, stones, sand, wood, and plant materials have been depleted. Access where immediate trail oversight is not present has led to over-harvesting of resources and inappropriate dumping of solid waste in coastal and other areas.

Land Use Decisions

In many cases, cultural and natural resources are threatened or have been lost due to development. At times, state land use designation and county development processes have allowed destruction of both ancient and early historic trails as long as developers provide public access to the shoreline.

Issues Not Addressed in the Plan

Not all issues raised by the public are addressed by the alternatives in the CMP because they are

- already prescribed by law, regulation or policy
- beyond the scope of the CMP
- at a level too detailed for a comprehensive management plan and would be more appropriately addressed in subsequent planning documents.

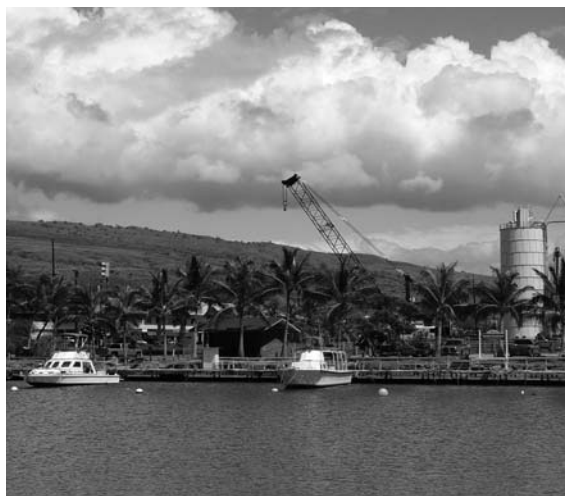
Some comments related to dissatisfaction with the trail name as a made-up word without historic accuracy. The term “*Ala Kahakai*,” meaning “trail or path by the sea,” was coined by a planner for a 1973 state trail system proposal and was later used in Senator Daniel Akaka’s legislation requesting the *Feasibility Study*. In this way, it became the name of the national trail and a given for the CMP. Some commenters thought *Ala Loa* or *Ala Hele* would be more appropriate names. The name can be changed through an act of Congress as has been done for some other Hawaiian national park sites, but it cannot be changed in the CMP.

Some commenters contended that the national parks on the island of Hawai‘i and the Ala Kahakai NHT are not legitimately under the jurisdiction of the federal government, and should be returned to the Kingdom of Hawai‘i. Response to this comment is beyond the scope of the CMP to address as are comments such as “Extend the designated corridor to Hilo” or “Need the trail to go around the whole island.” Addressing these comments would require further legislation.

Many specific comments raised issues that would more appropriately be addressed by future site and segment specific plans. Suggestions included:

- Encourage Nature Conservancy, etc., to buy up adjacent lands.
- Provide guidelines for camping on the trail.
- Remove 4WD access to/on trail.
- Provide a map of all sacred areas on the island.
- Create an endowment for volunteer-based maintenance.
- Discourage use of all-wheel drive vehicles on the trail south of Spencer Beach.

Although comments like these are not specifically addressed in the CMP, they will be considered in future implementation plans or day-to-day trail administration and management.



Kawaihae Harbor, S. Kohala, NPS photo

Guidance for Planning, Administration and Management

Initial guidance for trail planning, administration, and management is found in the purpose of the trail as established by Congress; the vision for the trail; the national significance of the trail and its fundamental resources and values; the primary interpretive themes that convey the trail's significance; and federal, state, and county legal and policy requirements—the more general body of laws and policies that apply to the Ala Kahakai NHT. This foundation provides the parameters for ensuring that all programs and actions recommended in the comprehensive management plan contribute to achieving the trail's purpose and other mandates.

PURPOSE OF THE TRAIL

A statement of purpose defines why a particular trail or park is recognized. The purpose of the Ala Kahakai NHT, derived from the legislative history, the *Feasibility Study*, and the public CMP scoping process completed in 2005 is to

- preserve, protect, reestablish as necessary, and maintain a substantial portion of the ancient *ala loa* and associated resources and values, along with linking trails on or parallel to the shoreline on Hawai'i Island
- provide for a high quality experience, enjoyment, and education — guided by Native Hawaiian protocol and etiquette — while protecting the trail's natural and cultural heritage and respecting private and community interests

COMMUNITY VISION FOR THE TRAIL

The following vision for the trail was developed with the public during the scoping process. The Ala Kahakai NHT will

- preserve ancient and historic trails within the corridor and tell the stories of those who use them

- provide access to practice traditional lifestyles and *mālama 'āina* (care for the land)
- protect sacred sites, historic places, and natural areas
- become a living classroom for educating Hawaii's people and visitors
- offer opportunities for community partnerships based on the ahupua'a concept
- create safe and well-kept places for spiritual, cultural, and recreational practices
- unite local communities around common goals to preserve Hawaii's culture and environment

SIGNIFICANCE STATEMENTS/FUNDAMENTAL RESOURCES AND VALUES

Significance statements capture the essence of the trail's importance to the United States' heritage, including those significant to the history of Native Hawaiians. Significance statements describe the distinctiveness of the totality of the trail's resources and place them within a broader context (regional, national, international). Significance statements identify those resources and values that must be preserved to accomplish the trails' purpose. The five significance statements listed below provide a framework for trail interpretation and education. They are derived from the *Feasibility Study*, which was endorsed by the NPS Advisory Board as required in NTSA 5(c), and revised through the CMP public scoping process.

Fundamental resources and values are systems, processes, features, visitor experiences, stories, scenes, and other assets that warrant primary consideration during planning and management because they are critical to achieving the trail's purpose and maintaining its significance. Underlying the discussion below are related Native Hawaiian cultural values that express the relationship of people to the land and its resources such as *kuleana*, responsibility; *laulima*, working together; *malama*, caring for, preserving; *aloha 'aina*, love of the land. These values and others are further described later in

this plan under “Hawaiian Land Management Values” on pages 50 and 51.

Significance Statement 1

The Ala Kahakai NHT contains the oldest and best remaining examples of the ancient *ala loa*, the major land route connecting the reaches of coastal settlement zone¹³ of most *ahupua‘a* on the island of Hawai‘i. The *ala loa* was essential to the movement of early Hawaiian’s (*ka po‘e kahiko*) from place to place.

Associated Fundamental Resources and Values

- preserved and walkable remnants or preserved alignment of ancient and historic trails
- sites, features, or places of significance situated along or connected by those remnants or along the alignment

Significance Statement 2

The Ala Kahakai NHT protects and provides access to natural, cultural, and recreational resources that together express the Native Hawaiian culture and way of life, past and present. Although the common conception of Hawaiian culture is what existed at the time that Kamehameha I unified the islands after western contact, the trail also recognizes the 1000 to 1500 years of Polynesian settlement before that.

Associated Fundamental Resources and Values

- the trail landscape, comprised of cultural and natural resources that can be accessed by or appreciated from the trail—archeological resources, historic sites structures, cultural landscapes, traditional cultural properties, *wahi pana* (storied and sacred places), and the hundreds of named features¹⁴ such as stone formations geological landscapes, a tree or area of plant growth, *pu‘u*, *kipuka*, water sources, and other natural resources.

- stories, *hulas* (dances), and chants associated with places, place names, and sites along the trail
- access to preserved places where spiritual beliefs, customs, social values, subsistence resource gathering, agriculture, trade, and commerce uses are practiced past and present.
- access to recreation areas (water and land-based activities) to practice sustainable recreation activities
- visitor experience of Native Hawaiian ways of living

Significance Statement 3

Along the coastal *ala loa* events took place that are significant to Hawaiian history and culture, from the arrival of Polynesians, to the rise of Kamehameha I and the unification of the islands into the Kingdom of Hawai‘i, to the coming of Captain Cook and Christian missionaries.

Associated Fundamental Resources and Values

- places and stories of ancient events along the route (e.g. major events such as arrival of Polynesians, establishment of *ahupua‘a* system, establishment of *kapu*, but also lesser known events associated with the many chiefs and chiefesses and commoners.)
- places and stories of historic events along the route (e.g. major events such as the rise of Kamehameha I, arrival of Captain Cook, the December 1819 battle, end of the *kapu*, arrival of missionaries as well as lesser known events associated with a specific place or person)

¹³ The coastal settlement zone includes the *kahakai* (nearshore fisheries and shoreline strand) and *kula kai* (shoreward plains). Maly quoted in NPS , 2004b, Part C, page C-8.

¹⁴ Hawaiians gave names to places that signify cultural identity, whether as a resource, a physical landmark, or a marker of a past event.

Significance Statement 4

The Ala Kahakai NHT is a dynamic, living cultural resource reflecting the values of an island people and their continuing responsible relationship with their community, land, and ocean resources.

Associated Fundamental Resources and Values

- stories of stewardship and the cultural heritage of an island people including oral histories, newspaper accounts, diaries, archives, photographs
- remnants of the *ahupua'a* land management system that allowed for cultural and economic self-sufficiency and sustainable abundance
- connection of the *ahupua'a* system and cultural stewardship values and patterns to management of the Ala Kahakai NHT

Significance Statement 5

The Ala Kahakai NHT passes through and provides the opportunity to protect significant natural areas and ecosystems with indigenous and endemic species along its route.

Associated Fundamental Resources and Values

- anchialine pools
- endemic species habitat
- endangered and threatened species
- ecological zones
- lava forms and formations



Jeep Trail, N. Kohala, NPS photo

PRIMARY INTERPRETIVE THEMES

Interpretive themes are the most important ideas or concepts to be communicated to the public about the Ala Kahakai NHT. Themes elaborate on the primary stories and experiences that are fundamental to the public understanding of the trail's purpose and significance, providing the foundation for comprehensive interpretive planning. Interpretive themes are derived from the significance statements and reflect fundamental resources and values. Interpreters use themes to connect tangible resources to larger ideas, meanings, and values so that the public can develop their own emotional and intellectual connections with trail resources. Interpretation along the Ala Kahakai NHT will include oral traditions and reference to cultural places to create a sense of place. It should introduce real people and events.

Theme statement: Walk in the foot steps of the Hawaiian ancestors along the Ala Kahakai.

Topic: Connections to the Past. The Ala Kahakai NHT contains the oldest and best remaining examples of the ancient *ala loa* and the sites connected by it, including remnants of several other ancient and historic trails, providing outstanding opportunities to explore parts of the Hawaiian trail system and follow in the footsteps of the *ka po'e kahiko* (people of old Hawai'i).

Theme statement: Experience the enduring lifestyles and values of the Hawaiian people.

Topic: Expression of a Unique Culture. The Ala Kahakai NHT links natural, cultural, and recreational resources that express Native Hawaiian culture and provide for practice, perpetuation, understanding, and appreciation of an enduring way of life. Experience of these resources can deepen personal values with respect to Native Hawaiian traditions and life styles.

Theme statement: Hawaiian history comes alive at specific sites along this trail.

Topic: Significant Events. The Ala Kahakai NHT provides the opportunity to experience events of significance to Hawaiian history and culture in the places in which they occurred.

Theme statement: Discover the satisfaction of being a responsible citizen-steward of this trail.

Topic: Stewardship. Management of the Ala Kahakai NHT provides opportunities for an island people to express their continuing *kuleana* (responsible relationship) with their community, land, and ocean resources.

Theme statement: Listen and learn as the landscape speaks its stories.

Topic: Environment. Animal and plant species, anchialine pools, landscapes, geology, ambient sounds, and night skies were essential components or considerations in the culture of early Hawaiians that require understanding and preservation today.

STATUS OF RESOURCES AND VALUES

Although the following discussion approaches cultural and natural resources as discrete categories, to the Native Hawaiian they are bound together. A fish pond may be a natural resource where rare birds feed, but it is also a cultural property, a source of abundant fish which were farmed by their Hawaiian ancestors.



Puhina o Lono Heiau, S. Kona, NPS photo

A lava flow may be a geologic phenomenon, but it is also an expression of Pele, the volcano goddess. The trail's fundamental resources and values reflect the intricacy of this relationship.

Because a limited number of trail resources have been inventoried and protected, the CMP cannot meet the requirement of the National Trail System Act to identify "all natural, historical, and cultural resources" of the Ala Kahakai NHT (emphasis added). According to the Hawaii State Department of Land and Natural Resources' Historic Preservation Division (SHPD), although only 5% of the island has been surveyed, an estimated 11,500 archeological and historic sites have been identified on the island of Hawai'i. Some natural resources have been inventoried in the national parks and in development plans, but the surveys are by no means complete or organized in a manner that trail administration and management can use.

Nonetheless, this CMP can suggest the character and scope of resources to be protected along the Ala Kahakai NHT. High potential sites and complexes listed on table 3 indicate the quality, types, and level of recognition of cultural and historical resources along the trail. Natural resources deemed significant to the Ala Kahakai NHT can be described, but the status of these resources at specific sites along the route will not be known until resource studies are complete and management plans are developed for individual trail segments. As these plans for trail segments are developed, more cultural and natural resources will be identified, protected, and interpreted to the public, as appropriate.

The values and resources described below provide the basis for discussion of impacts of the alternative management proposals.

Cultural Resources

There are several ways of categorizing and evaluating cultural resources for the Ala Kahakai NHT Trail: by eligibility to the National Register of Historic Places; by Hawaiian traditional culture; by National Park Service cultural management categories; and by requirements of the National Trails System Act, a mandate of this plan. Each of these systems is a means to ensure that the fundamental resources and values described above are protected, preserved, and made available to the public in appropriate ways. Trail administration and management must consider how each system applies in any given situation.

National Register of Historic Places

In the NPS, cultural resources are generally evaluated and protected through meeting the requirements of the National Historic Preservation Act (NHPA), which authorizes the secretary of the interior to recognize and develop protective strategies for properties with historic significance.¹⁵ Resulting from that act, the National Register of Historic Places (NRHP) is the official list of properties recognized as historically significant. Under section 106 of the NHPA, the NPS, as a federal agency, is obligated to assess the effects of its undertakings on cultural resources. Section 110 of the NHPA requires the NPS to evaluate the eligibility for the national register of historic properties under its direct control or properties on which federal funds are expended. It is further obligated, even pending evaluation, to assure that historic properties are not impacted beyond the point at which they are no longer eligible. The NPS List of Classified Structures (LCS) database includes structures nominated to or eligible for the NRHP in each national park; the Archeological Sites

Management Information System (ASMIS) documents information about archeological resources, and the Cultural Landscapes Inventory (CLI) documents cultural landscapes and their associated features including historic structures, sites, and districts. Determining and establishing eligibility of the trail and sites along it is essential for protecting and preserving the Ala Kahakai NHT.

Evaluation for eligibility to the register assesses the quality of significance in American history, architecture, archeology, and culture present in districts, sites, buildings, structures, and objects of state and local importance that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and that meet one or more of the following criteria:¹⁶

- A) Association with historic events, or
- B) Association with the lives of persons significant in our past, or
- C) Embodiment of a distinctive construction style, or
- D) Information potential

Several sections of the trail are already on the NRHP as individual properties, or are incorporated as a contributing property of an archeological district. Additional trail segments that still retain integrity of construction and setting would likely be deemed eligible under criterion A, B, C, or D. The trail itself may best be classified as a district because it is a linear property that encompasses a variety of elements and features which are historically and functionally linked by a travel way¹⁷. Dozens of other cultural sites along the ancient route are already listed on the NRHP as significant under one or more of the register criteria. Most of the National Historic Landmarks associated with the

¹⁵ The NPS organic act and the National Trails System Act are additional mandates for cultural resource preservation.

¹⁶ See the Glossary under "National Register for Historic Places" for the full NRHP definitions of these criteria.

¹⁷ "Trails and roads require verification that the land nominated is the actual location of the trail. Eligibility requires integrity of setting and location. Boundaries commonly encompass the length and width of the byway and a margin of land, for example, 40 feet, on both sides. ... Boundaries may also include land that forms a historically important and intact setting, for example, the hillsides and rock formations rising from an important pass on a frontier trail. Where the continuity of a byway has been interrupted by nonhistoric development, segments retaining significance and integrity can be nominated together in a multiple property submission" (NPS, 1998c).

trail are, in fact, nationally significant under all four of the NRHP criteria. Many prehistoric and historic sites have been determined eligible by the State Historic Preservation Office, but have never been formally nominated to the national register. Still other cultural properties, probably in the hundreds, remain incompletely recorded and not yet evaluated (NPS, 1998c).

Table 3, a listing of known and at least minimally protected sites along the trail route, lists 11 sites on the NRHP, 6 of which are National Historic Landmarks; 1 National Historic Landmark District with several sites; 2 Historic Districts with several NRHP sites; 10 sites on the State Register of Historic Sites; and 5 state preservation areas set aside in historic preservation agreements with the State Historic Preservation Division.

Another class of properties associated with the Ala Kahakai NHT that may be significant under any or all of the NRHP criteria is the traditional cultural property (NPS, 1998b). A traditional cultural property (TCP) is a site or a place, that is eligible for inclusion on the national register because of its association with cultural practices and beliefs that are (1) rooted in the history of a community and passed down through the generations in oral literature or history, and (2) important to maintaining the continuity of the community's traditional beliefs and practices (NPS, 1998a).

Some TCPs along the Ala Kahakai NHT are sacred to the extent that they are worshipped with offerings in the present day. TCPs may include sites with significant legendary associations, associations with ancient religious practices, specialized subsistence gathering areas, and so on. Among Hawai'i Island's better known traditional cultural properties are Mo'okini Heiau, associated with Pa'ao, the legendary priest/navigator from Kahiki, and South Point, a famous fishing ground, marked with a fishing *heiau*, Kalaka, reputedly used by Kamehameha. Mo'okini Heiau and South Point had associations with the *ala loa* (NPS, 1998a).

Hawaiian Traditional Culture

TCPs, because they are identified and evaluated with the NRHP criteria, tend to be physical, bounded places that a land manager can recognize as a kind of historic property. But in Hawaiian culture, intangible resources may be just as important as tangible resources, the small as important as the monumental, and all are sacred. The NPS recognizes that historic properties represent only some aspects of culture, and many other aspects, not necessarily reflected in properties as such, may be of vital importance in maintaining the integrity of a social group. However, the NRHP is not the appropriate vehicle for recognizing cultural values that are purely intangible, nor is there legal authority to address them under section 106 of the NRHP, unless they are somehow related to a historic property. Nonetheless, the NPS is committed to ensuring that such resources are fully considered in planning and decision making (NPS, 1998c).

In the Hawaiian culture, *mo'olelo* (traditions and historical narratives) are expressions of native beliefs, customs, practices, and history. In fact, in Hawai'i the very landscape is "storied and filled with *wahi pana*¹⁸ (storied and sacred places) represented in both the tangible and intangible facets of traditional Hawaiian culture, and are



Pelekane and Pu'ukoholā Heiau NHS, S. Kohala, NPS photo

¹⁸ The discussion of *wahi pana* was prepared by Kepā Maly, December 2005.

not always represented by the largest constructions or man-made features. Each Hawaiian place name consists of descriptive words that suggest the presence of gods or their interactions with people, document specific events, or characterize a certain place. Such *wahi pana* stand out in traditions and the recollections of elder *kama'āina* (native born). While today many of those *mo'olelo* have been lost, some still remain, and from them we are able to gain insights into the history of the lands and people of the 'āina (land). Along the route of the Ala Kahakai, many *wahi pana* can be viewed or experienced, some near at hand and others at a distance. Some examples of *wahi pana* along the Ala Kahakai NHT from north to south are described below.

Along the coast of Kohala appear the uplands and the noted hills of Pili (Puu Pili) and Kalāhikiola, poetically described as "*nāpu'u hāele lua o Pili me Kalāhikiola*" (the hills of Pili and Kalāhikiola, which appear to march together across the land). When viewed from the coastal region, these two hills, which mark land divisions of North Kohala, seem to move with the traveler.

From Kohala, the trail enters Kona and the lava lands of Kanikū and Kanimoe. These flows are named for two goddesses who were turned to stone and who are believed to guard the trail to the present day. Continuing further south through Kona, the trail passes the *mauka* section of the ancient "*ke ala a ke akua*" (the pathway of the gods), and now commemorated in the place name, Kealakekua. And further south in Kona, the trail passes through the lands of Kolo and 'Ōlelomoana. The names of these *ahupua'a* recall that in ancient times, those who traveled the *ala loa* would sometimes forfeit their lives along the trails when caught by fishermen who were in need of bone for making new fishhooks.

Upon entering the district of Ka'ū, the trail crosses the 'ūlei covered flatlands and looks upon the Pali Mōlilele (cliff from which the albatross flies), but which man must climb to continue the journey into Ka'ū. And drawing near to Kīlauea

(abode of the goddess Pele), the trail ascends via the sun-baked plains of Kūkalā'ula, where only the *pu'ulena* winds blowing from Puna, could cool the weary traveler.

Upon departing from Ka'ū and entering Puna, the trail passes through the *ahupua'a* called Kealakomo (literally, the entry path), the land which from ancient times, marked the end of one district and beginning of another.

Such places are among the thousands of cultural resources and values accessed by the Ala Kahakai. The stories associated with the myriad places along the trail will bring to life the landscape and native experience for residents and visitors alike. (See the Bibliography for a list of studies and reports completed along the trail route that use native and primary sources to detail *wahi pana*, cultural landscapes, and traditional cultural properties.)

To begin to address the significance of the trail to contemporary Native Hawaiians, a cooperative agreement with the University of Hawaii's Department of Urban and Regional Planning (DURP) produced a cultural resource study for North Kohala. This study covered cartographic research on ancient and historic trails, Māhele and land claims, place names, and ethnographic information. The project continues with similar studies being conducted at South Kohala and North Kona. A research project on ancient and historic trails in South Kona and Ka'ū is also being conducted.

NPS Cultural Management Policies

The NPS defines a cultural resource as an aspect of a cultural system that is valued by or significantly representative of a culture or that contains significant information about a culture. To focus attention on management requirements within the NRHP property types, the NPS *Cultural Management Policies* recognizes the following resource types: archeological resources, historic structures, cultural landscapes, places of significance to contemporary cultural groups (ethnographic resources), and museum objects.

While management plans for national parks tend to address cultural resources in these five categories, for the Ala Kahakai NHT the distinctions between these resource categories are often blurred.

Resource categories are useful because they help organize cultural resources into a manageable number of groups based on common attributes. On the other hand, categorization often obscures the interdisciplinary nature of many cultural resources. A *heiau*, for example, may be associated with many artifacts, form the centerpiece of a cultural landscape, and occupy the site of a prehistoric fishing camp. In addition to this type of overlap, cultural resources might also embrace more than one category or classification system. A fish hook can be both an archeological resource and a museum object, just as a wall may be viewed as a discrete structure, the extension of a building, and part of a landscape. Taken a step further, historic districts can be formed by various combinations of cultural landscapes, structures, archeological resources, and resources important to contemporary cultural groups (NPS, 1998c). Nearly always, an individual Hawaiian cultural resource fits into more than one category. Nonetheless, as required by NPS policy, the Existing Environment and Environmental Impacts chapters of this plan address resources using the four categories relevant to the trail: archeological resources, historic structures, cultural landscapes and museum collections. Ethnographic resources are considered by this plan to be incorporated into the other four categories.

National Trails System Act

The National Trails System Act requires that a comprehensive management plan identify high potential trail segments and sites. (See footnote, page 1, or glossary for definition.) Table 3, map 3, and appendices B and C respond to this requirement.

High Potential Trail Segments – Oral traditions and eye-witness accounts recorded in the early 1800s, Māhele land records from 1848 to the mid-1850s,

Boundary Commission transcripts from the 1870s to 1890s, and Kingdom maps from the 1880s to the early 1900s provide documentation of the route of the *ala loa* and its companion major trails that cross *ahupua'a* borders.

Generally documentation occurs in Hawai'i when a development or change in land use is proposed and the county requires developers to conduct surveys as a condition of approval. Unmodified remnants of the ancient *ala loa* and segments of historic trails including *alanui aupuni* have been documented in each district that the trail runs through in the general locations illustrated on the alternatives maps and described in Appendix B. Ancient and historic trail segments have been documented in each of the three West Hawai'i national parks (Tomonari-Tuggle, 2004). The maps depict conceptual alignments for these trail segments intended for planning purposes and are not intended for use as trail guides. Over time, as studies are conducted, trail segment locations will be confirmed.

High Potential Trail Sites –To date, no attempt has been made to document the archeology of the entire *ala loa*. As part of the CMP process, the Ala Kahakai NHT office initiated an archeological inventory project with the Hawaii State Historic Preservation Division (SHPD) to compile information from existing archeological reports within the trail corridor. This survey was not completed, and though unavailable for use in preparation of the CMP, its findings will be useful to trail management once the information is organized. High potential cultural sites are listed on table 3 and their general locations shown on map 3. Appendix C describes them further. Included in table 3 and map 3 as high potential sites, along with archeological and historic sites, is a sampling of traditional cultural properties and sites with on-going cultural significance such as *wahi pana* (storied and sacred places).

Table 3: High Potential Cultural Sites and Complexes along the Ala Kahakai NHT

PUBLICLY KNOWN HIGH POTENTIAL SITE OR COMPLEX	PERIOD EXEMPLIFIED		RECOGNITION ¹⁹
	A. ANCIENT (PRE-1778)	B. HISTORIC (1779-1892)	
North Kohala			
Mo'okini Heiau; Kapakai	a,b		NHL, SM, NR
Kamehameha 'Akāhi, 'Āina Hānau (Kamehameha I Birthplace)	a		
Lapakāhi State Historical Park preserves remains of a precontact Hawaiian settlement that includes house sites, canoe sheds, shrines, and burial cairns. Agricultural fields are several miles inland.	a		NR, SHP, SR
South Kohala			
Pu'ukoholā Heiau, Mailekini Heiau, former Hale o Kapuni Heiau, Pelekāne, Kamehameha's "leaning post," and Pahukanilua (John Young's homestead)	a,b		NHS,NHL, NR
Puakō Petroglyph Archeological Preserve (Mauna Lani Resort)	a		NR, SPA
Kalāhuipua'a with its fishponds and small cave shelters (Mauna Lani Resort)	a,b		SPA
Waikōloa Petroglyph Preserve; Ke ahu a Lono ('Ānaeho'omalū)	a,b		SPA
*Kahāpapa and Ku'uali'i fishponds at 'Ānaeho'omalū			
North Kona			
*Kapalaoa complex and ponds			SR
*Wainānālī'i and Kīholo Fishpond complexes: storied traditional places	a,b		SR
*Kalaemanō salt works and habitation features (ceremonial significance)			SR
*Ka'ūpūlehu salt works and petroglyph fields (Kona Village Resort)	a,b		SPA
*Kū ki'o to Kaulana includes fishponds, anchialine pools, and small clusters of permanent houses, associated graves, small <i>heiau</i> , and temporary shelters.	a,b		SR
Keāhole Point to Kaloko Ahupua'a includes small clusters of permanent houses, associated graves, small <i>heiau</i> , and temporary shelters including Wawaloli-'O'oma habitation cluster.	a,b		
Kaloko-Honokōhau National Historical Park (almost every type of precontact structure is represented along with some historic structures)	a,b		NHP, NHL, NR
Kamakahonu and 'Ahu'ena Heiau, Kailua (NHL) [King Kamahameha Hotel]	a,b		NHL, NR
Hulihe'e Palace	b		NR
*Kamoa-Keolonāhihi Point Complex			
*La'alua			
Kahalu'u Royal Center (Ke'eku, Hapai Ali'ui, Kapuanoni Heiau, Kuemanu Heiau, walled house lots. Agricultural fields in the uplands)	a,b		SPA
Kamehameha III birthplace, Kauikeaouli stone, Keauhou	b		
Kāneaka, the Keauhou Hōlūa Slide	a		NHL, NR
Lekeleke and Kuamo'o Battle Site and Burial Ground (1819) and features through Honua'ino.	b		
South Kona			
Kealakekua Bay Historic District, the site of the landing and death of Captain Cook includes Captain Cook Monument (reachable by boat), Hikiau Heiau, Ka'awaloa, Puhina o Lono (<i>heiau</i> at which Captain Cook's body was prepared for burial (Kealakekua Bay State Historical Park)	a,b		NR, SHP, SM
Moku'ōhai Battleground (1782)	b		
Pu'uhoonua o Hōnaunau National Historical Park (place of refuge, ruler's residential area, royal mausoleum, 'Ale'ale'a <i>heiau</i> , and <i>hōlua</i> slides, Alahaka Ramp, and 1871 Trail)	a,b		NHP, NR
*Kapalilua Region: Ho'okena-Kauhakō, Ho'opūloa, Miloli'i, Okoe Bay, Honomalino and Kapu'a Sites			SR

¹⁹ NHL = National Historic Landmark; NHS = National Historic Site; NHP = National Historical Park; NP = National Park; NR = National Register of Historic Places; SHP = State Historical Park; SM= State Monument; SR = State Register of Historic Places; SPA = state preservation area set aside in historic preservation agreements

PUBLICLY KNOWN HIGH POTENTIAL SITE OR COMPLEX	PERIOD EXEMPLIFIED		RECOGNITION
	A. ANCIENT (PRE-1778) B. HISTORIC (1779-1892)		
Kaʻū			
*Manukā Bay petroglyphs, habitation complex, hōlua slide			NR, SR
*Kaiakēkua and Keawaiki complexes			SR
*Wai ʻAhukini (royal residence)			SR
*Kāʻīlīkī ʻi-Wai ʻahukini fishing village complex, chiefly center			SR
Heiau o Kalalea; ancient canoe moorings, salt pans, and habitation sites at Ka Lae (the Point) [South Point National Historic Landmark District]	a		NHL District, SR
*Kalalea Heiau			
*Mahana Bay and Kapalaoa archeological district—canoe mooring, salt pans, fishhook manufacturing			
Punaluʻu Ruins (remains include Punaluʻunui heiau, a huge <i>luakini</i> temple)	a,b		
Kaʻū-Puna (all sites listed are within the Puna-Kaʻū Historic District in Hawaiʻi Volcanoes NP)			
Kūēʻē Village Ruins, Papalehau Ruins, Kāluʻe Ruins, Halapē Ruins, Halapē House Platform, Keauhou Ruins-Heiau Cave, ʻĀpua Point Ruins, Kealakomo Village, Puʻu Loa Petroglyphs, Laeʻapuki and Kamoamoa Village Ruins (about 85% covered in 1988-95 lava flows), site of Wahaʻula Heiau (covered by 1997 lava flow)	a,b		In NP, NR

Sources: Dunbar, Helene R. *Cultural Resources Assessment, Ala Kahakai, Hawai'i Island*, NPS, Pacific Great Basin Support Office, 1997 reviewed, amended with additions of *wahi pana* by Kepā Maly, Kumu Pono Associates LLC, December 2005, noted by an asterisk (*), and additional information from the NPS List of Classified Structures.



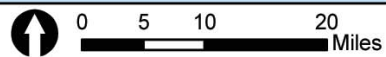
Kal Lae (South Point), Ka'ū, NPS photo

Map 3 Location of High Potential Cultural Sites and Complexes



Legend

- Ala Kahakai NHT Corridor
- Districts
- Parks
- Wilderness
- Primary Roads
- Secondary Roads
- High Potential Cultural Sites and Complexes
- Ahupua'a Mentioned in Text
- Puna Kau Historic District



*Ala Kahakai National Historic Trail
Working Map 3/22/07*

Natural Resources

The status of the fundamental natural resources and values related to the Ala Kahakai NHT is not determined. Some limited information on these resources exists within the national parks. The *Pacific Island Network Vital Signs Monitoring Plan: Phase III Report* (NPS, 2005) identifies “focal resources” for the Ala Kahakai NHT and assesses their status within the national parks. Focal resources, identified through cultural and local knowledge, scientific research, and judgements of park staff, reflect most of the fundamental natural resources and values identified for the trail. In general, from these sources we know that

- coastal strands, wetlands, anchialine (saline or brackish) pools, and fishponds provide habitat for endangered waterfowl, rare shrimp, native insects, plants, and many organisms that are harvested for food
- threatened and endangered species and habitats occur in several locations along the trail corridor
- nearshore marine areas adjacent to the trail are habitat for coral reefs and associated marine life used for traditional fishing and harvesting
- caves, while cultural resources, often contain unusual species adapted to the environment.

The resources identified in the monitoring plan are listed below with brief descriptions of their status.

Focal Natural Resource Values

- Intertidal areas, beaches, and coastal strand communities
- Coastal lowland plant communities
- Fishponds and anchialine pools
- Traditional subsistence coastal fishing and

harvesting²⁰ and ethnobotanical resources

- Cave resources
- Threatened and endangered species

Intertidal areas, beaches, and coastal strand plant communities — Few sand beaches occur along the route of the Ala Kahakai NHT, and they are highly sought after for recreation, resort, and commercial development. Black and green sand beaches found along the trail route in Ka‘u and within Hawai‘i Volcanoes National Park are unique resources threatened by unauthorized removal of sand. Endangered sea turtles use beaches for nesting and Hawaiian monk seals (*Monachus schauinslandi*) frequently haul out on them to bask. Coastal strand plant communities are found in many areas along the Ala Kahakai NHT. These communities have aesthetic value and help prevent erosion of beach areas. Located on strips of coral or volcanic sand or limestone or volcanic rock adjacent to the shoreline, the coastal strand ecosystem contains species adapted to salt spray, storm surge and shifting substrate with limited water and nutrients, such as the coconut (*Cocos nucifera*), and various vines, grasses, and shrubs. Strand vegetation tends to be widespread throughout the Pacific [e.g., beach *naupaka* (*Scaevola sericea*), beach morning glory or *pohuehue* (*Ipomoea pes-caprae*), screw pine or *hala* (*Pandanus tectorius*)], though the Hawaiian Islands have several endemic species. Coastal strand communities have been significantly altered by human activity. Coastal development and the introduction of invasive species have severely restricted the ranges of some endemic strand species, though more cosmopolitan strand species have not been as affected.

Coastal lowland and lowland dry plant communities — Several herbland, grassland, and forest plant communities may occur in the area from sea level to approximately an elevation of

²⁰ Traditional subsistence fishers are those who engage in limited fishing and gathering activities to feed their extended families identified with a specific region and associated through bloodlines and friendships which have developed over generations. Traditional fishing or harvesting is a sustainable practice and not a “blank check” for someone claiming Native Hawaiian blood to overharvest or misuse resources.

1000 feet within the trail corridor. Many of these native dry coastal and lowland plant communities have been destroyed by urbanization, off-road vehicle activity, fire, grazing, and encroachment by alien plant species. Kiawe (*Prosopis pallida*) has replaced the native flora in many former shrublands, and fountain grass (*Pennisetum setaceum*) poses a substantial threat to native *pili* (*Heteropogon*) grassland. Fountaingrass is “disrupting the more sparsely vegetated lowland native dry forests and shrublands that contain several endangered and many candidate endangered plant species” (Wagner, 1990).

Fishponds and anchialine pools — Fishponds were constructed by Native Hawaiians to grow and harvest desired fishes in a sustainable manner. Aimakapā and Kaloko fishponds, found within Kaloko-Honokōhau NP in North Kona, are bounded by wetlands that provide critical habitat to two species of endangered waterbirds and several other resident or migrant species. Anchialine pools are standing waters in rocky (lava) basins that vary in salinity and exhibit tidal fluctuations, although in most cases they lack a surface connection to the ocean. Anchialine pools in Hawai‘i provide habitat to many endemic organisms and have historically been used for drinking water. Birds, native bees, and damselflies utilize shoreline habitat and rely on many other protected or rare plants and animals associated with anchialine pools and wetland

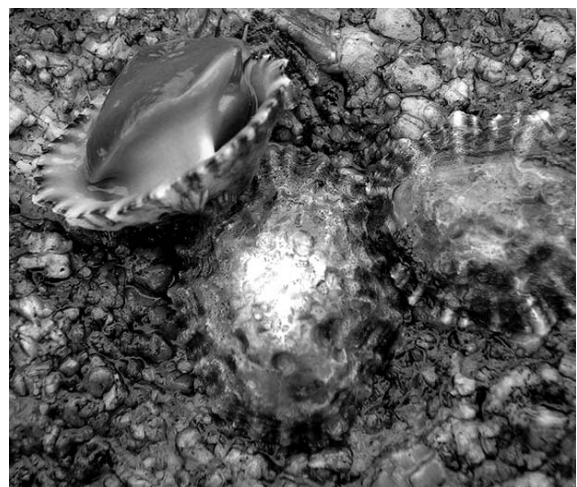


Anchialine Pond, Kaloko-Honokōhau NHP, N. Kona, NPS photo

resources. These pools rely on groundwater, primarily supplied by subterranean flow from the mountain slopes to the coast, for their freshwater input. Historic upslope water diversions and more recent real estate development have and continue to deplete these groundwater resources

Traditional coastal fishing and harvesting resources — Shoreline and spear fishing are common marine activities that provide food in addition to gathering of salt, various seaweeds, ‘opihi (limpets) from rocky shorelines, and endemic shrimp from anchialine pools. Tidepools and the coral reef also harbor an assortment reef fish, sea urchins, crustaceans, gastropods (snails), and seaweeds that are harvested for consumption by traditional fishers and others.

Cave resources — Caves are cultural resources and are managed under the Cultural Resource Management program by the national parks on the island of Hawai‘i. The lava geology of Hawai‘i has resulted in the formation of many caves and lava tubes used in ancient times for refuge, shelter, fresh-water collecting, burials, and other uses. Caves may contain burials and significant archeological resources associated with Native Hawaiian spirituality. Burial sites are sacred and not to be disturbed under traditional beliefs and by law. In the Affected Environment and Environmental Consequences chapter of this



‘Opihi Limpet, NPS photo

CMP, they will be discussed as cultural resources. Nonetheless, they are also treated as natural resources in the NPS Inventory and Monitoring Program. In addition, lava tubes may contain endemic cave-adapted insects and microorganisms, special geologically significant features, or mineral deposits, creating value as natural resources. The Federal Cave Protection Act (1988) requires the NPS to inventory and protect significant cave resources. The Hawai'i Cave Protection Act (2002) sets forth requirements for commercial entry and reporting of burials and provides criminal penalties for destruction or pollution of caves, disturbance of native organisms, and other adverse activities.

Sensitive, Threatened and Endangered Species — The U.S. Fish and Wildlife Service (USFWS) lists as federally endangered one mammal, four birds, two plants, two marine mammals, and one reptile that likely occur along the trail corridor. One reptile is listed as threatened. One damselfly and one anchialine pool shrimp are listed as candidate species for listing. In addition, Hawai'i Volcanoes NP has listed four other threatened and endangered plants that may be found within the trail corridor.

The Hawaii Natural Heritage Program as of 2003 named 32 listed and candidate species, 16 species of concern, 13 natural communities, and 13 designated critical habitats for plants that may occur in the vicinity of the Ala Kahakai NHT. (See Appendix D for lists of species.)

Wilderness

According to the Wilderness Act of 1964, a wilderness is an area retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed to preserve its natural conditions. It has outstanding opportunities for solitude or a primitive and unstructured type of recreation. Cultural resources must be managed in wilderness areas in accord with various cultural resource and historic preservation laws (NPS Management Policy 6.3.8).

About 14 miles of the Ala Kahakai NHT corridor from the west boundary of Hawaii Volcanoes National Park to Keauhou are within a designated wilderness area and are subject to the Wilderness Act. If any action regarding the NHT is to occur within the wilderness area, according to the Wilderness Act, it must first meet the "minimum requirement" to ensure that it is necessary for preservation of the wilderness resource and does not adversely impact the wilderness character of the area. Should the action be deemed necessary and appropriate, then the "minimum tool" causing the least impact to the physical, cultural, and experiential resources would apply. (See the Glossary for definitions.)

Trail Mapping

Currently, paper and digital maps exist in varying scales. Maps generated for this CMP were digitized into a Geographical Information System (GIS) format from maps in the 1979 County of Hawaii *Inventory of Public Shoreline Access*. This information was augmented by land title abstract information from Nā Ala Hele dated 2003. Even though most of the digitized trail segments have not been verified in the field, this effort constitutes the first attempt to bring together route information for the entire shoreline corridor. The map database generated for this project will be meshed with databases and metadata from other projects to provide one reliable source of information for all trail-related resources.

In addition, Ala Kahakai NHT administration is working with Redlands University Environmental Studies Program to develop a GIS internet mapping site to serve as a tool for community-based trail management. Currently the program is developing a data base for inventory and monitoring of cultural and natural resources occurring within the trail corridor. Eventually, access, safety and interpretive information will be made available to the public via the Ala Kahakai NHT internet mapping site.

This information will be made available to partners and stakeholders, as appropriate.

Continued maintenance and augmentation of the GIS developed for this CMP could be accomplished through an arrangement with the NPS Pacific West Region-Honolulu or an agreement with a university or another agency. The Ala Kahakai NHT administrative office has a computer workstation equipped with the appropriate software to prepare and print maps.

GAPS IN INFORMATION AND RESEARCH NEEDS

Information for the CMP has come from studies available at the four national parks, other readily available publications, and knowledgeable individuals in the public and private sectors. But the fact is that almost none of the trail has been studied systematically, and information that does exist is widely scattered. Much remains to be learned. Many of the required inventories and studies listed below will be completed in phases as trail segments are incorporated into the Ala Kahakai NHT and further NEPA and Section 106 compliance completed. The following list gives an idea of the gaps in knowledge that exist and the research needed to fill the gaps:

- identification of unaltered and verified ancient and historic trail along the entire route
- overview of resources and landscapes of significance to contemporary Hawaiians (a general focus on getting ethnographic data that may include surveys, transect walks, rapid ethnographic assessment procedures, community mapping, focus groups, interviews, and oral histories associated with places along the trail)
- cultural resource overview and assessment (focused on gathering existing information together)
- cultural resource inventories including archeological sites, cultural landscapes, and traditional cultural properties, and national register evaluations
- historic structure inventory and national register evaluation

- natural resource overview and assessment (focused on gathering existing information in one database)
- vegetation inventories
- wildlife inventories
- cave inventory
- anchialine pond inventory
- facility and infrastructure study
- visual survey and analysis to identify scenic resources of the trail corridor
- assessment of needs for fire management in nonfederal areas

LEGAL AND POLICY REQUIREMENTS

Federal

Aside from the National Trails System Act, as amended, other federal laws apply to trail management. All trail resources and opportunities for visitor enjoyment must be managed in compliance with a large body of legal and policy requirements intended to adequately protect the nation's natural and cultural heritage and opportunities for enjoyment of that heritage. Federal laws, regulations and planning direction applicable to this CMP include, but are not limited to the following:

Antiquities Act of 1906 (16 USC 431-433) provides for protection of historic, prehistoric, and scientific features on federal lands, with penalties for unauthorized destruction or appropriation of antiquities; authorizes the President to proclaim national monuments; authorizes scientific investigation of antiquities on federal lands subject to permit and regulations.

Archeological and Historic Preservation Act of 1974 (AHPA, 16 U.S.C.469-469c) provides for the preservation of significant scientific, prehistoric, historic, and archeological materials and data that might be lost or destroyed as a result of federally sponsored projects; provides that up to one percent of project costs could be applied to survey, data recovery, analysis, and publication.

Archeological Resources Protection Act of 1979 (ARPA, 16 USC §470aa), protects archeological resources and sites on federal lands and Indian lands and fosters increased cooperation and exchange of information between governmental authorities, the professional archeological community, and private individuals having collections of archeological resources and data obtained before October 31, 1979.

American Indian Religious Freedom Act of 1978 (AIRFA, 42 USC §1996) recognizes the rights of American Indian, Eskimo, Aleut, and Native Hawaiians to exercise their traditional religions, including limited access to sites, use and possession of sacred objects, and freedom to worship through ceremonials and traditional rites.

Coastal Zone Management Act of 1972 — (CZMA, 16 USC 1451-1464) establishes a voluntary national program within the Department of Commerce to encourage coastal states to develop and implement coastal zone management plans with cost-sharing grants to states to develop their programs. With federal approval of their plans, grants would be awarded for implementation. State plans must define boundaries of the coastal zone, identify uses of the area to be regulated by the state, the mechanism (criteria, standards or regulations) for controlling such uses, and broad guidelines for priorities of uses within the coastal zone. Federal actions must be consistent with each approved state plan. Appendix K contains the assessment of consistency with the State of Hawaii Coastal Zone Management Program for this CMP.

Endangered Species Act of 1973 (16 USC 35) requires identification and promotion of the conservation of all federally listed threatened, endangered, or candidate species and their habitats within federal administrative boundaries. The U.S. Fish and Wildlife Service and the National Marine Fisheries Service are the lead agencies in matters pertaining to federally listed threatened and endangered species. The National Park Service cooperates with those agencies in activities such as the delineation of

critical habitat and recovery zones on park lands and participates on recovery teams.

Federal Cave Protection Act of 1988 (16 USC 4301-4310) protects significant caves on federal lands by identifying their location, regulating their use, requiring permits for removal of their resources, and prohibiting destructive acts. The Act requires that caves be considered in the preparation and implementation of land management plans, and allows for cave location to be kept confidential.

National Environmental Policy Act of 1969 (NEPA, 42 USC 5) requires a systematic, interdisciplinary approach to federal actions which will insure the integrated use of natural and social sciences and environmental design arts in planning and in decision-making which may have an impact on man's environment.

National Historic Preservation Act of 1966 (NHPA, 16 USC 470), as amended declares a national policy of historic preservation on federal land, including the encouragement of preservation on the state and private lands; authorizes the secretary of the interior to expand and maintain a National Register of Historic Places including properties of state and local as well as national significance (Section 110); establishes the Advisory Council on Historic Preservation (ACHP); requires federal agencies to consider the effects of their undertakings on national register properties and provide the Advisory Council (ACHP) opportunities to comment (Section 106). Amendments include properties eligible for as well as listed in the national register and emphasize the interests and involvement of Native Americans and Native Hawaiians.

National Park Service Organic Act (16 U.S.C. 1 2 3, and 4) created the National Park Service (NPS) within the U.S. Department of the Interior. The Organic Act charges the NPS with a dual mandate to promote and regulate the use of the national parks "by such means and measures as conform to the fundamental purpose to conserve the scenery and the natural and historic objects

and the wild life therein and to provide for the enjoyment for the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.”

Native American Graves and Repatriation Act of 1990 (25 NAGPRA, USC 3001 *et seq.*) protects human remains and associated funerary objects on federal lands, and provides a process for museums and federal agencies to return certain cultural items—human remains, funerary objects, sacred objects, and objects of cultural patrimony—to lineal descendants, culturally affiliated Indian tribes, and Native Hawaiian Organizations.

Wilderness Act of 1964 (16 U.S.C. 1131-1136, 78 Stat. 890) provides criteria for determining suitability and establishes restrictions on activities that can be undertaken on a designated area. They are to be managed “for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment as wilderness...” No roads or structures may be built. Vehicles and other mechanical equipment may not be used.

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, 1994, requires each federal agency to make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.

Executive Order 13007, Indian Sacred Sites, 1996, requires federal agencies to (1) accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners and (2) avoid adversely affecting the physical integrity of such sacred sites. Where appropriate, agencies shall maintain the confidentiality of sacred sites. (Although this order does not seem to apply to sites considered

sacred by Native Hawaiians, it does offer an approach for considering these sites.)

NPS Management Policies 2006 provides policies on how the National Park Service will meet its park management responsibilities under the 1916 NPS Organic Act.

NPS Director's Orders, such as D.O. #12 that guides preparation of Environmental Impact Statements (EIS) and D.O. #28 that guides cultural resource management.

State and County Land Use Regulation²¹

Hawai'i's land tenure, use and access laws are based on and carried over from laws promulgated by the Kingdom of Hawai'i. State land use laws passed in the early 1960s regulate growth. Land use planning and control are exercised at two levels of government: state and county. In addition, federal law requires Army Corps of Engineers permits for uses in coastal areas and wetlands.

STATE LAND USE REGULATIONS

The state of Hawaii controls land use by three means: the Land Use Law, the Hawaii Environmental Impact Statement Law, and the Coastal Zone Management Act (CZMA).

Land Use Law — The State Land Use Commission (LUC) has classified all lands in the state into one of four land use categories: Urban, Rural, Agriculture, and Conservation. The counties are responsible for regulating use in the Urban, Rural, and Agricultural Districts. Jurisdiction over uses in the Agriculture District is shared with the LUC in certain instances. The state, through the Board of Land and Natural Resources (BLNR), regulates land use in the Conservation District, which also includes all nearshore, ocean land below the high water mark. Land use regulation must conform to the state plan according to Act 100. Conformance is difficult to measure because the Act's provisions are general and diverse.

²¹ Most information for this section on land use regulation is taken from the *Feasibility Study*, pp. 53-55.

Hawai'i Environmental Impact Statement Law — Chapter 343, Hawaii Revised Statutes (HRS), requires an environmental assessment (EA) or an environmental impact statement (EIS) for developments in the State Conservation District and in the Special Management Area (SMA) and shoreline setback (coastal areas regulated by the counties), for projects using state or county lands or funds, and other specified categories of use. The EA or EIS should include a summary description of the affected environment including any archeological resources present on the property. Any structure, including ancient trails, which are over fifty years old, falls under the definition of "historic property" in chapter 6E, HRS, Hawaii's Historic Preservation Law. The State Historic Preservation Division of DLNR is responsible for evaluating the values of the historic resource and determining whether preservation or protection of the resource is necessary. The land use regulating agency may impose conditions which require the establishment or maintenance of public rights of way through the affected property.

Hawaii Coastal Zone Management Act of 1977— Coastal Zone Management — the national Coastal Zone Management Act (CZMA) requires direct federal activities and development projects to be consistent with approved state coastal programs to the maximum extent practicable. Also, federally-permitted, licensed, or assisted activities occurring in, or affecting, the state's coastal zone must be in agreement with the Hawaii CZM Program's objectives and policies. Federal agencies cannot act without regard for, or in conflict with, state policies and related resource management programs that have been officially incorporated into state CZM programs (Code of Federal Regulations, 15 CFR 930). The counties have the authority to establish the SMA boundaries and adopt permit requirements. Map 18 depicts Special Management Areas along the Ala Kahakai NHT. Appendix K contains the assessment of consistency with the CZMA.

COUNTY LAND USE REGULATIONS

Hawaii County regulates the private use of land in state land use districts of Agricultural, Rural, and Urban in two primary ways: by zoning, which regulates the intensity and type of use permitted on private land and must conform to the County General Plan; and by subdivision controls, which regulate the intensity of single-family residential development. Through the variance process, developments are often permitted on conservation land.

Other Regulatory Provisions

Overlaying the general state regulatory framework are special laws which apply to coastal and shoreline development, resource protection, or specifically address trails and public access issues. Brief summaries of relevant statutes, administrative rules, and other regulatory considerations are provided below:

Historic Preservation Program (HRS 6E- 3) — establishes within the Department of Land and Natural Resources a division to administer a comprehensive historic preservation program to undertake duties to include the following: develop an on-going program of historical, architectural and archeological research and development; acquire, preserve, restore and administer historic or cultural properties; develop a statewide survey and inventory to identify and document historic properties, aviation artifacts



Ancient Trail, Hōkūlī'a Golf Course, S. Kona, NPS photo

and burial sites; prepare information for the Hawaii and national registers of historic places; prepare, review and revise the state historic preservation plan; provide technical and financial assistance to the counties and public and private agencies involved in historic preservation activities; coordinate the evaluation and management of burial sites; acquire burial sites to be held in trust; regulate archeological activities throughout the state; develop and adopt, in consultation with the Office of Hawaiian Affairs native historic preservation council, rules governing permits for access by Native Hawaiians and Hawaiians to cultural, historic and pre-contact sites and monuments. Section 6E-11 establishes penalties for violations of the state preservation law.

Hawaii Administrative Rules (HAR) 13-13-300, Rules of Practice and Procedure Relating to Burial Sites and Human Remains — establishes Island Burial Councils and procedures for proper treatment of Burial sites and human skeletal remains.

Chapter 343, Act 50, *HRS* — prescribes the requirement of assessment of cultural practices and resources in environmental impact statements. The state of Hawaii Office of Environmental Quality Control has developed guidelines and a protocol for evaluating impacts to the practices and beliefs of cultural or ethnic groups (see Appendix A).

Legacy Land Program (HRS 173A-5) — provides for the acquisition of lands including easements for parks, coastal areas, beaches, and ocean access, and cultural and historical sites.

Chapter 205A-41, *HRS* — contains additional provisions establishing a shoreline setback law for the state. The law authorizes the counties to establish minimum shoreline setback requirements of 20 or 40 feet depending on the size of the parcel. Development and construction

proposed within the shoreline setback area are subject to variance procedures administered by the counties. Shoreline setback variance conditions of approval have also been used to obtain public access dedications to and along the shoreline.

Chapter 46-6.5, *HRS* — mandates that counties adopt ordinances to require the dedication of rights-of-way or easements for pedestrian public access from public roads to beach and mountain recreation areas. This requirement applies to land that is proposed for subdivision into six or more units. The County of Hawaii adopted Ordinance No. 96-17 to comply with this mandate.²²

Chapter 115, *HRS* — guarantees the right of public access to the sea, shorelines, and inland recreational areas, and transit along the shorelines and provides for the acquisition of land for the purchase and maintenance of public rights-of-way and public transit corridors. Counties have the primary authority and duty to develop and maintain public access to and along shorelines.

Chapter 198D, *HRS* — establishes the Hawaii statewide Nā Ala Hele Trail and Access Program. The DLNR is directed to “plan, develop, acquire land or rights for public use of land, construct, and engage in coordination activities to implement the system, in accordance with this chapter.” The Nā Ala Hele Trail and Access Program is established in DLNR’s Division of Forestry and Wildlife. Trails included in the Nā Ala Hele system must be determined to have a functional value to be included in the system. (See appendix A for Nā Ala Hele legislation.)

Shoreline Protection Act of 1975 — in response to the Coastal Zone Management Act of 1972, a Special Management Area (SMA) program was established. The SMAs extend a minimum of 100 yards inland from the shoreline vegetation or debris line to ensure that proposed developments minimize adverse environmental impacts to

²² In practice, the county prefers not to accept dedication of easements because that would obligate it to assume the costs of improvements and maintenance.

coastal resources, protect public recreation and wildlife resources, and ensure adequate public access to these areas. County SMA permit conditions have been the primary source of public access easements and dedications that have been added to the public shoreline access inventory. The SMA requirements apply only to those lands proposed for development, and the conditions of permit approval may not be enforced if development does not occur.

The Public Access Shoreline Hawaii (PASH) — this decision, resulting from the implementation of the CZM and the SMA, rendered by the Hawaii Supreme Court in 1995, unanimously upheld the validity of Native Hawaiian gathering rights that were asserted by PASH and other individuals during the SMA permit proceedings before the County of Hawaii Planning Commission. The decision spoke to the standing of Hawaiian gathering rights and the government's duty toward protecting those rights (County of Hawaii, 2001).

Hawai'i County Public Access, Open Space and Natural Resources Preservation Fund — often referred to as the 2% fund, was approved by ballot initiative during the 2006 General Election. It sets aside 2% of property tax collections—around \$2.6 million—for purchase of lands deemed by an appointed commission to be worthy of preservation (Command, 2007). Of the 17 properties identified by the commission, 6 are along the route of the Ala Kahakai NHT. These funds were used to help preserve the Honu'apo Fish Pond site.

RELATIONSHIP TO OTHER PLANS

The following plans or planning efforts have influenced the preparation of this Comprehensive Management Plan or may be modified based on the information presented in this plan. The list is not exhaustive.

National Park Service

Archeological Overview and Assessment for the Three West Hawai'i Parks, 2004

Curatorial Facilities Strategy, Cultural Resources, Pacific West Region, May 2006.

Environmental Assessment, Assessment of Effect: Reestablishment of the Historic Scene at Pu'ukoholā Heiau National Historic Site, April 2004

Fire Management Environmental Assessment for Hawai'i Volcanoes NP, November 2004

Fire Management Plan Pu'ukoholā Heiau NHS, September 2006

General Management Plan for Pu'u'honua o Hōnaunau NP, 1977

General Management Plan for Kaloko-Honokōhau NHP, 1994

Ka'ū Coast, Hawai'i Reconnaissance Survey, June 2006

Management Plan for Hawai'i Volcanoes NP (1975). Hawai'i Volcanoes NP is developing a new GMP that can consider plans for the Ala Kahakai NHT.

Native Hawaiian Use of Hawai'i Volcanoes National Park, A Historical and Ethnographic Overview

Pacific Island Network Vital Signs Monitoring Plan, December 2005

Park Museum Collection Plan (servicewide), March 2007.

West Hawai'i Parks Museum Management Plan, Kaloko-Honokōhau, Pu'ukoholā Heiau, Pu'u'honua o Hōnaunau, Ala Kahakai, February 2004.

Wilderness Management Plan Hawai'i Volcanoes National Park (draft), January 2005. The Ala Kahakai NHT could be considered in the final plan.

State

Hapuna State Park Plan: Completed in 2002, this plan calls for an expansion of the current management area. The NHT is recognized in this plan as the state alignment of the Ala Kahakai.

Kekaha Kai State Park Plan: This plan provides the state with management and development guidance over the next several years, acknowledges the Ala Kahakai NHT, and states that a historic route will be negotiated with State Parks division.

Proposed Kīholo State Park: “If established, Kīholo State Park would comprise all public lands *makai* of the Queen Ka‘ahumanu Highway within the *ahupua‘a* of *Pu‘u Anahulu* and *Pu‘u Wa‘awa‘a*. In addition, a wild coastline park at Kīholo would insure retention of the natural open space and the open coastal views from upland vantage points. This area includes approximately 8.5 miles of undeveloped coastline, 4,357 acres of State-managed coastal lava plain, and 88 acres of private in-holdings” (State of Hawaii, 2003). Establishment of a state park requires a master plan for which the state is seeking funding. In the meantime, the *Management Plan for the Ahupua‘a of Pu‘u Wa‘awa‘a and the Makai Lands of Pu‘u Anahulu* states several planning and management objectives intended to provide a framework for management of this area for a 10-year period beginning in July 2003.

Statewide Comprehensive Outdoor Recreation Plan (SCORP): identifies statewide recreation demands and issues and presents a strategic plan to address them. It is required by the Land and Water Conservation Fund Act of 1965 to qualify for federal grants for outdoor recreation projects and is to be updated every five years. Hawai‘i’s last SCORP was approved in 2003.

Private

Kohanaiki Development: Plans for this a private development of the *ahupua‘a* of Kohanaiki *makai* of Queen Ka‘ahumanu Highway include residential uses, an 18 hole golf course, a public shoreline park with facilities and camping, and an alignment of the Ala Kahakai NHT as the existing shoreline trail.

O‘oma Development: Planning continues for this private development. Adjacent and north of Kohanaiki, it includes residential uses, an 18 hole golf course, a public shoreline park with facilities and camping, and an alignment of the Ala Kahakai NHT as the existing shoreline trail.

Kūki‘o Development Plan: Kūki‘o is a private residential development that has made accommodation for public access along the shoreline. An alignment for the Ala Kahakai NHT on sand was defined with the use of GPS with representatives from the development. The development preserves other historic trails as well.

Ka‘ūpūlehu Development Plan: Affiliated with the Kūki‘o development, this private residential development has made accommodation for public access along the shoreline. A route for the Ala Kahakai NHT was required by the county as a development permit condition.

Waikoloa Development Plan: Several projects are planned for this resort community. Kolea is currently under construction and plans for units on land owned by Lonomakua Co.

Mauna Lani Resort Projects: A public pathway exists through these private residences (Kamalani, 49 Black Sand Beach, and Pauoa Bay) and may become part of the Ala Kahakai NHT.

Māhukona Resort Development: Proposed by Surety Kohala in the 1990’s, the project

consists of a lodge with about 80 rooms, a restaurant, a spa, swimming pool and golf course. It would also feature between 120-150 condominium units as well as 90 to 120 one-acre lots. The project would include a wastewater treatment facility, a 17-acre historic park, and a shoreline trail.

Impact Topics—Resources and Values at Stake

Impact topics are the resources of special concern that could be affected by the range of management alternatives. Impact topics allow comparison of the environmental consequences of implementing each alternative. The planning team selected topics to focus the environmental discussion based on federal laws and other legal requirements, the Council on Environmental Quality's guidelines for implementing the National Environmental Policy Act, NPS management policies, and most especially on issues and concerns expressed during public scoping and the fundamental resources and values that may be affected. The assessment of consistency with the Coastal Zone Management Act is presented in appendix K. Each impact topic is provided below, followed by a brief justification for dismissing any topics from further consideration.

IMPACT TOPICS ADDRESSED AND ANALYZED

- Cultural Resources
- Cave Resources
- Wetlands (Anchialine Pools and Fishponds)
- Marine Resources Related to Traditional Coastal Harvesting
- Native Ecosystems: Vegetation and Wildlife
- Special Status Species
- Scenic and Visual Resources
- Wilderness Values
- Public Health and Safety
- Visitor Opportunities and Experience
- Socioeconomic Environment (the economy

and nearby communities, landownership)

■ Trail Operations

At the end of the impacts of each alternative is a brief discussion of unavoidable adverse environmental effects; short-term uses and long-term productivity; and irreversible and irretrievable commitment of resources.

IMPACT TOPICS CONSIDERED AND DISMISSED

The following impact topics were considered and determined not relevant to the development of this CMP for the Ala Kahakai NHT because implementing the alternatives would have no effect or a negligible effect on the topic or resource, or the resource does not occur along the trail. The topics dismissed from further evaluation follow:

Air Quality

As described in chapter 3, air quality related to vog (volcanic smog) and laze (clouds of mist formed when hot lava reaches sea water) has potential health impacts on trail users, but trail construction, renovation, relocation, or use would have negligible short and long-term effects on air quality. The potential sources of air quality effects would be development of trail heads and vehicle emissions associated with constructing small parking areas. Each of these sources would be short-term and negligible. The proposed alternative would result in negligible adverse, short-term effects on air quality. Because the impact to air quality would be negligible, the impact topic was dismissed from consideration.

Energy Requirements and Conservation Potential

No facilities with inherent energy needs are proposed in any management alternative. Only composting toilets are proposed. Existing building facilities would be used for visitor orientation and interpretation. Should any of these facilities require remodeling to accommodate the trail, the concepts of

sustainable design would be used. The objectives of sustainability are to minimize adverse effects on natural and cultural values, to reflect the environmental setting, and to require the least amount of nonrenewable fuels or energy. Therefore, this topic is not addressed further.

Environmental Justice

Executive Order 12898, “General Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,” requires all federal agencies to incorporate environmental justice into their missions by identifying and addressing disproportionately high and adverse human health or environmental effects of their actions on minorities and low-income populations and communities. The communities in the trail corridor contain a mix of incomes and ethnic backgrounds and are not considered predominately minority or low-income. The proposals in this CMP would not have adverse impacts on minorities and low-income populations and communities; therefore this topic is not addressed further.

Indian Trust Lands and Resources

No Indian Trust lands or resources are involved in Hawai‘i. Therefore, this topic is not addressed.

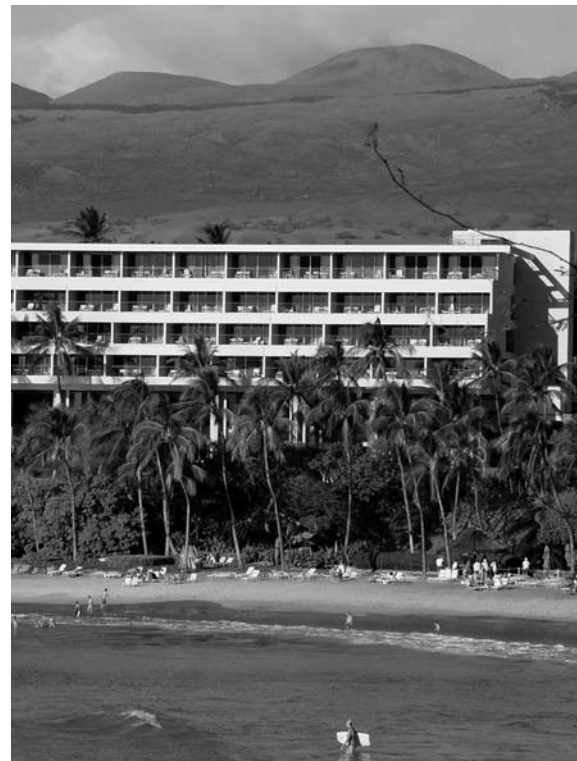
Natural or Depletable Resource Requirements and Conservation Potential

None of the alternatives would substantially affect energy requirements either within the national parks or within nonfederal lands along the trail route because any rehabilitated buildings or new facilities (e.g. composting toilets) would take advantage of energy conservation methods and materials. Therefore, this topic is not addressed further.

Prime and Unique Agricultural Lands

Prime farmland is defined as soil that particularly produces general crops such as common foods, forage, fiber, and oil seed; unique farmland soils

produce specialty crops such as specific fruits, vegetables, and nuts. According to maps prepared by the Hawaii State Department of Agriculture based on 1977 data, there are no lands classified as unique farmland within the Ala Kahakai NHT corridor. The same source indicates there is prime farmland on the north of the island from north of Honoipū Landing to ‘Upolu Point. This area was once involved in sugar cane production. The portion of this area within the trail corridor is currently owned by the state, Kamehameha Schools, Surety Kohala, and a couple of private landowners. Their plans for the land are not known. In addition, the map denotes approximately 73 acres of prime farmland in three widely separated parcels within the trail corridor near Punalu‘u. None of the alternatives propose land use changes and all propose working with local landowners in implementing the trail. Impacts to prime farmlands are expected to be negligible, and therefore, this topic is not addressed further.



Mauna Kea Beach Hotel, S. Kohala, NPS photo



Hāpuna Beach, S. Kohala, NPS photo