

Top left: Camp site, N. Kohala; top right: Trail Clearing, Kealakehe HighSchool, Oʻoma, N. Kona; bottom: Weliweli, N. Kona. NPS photos.

Chapter 2: Alternatives for Management

Actions Common to All Alternatives

ADMINISTRATION & MANAGEMENT: DEFINITION OF TERMS

Within the National Trails System, the terms administration and management have specific and separate meanings to distinguish between trailwide coordination (administration) and local, segment by segment, ownership and care (management).

Administration encompasses the tasks performed by the agency assigned by the U.S. Congress to administer the trail. Subject to available funding, the administering agency exercises trail-wide responsibilities under the National Trails System Act for that specific trail. Typically, such responsibilities are to provide technical assistance, oversight, and coordination among and between agencies and partnership organizations in planning, resource preservation and protection, marking and interpretation, agreements (partnership, cooperative, and interagency), and financial assistance to other cooperating government agencies, landowners, interest groups, and individuals.

Under all alternatives, overall administration of the Ala Kahakai NHT rests with the National Park Service Pacific West Region-Honolulu under the Pacific Area Director. The trail superintendent, the administrator of the trail, is located at trail headquarters, established at Koloko-Honokōhau National Historical Park in June 2002.

Management refers to those site-specific tasks carried out by various government, community, and private entities that own, manage, or care for lands along each national trail. Management responsibilities often include inventorying of resources, mapping, planning, and development of trail segments and sites, compliance with

federal and state laws, provision of appropriate public access, site interpretation, trail maintenance, marking, resource preservation and protection, viewshed protection, and management of visitor use.

The alternatives offer different management scenarios.

RESOURCE PROTECTION

Although this plan separates resource protection into discrete categories of natural and cultural resources, for the Native Hawaiian these are integrated into a cultural landscape. In Hawaiian culture, the land ('aina) is sacred. The natural and cultural worlds are intricately bound together; the spiritual world is not separate from the secular but everything has spiritual power (mana). As an example noted before, volcanic activity is a part of geological history, but Kīlauea is also home to Pele, the volcano goddess, and her family. Seen in the flows and other natural phenomena associated with volcanic activity, Pele and her family continue to be a presence in Native Hawaiians' lives.

Trail management will treat these resources holistically as part of a landscape in which culture and nature are one. To the extent feasible and in recognition of the relationships among physical, biological, and social systems, cultural resource management will be integrated with natural resource management, education, and visitor experience as a primary approach of trail management.

Under all alternatives, the NPS will use a similar variety of means to preserve, protect, and interpret all significant resources and fundamental values along the Ala Kahakai NHT. However, the extent of resources protected will differ with each alternative

Cultural Resources

The trail and its associated resources are best considered as elements within a cultural landscape. The range of cultural resources along the trail includes, but is not limited to, ancient and historic trail fabric; archeological sites, such as shrines (heiau, ahu), burial sites, petroglyphs, and grinding surfaces, and so forth; caves; named places, features, and landscapes of significance to contemporary Native Hawaiians (wahi pana) such as stone formations, geological landscapes, tree or areas of plant growth, water sources, and so forth; and food and fish gathering areas. Protection of these resources and values is fundamental to achieving the trail's purpose and maintaining its significance.

Such resources would be protected within the agreed upon trail right-of-way and adjacent protection areas as defined in management agreements for each trail segment. National Historic Preservation Act Section 106 consultation with the State Historic Preservation Officer will be initiated early in the process of inventory and development of management agreements. Not all sites along the trail route are known at this time, but the CMP includes a process for completing archeological and other cultural resource inventories and assessments. Table 3 (chapter 1) lists known sites that would be protected. Not all of these sites are within the immediate coastal zone, but all are significant in Hawaiian and American history and culture. All relevant federal and state cultural resource protection laws would apply to the trail.

On lands for which NPS has the responsibility for the management and condition of cultural resources, such as the four national parks, the complement of federal laws²³ will apply. Approaches to cultural resource research, planning, and stewardship will follow NPS-28, Cultural Resource Management Guideline.





above: Petroglyphs, Anaehoomalu, NPS photo below: Kaloko-Honokōhau NHP, N. Kona, NPS photo

Although the four national parks along the route have cultural resource management plans and committed funding for resource inventory and stewardship, none of this work is complete and none is focused on the Ala Kahakai NHT. The trail staff will coordinate with the compliance officers of each of the four parks for any action proposed within the park, including sign installation. An environmental assessment may need to be completed for the trail in each park. The trail staff will also work with park staffs to help complete inventories and assessments in order to understand the character and significance of cultural resources along the trail and the needs for protection, stewardship, and monitoring. Trail staff will encourage the parks to embrace the Ala Kahakai NHT and to seek funding for resource inventories related to the trail.

²³ Examples are the Archeological Resources Protection Act of 1979, American Indian Religious Freedom Act of 1978, Federal Cave Protection Act of 1988, National Environmental Policy Act of 1969, National Historic Preservation Act of 1966, Native American Graves and Repatriation Act of 1990 as well as the NPS Management Policies of 2006 and other applicable laws and regulations. See chapter 1 for a complete list.

On federal lands incorporated into the Ala Kahakai NHT, cultural information gained through trail inventories will be added to the following databases as appropriate:

Archeological Sites Management Information System (ASMIS) documents information about archeological resources.

Cultural Landscapes Inventory (CLI) documents cultural landscapes and their associated features including historic structures, sites, and districts.

List of Classified Structures (LCS) documents the inventory and condition of historic structures that are on the National Register of Historic Places.

National Catalog System (NCS) system catalogs artifacts, associated records, and archival material.

NPS Inventory and Monitoring Database

In the event that ethnographic data is or becomes available concerning the contemporary cultural significance of resources listed in any of the above databases, that information will be added to the database entries as appropriate.

For trail segments and sites on the over 80% of the trail route under nonfederal ownership that are added to the Ala Kahakai NHT through agreements with land owners, several protection strategies may be used as suggested below:

Compliance with NEPA and NHPA: On non-federal lands as well as federal lands, the National Environmental Policy Act (NEPA) and Sections 106 and 110 of the National Historic Preservation Act (NHPA) will apply. These laws require assessment of impacts of federal actions on cultural resources and assessment of properties for potential

eligibility to the National Register of Historic Places (NRHP). ²⁴

Compliance with state preservation laws:

The Ala Kahakai NHT will comply with the guidelines set forth by the State Historic Preservation Division (SHPD) including the Burial Sites Program, HRS Section 6E (the State Preservation Law), the Hawaii Cave Protection Law of 2002, and others.

Inventory and assessment: Existing information about cultural resources along the route in a variety of repositories will be gathered in one database. The goal will be consistent collection of natural and cultural information and trail data in a trail Geographic Information System (GIS) with full metadata to develop a trail-long profile. For identification of undocumented significant archeological sites, caves, other cultural resources and landscapes, and historic structures, the NPS will develop a single site and feature form consistent with NPS site condition and assessment requirements and the Secretary of the Interior's Standards to be used for inventories on federal and nonfederal lands. As recommended in the Archeological Overview and Assessment for the Three West Hawai'i Parks (NPS 2004a), a single numbering system, preferably the system used by the SHPD, should be applied to all sites. Site identification and assignment of site numbers should be carried out within a framework that has a logical structure or rationale.

As feasible, trail staff will coordinate the collection of new information about previously unrecorded sites, assess their significance to determine their eligibility for the NRHP, and cooperate with Native Hawaiians, state land managers, trail

²⁴ Resource types eligible for the national register include buildings, districts, sites, structures, objects, or traditional cultural properties. However, these categories are not distinct. A cultural landscape might include buildings, structures, and objects and be listed in the national register as either a site or a district. Archeological resources may be listed in all national register categories. Proper national register documentation for the Ala Kahakai NHT requires a multidisciplinary approach to resource evaluation.

associations, trail scholars, and the SHPD in adding, deleting, or modifying the database of trail information. Potential or documented traditional cultural properties (TCPs) and wahi pana will be identified through existing literary and cartographic sources and, in large part, through ethnographic interviews with Native Hawaiians. Direct involvement and participation of Native Hawaiians is required, and they determine whether or not TCPs should move forward. As feasible, assessments of traditional cultural significance will be added to existing NRHP nominations. To ensure including TCPs and wahi pana in trail management, the inventory process will be based, as feasible, on landscapes or ecosystems rather than on the specific trail right-of-way and negotiated adjacent resource areas.

In some situations, information must be kept confidential for protection of resources and to guarantee privacy to Native Hawaiian families. In response to public requests for information, the Freedom of Information Act and its appropriate exemptions will apply. Information can also be kept confidential under the provisions outlined in the National Parks Omnibus Management Act of 1998, also known as the "Thomas Act" (see Appendix A) and under NPS Management Policies for Cultural Resources section 5.2.3.

Monitoring protocol: A monitoring protocol will be established for the entire trail, based on the consistent inventory and assessment system noted above, so that trail conditions, protection and restoration of natural areas, and protection of cultural resources, human use impacts and violations can be effectively measured and responded to.

Monitoring: Sensitive cultural resource areas will be monitored and maintained at the lowest feasible cost through volunteer and other programs that will have a training component so that the volunteers do not themselves accidentally harm resources. Trail

segment management entities, or stewardship groups, will provide for active monitoring and patrolling of sensitive sites and trail segments at a frequency determined in site and segment management plans. Inventory and monitoring activities will be integrated where possible with the NPS inventory and monitoring program.

Participation in planning and implementation of a joint West Hawai'i Parks Museum facility: The trail staff will work together with potential trail partners such as Hawaii State Parks, Bishop Museum, Kona Historical Society, University of Hawaii, West Hawaii Campus, Kamehameha Schools, Office of Hawaiian Affairs and the Department of Hawaiian Home Lands to help make a success of the proposed facility which will preserve and perpetuate Native Hawaiian culture. As described in the West Hawai'i Parks Museum Management Plan, the facility will combine traditional museum activities with contemporary cultural activities and bring together Native Hawaiian archeology, ethnography, and natural history of the west Hawai'i area in one centralized location to enhance research and learning opportunities at all levels.

Site and segment-specific management

plans: On a segment by segment basis, generally related to *ahupua'a* boundaries but often to ownership, cultural resources associated with the trail will be identified, evaluated, understood in their cultural contexts and managed in light of their values. A management plan for each trail segment or site will address natural and cultural resources, and in compliance with applicable state and federal laws, may include preparation of an environmental assessment (EA). The plan will define, for compliance documentation, the area of potential effect (APE), the size of the area of land adjacent to the trail that should be

surveyed for culturally significant resources. This decision will be made on a case-by-case basis in consultation with the SHPD or by negotiating a programmatic agreement. For cultural resources, the management plan will describe culturally appropriate treatments for burials, sacred sites, and artifact and site feature preservation prepared in close coordination with the SHPD. They will incorporate the expertise of local Native Hawaiians, archeologists, cultural anthropologists, and natural scientists, among others. Each plan will also establish procedures for monitoring that particular trail segment consistent with the overall monitoring protocol.

Phased opening of trail segments: No segment of the trail will be promoted for public use until significant cultural resources and values within that segment are documented, sensitive areas determined, and a segment-specific management plan in place.

Coordination with the Nā Ala Hele Hawaii Island Advisory Council: The Ala Kahakai NHT administration will coordinate with the advisory council on guidelines for protecting historic trails including protection of trail alignments with no physical remnants and recommendations for adjacent areas.²⁵ (See Appendix H for these guidelines.)

Strategic routing of the trail: As feasible, the trail will be routed to avoid intrusion by trail users into sensitive natural and cultural areas, with special consideration for burial, sacred sites, and caves.

Agreements: Protection on private lands will be accomplished through partnership or cooperative agreements, conservation

easements, and land donations or fee simple purchases from willing sellers where lands could be efficiently managed.

Flexible stewardship allowing for limited visitation: Guardianship and curator programs for specific sites may be established by involving concerned Native Hawaiians. Based on management plans for the specific areas, some highly sensitive areas may require a Native Hawaiian guide or trained docent to permit public use, some may require trail rerouting to avoid sensitive sites, and others may be able to bear unrestricted public use. These issues will be addressed in each specific segment management plan for high potential sites and trail segments.

Planning and design: Trail planning and design will carefully consider effects to cultural resources with the goal of creating no adverse effects to them. The attention of visitors will be directed away from burial sites. Visitors will be asked to remain outside of ceremonial sites or other sensitive features. Planning and design will try to anticipate places where visitors might stray from the trail to visit an inviting beach or to get a better view and provide for appropriate access paths, as feasible. Preserving culturally important plants near the trail could provide an opportunity for education about their cultural value without causing visitors to stray from the trail.

Public education: Signs and interpretive exhibits and brochures can inform the public of the need for preservation of cultural resources.

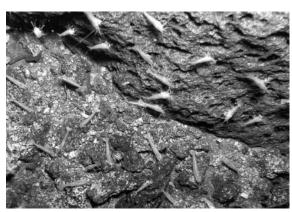
²⁵ These guidelines note that trail widths vary and may be established through direct observation or through information in archeological studies, land deeds, historic maps, or county permit documents requiring trail easements. The size of adjacent protection areas, called "buffers" in the guidelines, vary also and are determined on a case by case basis with consideration given to the archeological integrity of the specific trail, surrounding environment, land uses, land ownership, and nearby natural and cultural features. Refer to pages 264-266 of this document for an excellent discussion of treatments of buffers and areas outside of defined buffers.

Natural Resources

Generally, the Ala Kahakai NHT will be managed to ensure that natural systems are not significantly affected. Site-specific biological inventories and assessments developed with each trail segment management plan will provide sufficient information to evaluate options for trail development to help ensure that there are no adverse impacts from development or trail use. Resources identified as requiring special consideration are native plant and animal communities, anchialine pools, marine resources related to traditional coastal harvesting, cave ecosystems, and sensitive or threatened and endangered species habitat.

Native Plant Communities

The trail corridor encompasses a range of native plant communities, many of which are alien dominated: coastal strand, coast lowland and dry lowland communities, and open dry forest may be encountered. Each trail segment management plan will include an inventory of native plants and invasive species present. As possible, invasive species will be removed or controlled, with special emphasis on eradication of populations that are just beginning establishment. The tread of existing trail will be kept clear of invasive species. If a trail segment requires construction, it will be located so as to avoid trampling of plants and adverse effects on sea turtle or Hawaiian monk seal resting areas. Educational signs and exhibits may help in protection of native plant and animal communities.



'Opaeula, Red shrimp, NPS photo

Anchialine Pools

'Opae'ula, red shrimp, are the single most important factor indicating the health of an anchialine pool. Before a trail segment is officially opened to the public, the presence of red shrimp in trailside pools will be inventoried to provide a baseline of information. Then pools along managed trail segments will be monitored for the visible presence of red shrimp. Protocols for managing and monitoring pools developed at Waikoloa and Kaloko-Honokōhau NHP and other pool management plans required as a condition of development will be applied to other pools along the trail route. Trail administration will establish rules and regulations regarding public use of the pools. Use of the most high value pools could be restricted for traditional, research, educational, and sanctuary purposes. High value pools are those that have (1) an array of native anchialine species, (2) a unique assemblage of euryhaline (species with a wide tolerance to salinity), and/or marine species, or (3) unique cultural features (Brock and Kam, 1997, pp. 51-52). Assessment of cultural features will be made by Native Hawaiians, preferably with an association to the particular pool, or by an anthropologist/ ethnographer. Public education through signs and interpretive exhibits, monitoring, and if necessary, trail use restrictions will be employed to protect pools along the trail route.



Koloko Fishpond, Kaloko-Honokohau NHP, N. Kona, NPS photo

Marine Resources Related to Traditional Coastal Harvesting Resources

In order to determine the extent of impacts, if any, in areas along the Ala Kahakai NHT where local fishers and gatherers have expressed concerns, baseline data will be assembled to establish the abundance and diversity of the existing nearshore and reef resources. Once a baseline is established, a monitoring program will determine the significance of the impacts. Local fishers and gatherers will be included in trail planning to provide recommendations for fishery protection and sustainable gathering. This information could also be collected as ethnographic data. Interpretive media and informational materials will convey the limitations on fishing and gathering and encourage appropriate activities.

Cave Ecosystems

Caves are important cultural resources because they contain archeological resources and burials and have significance to contemporary Hawaiian people; however, they are important also for their scientific values related to their biological and geological resources. Under federal law and NPS guidelines, any cave found along the trail on federal land would be considered to be significant and its cultural, biological, and geological resources inventoried. After the inventory, the cave location and resources will not be published or made available to the public, but it may be appropriate to list the resources, without specific location information, in the NPS Inventory and Monitoring database. The preferred treatment is to keep the public out of caves on NPS land.

On nonfederal land along the Ala Kahakai NHT, the Hawaii Cave Protection Law of 2002 would apply. The law limits commercial uses of caves and allows use for educational, Native Hawaiian cultural, or scientific purposes with the written permission of the landowner. If trail segments on nonfederal land have associated caves, the NPS would encourage closure of the cave to public uses other than those permitted by law. The NPS

would recommend an inventory of cave resources for any cave adjacent to the trail or accessible by it. In general, the trail will be aligned to move trail users away from caves that may contain significant natural resources, burials, or other culturally sensitive materials without calling attention to the cave itself.

Endangered Plant and Animal Species

As trail and site development occurs and site-specific surveys identify species which have been listed or proposed by the US Fish and Wildlife Service (USFWS) [see Appendix D for a list], the National Park Service will contact the USFWS to initiate consultation under Section 7 of the Federal Endangered Species Act of 1973, as amended (Act). Potential adverse impacts to listed and proposed species will be eliminated or reduced in compliance with the provisions of the Act. State and county laws will also apply.

On state lands, state listed endangered and candidate species will be protected by the state law, "Conservation of Aquatic Life, Wild Life, and Land Plants" (Chapter 195D, HRS). This law is similar to the federal law, except that the state law does not permit mitigation measures (mitigation is described as replacing a habitat in kind in another area to permit its destruction in one area). Also, unlike federal law, Hawaii state law protects endangered plants on private property.



Cave, N. Kona, NPS photo

Fire Management

Within the four national parks, fire management along the Ala Kahakai NHT will follow the recommendations of the parks' completed fire management plans. Hawai'i Volcanoes NP Fire Management Plan is in draft. It is the only national park on the island of Hawai'i with fire fighting resources. Since there are no NPS fire-fighting resources on the western side of the island, the NPS and the County of Hawaii have an MOU for reciprocal fire protection and initial response. The Pacific Island Fire Management Officer acts as the resource advisor for the four national parks.

For nonfederal land incorporated into the Ala Kahakai NHT, a fire management plan will be prepared in coordination with appropriate state and county agencies. Cultural resource specialists will participate in the preparation of the plan, and staff charged with fire management will be informed of significant cultural resource sites whose location is confidential. The plan will incorporate Minimum Impact Tactics (MIT), guidelines that assist fire personnel in the choice of procedures, tools, and equipment used in fire suppression and post-fire rehabilitation to maintain a high standard of caring for the land and resources.

Nonfederal fire responders will be encouraged to use MIT. Agency coordination will be crucial since MIT is not used by all agencies. The plan will consider fire suppression and the potential for low intensity prescribed burns or mechanical thinning projects to prevent larger fires, to reveal overgrown trail fabric or resources, and to stimulate seed production, rejuvenate plant populations, or lessen existing alien plant competition in existing areas of native species. The Pacific Island Fire Management Officer would act as the resource advisor for fires on nonfederal lands incorporated into the Ala Kahakai NHT.

Potential operational impacts to cultural resources along the trail include ground

disturbance, vegetation removal, fire retardants, and damage and looting of resources made visible by fire. Impacts caused by fire management operations related to the suppression of wildfires and the execution of prescribed burns and mechanical thinning projects will be addressed. Generally speaking, the former have greater potential to result in significant impacts due to hurried execution.

Wilderness

Trail marking and use within the wilderness area in Hawai'i Volcanoes NP will follow the recommendations of the Wilderness Management Plan for the park. Existing trail fabric and tread will be protected, but trail tread will not be constructed in the wilderness area; rather, wayfinding will be used. Minimal signs may include a small trail logo with a directional arrow. Interpretive exhibits will be kept to trailheads outside of the wilderness area. No facilities such as shelters or restrooms will be constructed within the wilderness area for Ala Kahakai NHT users.

HEALTH AND SAFETY

The user of the Ala Kahakai NHT can encounter a variety of hazards depending upon the location of the trail. The user experience of the trail could be affected by hazards. Trail users could experience adverse impacts to their health from volcanic smog (vog), from volcanic haze (laze), or from heat, dehydration, and exposure if they are unprepared for the rigors of some sections of the trail. Hazards exist in some areas because 'a'ā lava provides unsure footing. Unexpected earthquakes or tsunami could occur. In addition, parts of the Ala Kahakai NHT offer easy access to the ocean, and visitors unfamiliar with ocean conditions may be tempted to swim in unsafe areas. Segments of the Ala Kahakai NHT not now available to the public, but which may become available, are largely in remote areas far from emergency aid. As a rule, lifeguards, park rangers, or other emergency help would not be present.

As described in chapter 3, health hazards include poor air quality and hot lava due to the continuing eruption of Kīluea, tsunami, poisonous insects, exposure to *leptospirosis*, flash floods, and lack of potable water. Under all alternatives, health and safety issues will be addressed as appropriate for each segment of trail or each site along the trail. Trail visitors will learn of potential dangers and the necessary precautions to take from brochures and other written information, from postings on the trail website, from signs at trailheads or trail sites, and from other forms of interpretive media.

CRITERIA FOR HIGH POTENTIAL SITES AND SEGMENTS

Based on the National Register of Historic Places and the National Trails System Act, the following criteria will be used to identify high potential sites and segments:

- authenticity of the trail segment or site, based on documentation and archeological research.
- integrity of the physical remains.
- integrity and quality of the setting even if there is no physical trail remnant.
- opportunity for a high-quality recreation historic trail experience.
- opportunity to interpret the historic periods of trail use.

In addition, the following criteria will apply to sites and segments incorporated into the Ala Kahakai NHT:

Legal and policy compliance —Trail sites and segments that are proposed for development or modification must comply with applicable state, local, and federal laws relating to environmental compliance, historic preservation, public health and safety, equal employment opportunity, and accessibility for people with disabilities.

Compliance–related actions must be completed prior to an agreement for site or



Kuapa (wall), Kaloko Fishpond, N. Kona, NPS photo

segment use along the Ala Kahakai NHT. The NPS or other qualified entities will provide the technical assistance necessary for compliance. (See the glossary for more information on compliance.)

Public access — Sites and segments must be reasonably available for public use. "Reasonably available" includes areas that are restricted to day use or are available only through guided tours subject to the payment of a fee, or subject to other similar restrictions, as well as areas that are free and open to the public at all times. The degree of public use should be commensurate with the resource value, that is, the more sensitive the resource, the more restricted the access.

Size —Trail segment lengths are determined mainly by *ahupua'a* boundaries which, in many cases, follow current landownership patterns. Each site or segment must be large enough to protect significant resources and to offer opportunities for interpreting some aspect of the trail or retracing the trail route. A trail segment would include the trail tread (legal right-of-way) and negotiated adjacent areas sufficient to protect important resources and the trail setting.

Location — Sites or segments should be within the corridor of the Ala Kahakai NHT.

Management—The managing entity will ensure that the segment will be available for public use and identify how resources will be inventoried, assessed, monitored, and preserved and the trail right—of—way protected and made available for public use. Management objectives for the site or segment will be established and management responsibilities defined in the agreement.

CRITERIA FOR INCLUDING INTERPRETIVE FACILITIES National Park Service Visitor Centers

The four NPS units will be encouraged to include the Ala Kahakai NHT in their interpretation programs. These parks might include orientation programs similar at each site (video, film, exhibit, for example) and programs that place each particular trail locality and site in a more precise context based on the place names and stories of the area. Programs will be designed to promote firsthand experiences by motivating visitors to see important trail sites or to travel a segment of the trail.

As units of the national park system, each park will pursue its own development and funding process, and ongoing operational costs will be funded through the normal appropriated funding process for each unit. Ala Kahakai NHT trail administration can provide funds, as available, for site bulletins, wayside exhibits, and other interpretive information.

Complementary Interpretive Facilities

Various agencies and groups, other than the NPS, may have appropriate facilities at which Ala Kahakai NHT interpretation can be presented. The NPS trail staff will coordinate the overall interpretation of the trail. Facilities that meet the criteria outlined below could be recognized as official interpretive components of the trail and use the trail marker on signs and approved materials.

Complementary interpretive facilities should meet the following criteria:

- No significant impacts to the integrity of archeological or historic sites, cultural landscapes, or the environment.
- Environmental and architectural compatibility with the resources and values being interpreted.
- Accurate interpretive information to visitors.
- Accessible to and usable by people with disabilities and meet or exceed federal standards and NPS compliance requirements.
- Open according to a regular schedule for at least 25% of the year.
- Clean, well–maintained, and orderly.
- Meet applicable local, state, and federal regulations for health and safety, equal employment opportunity, and environmental compliance.
- Operating staff that is familiar with the trail history and, as appropriate, personal interpretation techniques.
- A defined system of financial accountability, if the facility sells special publications or other materials that are sponsored or provided by the NPS.

These facilities may receive assistance from the NPS in the categories described below. The NPS will provide assistance on interpretation, including technical assistance, limited financial assistance, and media, but it will not construct or operate facilities.

Category I, State Interpretive and Educational

Facilities — these facilities include those constructed, operated, or substantially supported by state agencies. The NPS can provide technical assistance for interpretive planning, design, or curation; allow its publications to be sold; or provide exhibits or other media appropriate for the site.

Category II, Private or Local Nonprofit Interpretive and Educational Facilities — these facilities include those nonprofit facilities run by communities, the county, regional entities, the Ala Kahakai Trail Association, and trail segment management organizations. The NPS can provide technical assistance or, on a cost-share basis, a modular exhibit with a trail overview and local site information. If the site qualifies, NPS—sponsored publications or materials could be sold.

Category III, Off-trail Corridor Facilities— this category includes off-trail corridor interpretive and educational facilities that recognize and interpret the trail. The NPS can provide technical assistance and, if the site qualifies, allow its publications or materials to be sold there. The extent to which media will be provided will depend on future NPS interpretive planning and consideration of the following factors: the site's historical significance to the trail; its outdoor interpretive/recreational values; its resource integrity; its location relative to similar NPS or federal facilities and programs; its ability to convey trail themes and to educate and reach the public; its proximity to trail resources; and its ability to contribute to interpretive balance between different sites.

MANAGEMENT APPROACH Description

The NPS will use management agreements for high potential sites and segments, authorized by Section 7(h)(1) of the National Trails System Act, as the chief means of ensuring trail and resource protection and authenticity of interpretation on nonfederal land. These agreements between the NPS and the landowner, land manager, or nonprofit organization seek to

- confirm that features are important to the trail
- include and officially recognize qualifying nonfederal sites and segments on nonfederal lands in a national historic trail
- document the NPS and manager's commitment to resource protection and appropriate public use

 build a uniform and coherent visitor experience and resource protection program end-to-end along the trail

For the Ala Kahakai NHT, trail marking and use of the logo indicate that proper protocols related to the Native Hawaiian descendents and others with deep connections to that specific area have been followed, cultural and natural resources identified and protection measures put in place, trail maintenance clarified, and monitoring procedures applied. Agreements help to ensure that ancient and historic trail segments and associated sites and values meet the basic preservation, interpretation, or recreation functions described in the National Trails System Act, Section 7(h)(1) and any other prescribed criteria. Agreements formalize partnerships with non-federal landowners and stakeholders along portions of the entire trail. (See Appendix G for sample site management agreement.)

Hawaiian Land Management Values

Specific stewardship concepts and values embedded in the Hawaiian culture and expressed in words of the Hawaiian language provide a basis for effective trail management. These concepts will be the foundation for a cultural, community-based trail management approach for the Ala Kahakai NHT. Brief definitions, which do not fully convey the depth and breadth of meaning, are offered below:

'aina The living earth

aloha "Sacred breath of life," love,

compassion

aloha 'aina Love of the land, reverence for all

living things

hoʻokipa Hospitality

hoʻokupu Tribute as a sign of honor and

respect, gift exchange

'ike Knowledge

kōkua "Pulling with the back," pitching in

to help, volunteering

kuleana Responsibility, implied reciprocity

laulima "Many hands working together,"

cooperation

lōkahi Unity, balance, harmony

mahalo Thanks, gratitude

mālama Take care of, care for, preserve

mana'o'i'o Respect for nature

pono Balance, proper, right, just, fair,

integrity

Community Planning and Management Team

For each trail segment, generally defined by an ahupua'a, with help from the Ala Kahakai NHT administrative office, a planning team will develop a management agreement. Interested individuals from the following categories will be invited to join the team as appropriate for each segment:

- kūpuna or other knowledgeable and concerned Native Hawaiians associated with a particular ahupua'a
- kama'aina or persons with historic kinship with or knowledge of the land
- landowners adjacent to the trail segment
- volunteer trail groups with an interest in the trail segment
- community-based organizations interested in the trail segment
- representatives of involved government agencies
- other stakeholders as appropriate for each trail segment
- interdisciplinary resource specialists (a requirement)

This team will assist in the development of a trail segment management plan and help ensure follow-through in the management of the segment.

Once a management plan is in place for a specific site or trail segment, the public will be informed

through appropriate trail information programs that the site or segment is available for public use. The agreement can be revoked if parties to it fail to protect natural or cultural resources or fail to meet their agreed-upon obligations. This would result in the removal of the segment from the public inventory, from trail information programs, and the removal of signage. Other actions may also be taken, according to the terms of the management agreement.

Organizational Capacity Building

As appropriate, Ala Kahakai NHT administrative and operational staff will assist and encourage trail segment management groups by offering strategic planning, organizational capacity building services, resource management and other training in order to assure and sustain successful implementation of trail management agreements.

Administrative Focus

Given the length of the trail, its numerous associated resources and values, and the limitations of staff time, the Ala Kahakai NHT administrative staff will initially focus on the 73-mile corridor from Kawaihae through Pu'uhonua o Hōnaunau NHP (see map 1) to develop trail segment management agreements for the following reasons:

- easily identified traditional or historic trails and routes are evident
- the area is impacted by population growth
- landowners in the zone are interested in the trail
- state, county, or national parks are present
- development pressure increases the demand for recreation and the need for trail protection
- communities in the zone want to be involved
- potential projects provide a good demonstration of what the trail can be

Cost estimates are based on completing this section of trail within the planning period of

about 15 years. Nonetheless, other areas at risk will be recognized and protected as possible, even if they cannot be managed for public use immediately. Opportunities initiated by local people that arise in other areas will receive attention also.

TRAIL CLASSIFICATIONS AND MANAGEMENT PRESCRIPTIONS

Management prescriptions are used to specify the desired resource conditions and user experiences that should result from trail management. Trail classifications for the Ala Kahakai NHT relate to the degree of evidence of the *ala loa* or ancient and historic trails. The desired conditions and trail experience relate to the fundamental resources and values discussed in chapter 1 and summarized as follows:

- protection of the original trail fabric or alignment
- protection and provision of access, as appropriate, to protected natural, cultural, and recreational resources related to the Hawaiian culture
- protection of places where prehistoric and historic events associated with the ala loa took place and where their associated stories may be told
- provision of opportunities to practice and experience traditional Hawaiian stewardship in an ahupua'a context
- protection of significant natural areas and resources

The four trail classifications described below may be found anywhere along the trail route in any of the island districts. These classifications and prescriptions apply to all alternatives, but the extent to which they apply will vary with each alternative. Should these prescriptions conflict in any way with management prescriptions in the management plans of the four national parks, to

the extent possible within park purpose and significance, park plans would be amended to accommodate and support the CMP. Prescriptions describe desired conditions in the present tense. Four trail types are described as follows and are noted on the table of trail segments in Appendix B.

Unaltered Trail. The ancient or historic trail retains the essence of its original character with historic fabric in place or original trail tread evident. These trails may be comprised of stepping stones, 'a'ā lava, pāhoehoe lava, curbstone, 'a'ā lava with stepping stones or with stepping stones removed, or a pathway with defining elements alongside.

Desired Condition: The trail tread or fabric, other defining elements, and trail values are preserved and protected in place, rehabilitated, or restored²⁶ as necessary and appropriate. Ideally, there are few, if any, modern intrusions and the trail is kept free of added development. Adjacent protected areas, negotiated with the landowner, are adequate to maintain the integrity of location, design, setting, materials, workmanship, feeling, and association. Cultural and natural resources are protected and interpreted; however, natural resources are managed to complement cultural resources, while protecting rare and exceptional natural systems. Informational and interpretive signs are well-designed and offered at trail heads away from the trail itself. The special relationship of Native Hawaiians to the trail and associated resources is recognized and integrated into the management program. A national register nomination is completed for the segment. The trail is clean, safe, and appropriately used.

Trail Experience: Use is restricted to hiking. The trail user can come into contact with the historic setting, share the experience of the ancient users, and explore Hawaiian culture first hand by walking the trail and learning of its associated

²⁶ Please refer to the Glossary for definitions of preservation, rehabilitation, and restoration.



Makahiki Festival, Kaloko-Honokōhau NHP, N. Kona, NPS photo

places and stories. Native Hawaiian cultural practitioners find an appropriate setting for their practice. Hawaiians and others with deep ties to the trail setting and its culture are able to enjoy this culture and share the experiences of their ancestors. Trail use may require a relatively high degree of physical exertion and an extended time commitment. Generally, these trail segments offer a moderate to high degree of challenge and adventure. Existing opportunities for solitude, closeness to nature, tranquility, and the application of outdoor skills are protected and enhanced if possible. The trail is perceived by users to be uncrowded with few users at any one time. More users are expected in traditionally high use areas such as beaches, parks, and resorts; crowding is not necessarily perceived in these areas. In many areas there is a low probability of encountering other visitors; within developed areas, other trail users may be encountered, but numbers may be limited through permits, guided tours, or other means as necessary to preserve the desired experience.

Management: Management presence is sufficient to protect trail resources. Guidelines prepared by the Nā Ala Hele Hawaii Island Advisory Council apply (see appendix H). Trail relocations are not permitted unless absolutely necessary to avoid burials or other sacred places. If a trail is rerouted

to avoid a burial, the original trail fabric or tread that passes the burial is preserved. Hawaiian cultural concepts are the basis of trail management, and traditional practitioners are encouraged to use the trail. Support facilities, if needed, are located away from the trail segment and its associated resources. Conditions allowing cultural practices are maintained. Markers and signs are inconspicuous and may be surface-mounted to avoid digging. In soil areas, marker posts may be installed in the ground if an archeologist is present during the digging. In some cases, wayfinding is used. Cultural and natural resource inventories are complete and monitoring protocols in place. Resource protection is achieved through visitor education. control of numbers as needed in sensitive areas, and regular patrols and enforcement. Some Native Hawaiian or interpreter-led trips may be provided. If landscaping is installed, plants native to Hawai'i and adapted to the locale are used. Invasive plants are tracked and where possible controlled. Incipient alien species are removed from the trail right-of-way and negotiated adjacent areas as feasible.

Verified Trail. The ancient or historic alignment is known, but no trail fabric or trail tread is present. There is a high degree of evidence for the trail, but there may be low physical integrity. It must be an ancient or historic trail alignment as defined by the Highways Act of 1892 and proved through research.

Desired Condition: The trail alignment is preserved and protected. Ideally, there is limited intrusive modern development, but it may be present. Adjacent protected areas, negotiated with the landowner, are adequate to maintain the integrity of location, setting, feeling, and association. The trail tread can be restored if the archeological evidence is clear as to construction methods. Otherwise, a trail segment may be constructed on the ancient or historic alignment using the most appropriate materials related to the adjacent ancient or historic segments. Cultural and natural resources are protected and

interpreted; however, natural resources are managed to complement cultural resources, while protecting rare and exceptional natural systems. The special relationship of Native Hawaiians to the trail and associated resources is recognized and integrated into the management program. If appropriate, a national register nomination is completed for the segment. The trail is clean, safe, and appropriately used.

Trail Experience: Use is restricted to hiking. The trail user understands that the original trail fabric is no longer there, but also has a sense of what the ancient users experienced. Native Hawaiians and others with deep connections to the land experience the roots of their culture through travel on the trail and appropriate cultural practices. The trail user can explore Hawaiian culture first hand by walking the trail and learning of its associated places and stories. The trail is perceived by users to be uncrowded with few users at any one time. More users are expected in traditionally high use areas such as beaches, parks, and resorts; crowding is not necessarily perceived in these areas. Trail use may require a relatively high degree of physical exertion and an extended time commitment. Generally, the trail offers a moderate to high degree of challenge and adventure. Opportunities for independence, closeness to nature, tranquility, and the application of outdoor skills vary according to trail location.

Management: Management presence is sufficient to protect trail resources. Guidelines prepared by the Nā Ala Hele Hawaii Island Advisory Council apply (see appendix H). Trail relocations are not permitted unless absolutely necessary to avoid burials or other sacred places. If a trail is rerouted to avoid a burial, the original trail alignment that passes the burial is preserved. Hawaiian cultural concepts are the basis of trail management, and traditional practitioners are encouraged to use the trail. Support facilities, if needed, are located away from and out of sight of the trail segment

or associated resources. Markers and signs are inconspicuous and may be surface mounted to avoid digging. In soil areas, marker posts may be installed in the ground if an archeologist is present during the digging. If necessary to accommodate through-hiking, facilities such as picnic tables, trash cans, composting toilets, potable water, and primitive campsites may be provided in appropriate areas accessible by the trail but away from its view. Cultural and natural resource inventories are complete and a monitoring protocol in place. Non-native plants are removed from the trail right-of-way and negotiated adjacent protected areas. If landscaping is installed, plants native to Hawai'i and adapted to the locale are used.

Linking Trail. Connects unaltered and verified trail segments on an approximate alignment of the ancient or historic route that may have been obliterated by lava flows, high wave events, tsunami, development, or other human activity. Often the requirement to construct a public trail results from conditions placed on private landowners through land use approvals, such as SMA permits, zoning, and subdivision approvals. In some cases, the accesses that result from permit conditions may be in the same location as those proven to be public under the Highways Acts of 1892. Such trail segments would be managed under this CMP either as unaltered or verified trails.

However, in the cases where the existence of a public trail cannot be proven, the conditions of approval can require a permanent easement and construction of a public trail across private land.²⁷ Many of these trails already exist in resorts and other private developments. Such trails could become part of the Ala Kahakai NHT as linking trails. In addition, trails may need to be marked or constructed over new lava flows or other areas where a trail no longer exists. In some cases, where highly erodible coastline exists, the trail may need to be sited somewhat

²⁷ For example, Hawaii County required that Parker Ranch provide over two miles of public access within the 40-foot shoreline setback as a condition of subdivision approval for an area between Puakea Bay Estates and Kapa'a Park.

inland. A linking trail may be a dirt or sand pathway, asphalt or concrete walkway or sidewalk as in resorts or other developed areas, a two-track pathway, or jeep trail.

Desired Condition: The trail is walkable, welldesigned, and maintained to avoid erosion or resource damage. The trail may pass through or adjacent to developments such as golf courses, housing, and commercial projects where the historic scene no longer exists, but as possible, open areas adjacent to the trail reduce the effect of modern intrusions. Adjacent protected areas, negotiated with the landowner, are adequate to protect some sense of the trail environment. Hawaiian traditional places or cultural resources connected by or associated with the trail are interpreted and their stories told. As feasible, if a new linking trail needs to be built, the most scenic alignment of the trail, one that provides views to the ocean or significant inland features, is selected. If the trail segment leads to or passes significant cultural resources, a national register nomination for those resources is considered.²⁸ The trail is clean, safe, and appropriately used.

Trail Experience: Use is generally restricted to walking, although bicycling or other existing travel modes may be accepted on trail segments that may become part of the Ala Kahakai NHT. Where motorized use is established on jeep trails, it may be restricted to preserve the environment, cultural resources, or the trail user experience. Motorized use is not allowed on newly constructed trail segments. The user generally has a pleasant experience, one perhaps with more shade and surer footing than that provided on unaltered or verified trails, but does not have expectations for experiencing a traditional Hawaiian trail. In developed areas, the linking trail offers little challenge or adventure, but in more remote areas these qualities could be higher. Opportunities for independence, closeness to nature, tranquility, and the application of outdoor skills vary according to

trail location, but would be limited in developed areas. The probability of encountering other trail users is high on linking trails in developed areas, but reduced in more remote areas.

Management: Management presence may be high is such places as resorts and less in more remote areas. Best practices guide the layout and construction of new linking trails. Marking is clear and evident but avoids clutter. In soil areas, marker posts may be installed in the ground if an archeologist is present during the digging. Facilities such as picnic tables, trash cans, composting toilets, potable water, and primitive campsites may be provided at appropriate intervals along the trail. Non-native plants may be adjacent to the pathway in developed areas; however, plants native to Hawai'i and adapted to the locale are encouraged.

Roadway (auto tour route). An auto tour route using existing public roadways and access roads will be marked, and interpreted at appropriate and significant historic sites. Only the seven miles of Ali'i Drive, the shoreline drive connecting Kailua-Kona to Keauhou, are on the ancient route. The rest of the auto tour route provides automobile access to trail sites and segments. It is comprised of highway and paved or unpaved access roads that can be used by two-wheel drive vehicles. Roads selected for the route meet these criteria and include three overlooks that offer views of the trail route. The auto tour route connects all four national parks. Map 4 depicts existing sites that meet the criteria for the auto tour. At this time Mo'okini Heiau is not included in the auto tour because the entrance road is basically inaccessible. Once the road is improved, the *heiau* would be eligible to be included in the auto tour.

Desired Condition: Well-maintained roads provide access to selected high potential sites and associated trail segments that interpret the fundamental trail resources and values. Access

²⁸ In some cases, nominations of resources adjacent to a paved trail are already completed, as with the trail through Mauni Lani resort in South Kohala.

roads accommodate two-wheel drive vehicles and have adequate parking areas. The auto tour route and the access points to high potential sites and segments are clearly marked. Trail segments related to the auto tour are clearly defined and users stay on them. (See appendix E for signage suggestions.)

Trail User Experience: Visitors use the roadways, trails, and associated developments of the auto route to gain access to the Ala Kahakai NHT and its associated resources, tour the trail, and enjoy scenic overlooks and interpretive media. Visitor attractions are convenient, easily accessible, and well-interpreted. Visitors learn of the history of the trail and its associated places and stories. Observing the natural environment and understanding the cultural history are important activities. Trail segments that lead from parking areas and all facilities on this route are accessible to persons with disabilities and meet ADA requirements. Although buildings, structures, and the signs of people predominate, natural elements are present. There is little need for visitors to strenuously exert themselves, apply outdoor skills, or make a long time commitment to see the area. The probability of encountering other visitors and trail users is very high. Opportunities for adventure are minimal. Many areas along the auto route provide opportunities for social and group experiences, interpretation and educational programs, and compatible recreation activities. Programs incorporate multimedia approaches to meet the needs of all visitors, and facilities incorporate the principles of universal design, as feasible.

Management: The most management presence is provided at sites along the auto tour route to ensure resource protection and public safety. Existing buildings at the national or state parks or other sites are used as trail contact stations. There is regular trail, road, and roadside facility maintenance. Interpretation includes signs, displays, and wayside exhibits. Some interpreterled programs and tours may also occur at sites along the auto tour route. Development is

designed to harmonize with the natural and cultural environment. If landscaping is installed, plants native to Hawai'i and adapted to the locale are used. As feasible, non-native plants are removed from those sections of trail available to auto tour users. Major interpretive sites and trailheads have rest rooms, trash cans, wayside exhibits, and parking areas designed for traffic flow and safety. New facilities such as shade structures are consistent with the defining elements of the cultural landscape. Onsite controls and restrictions are subtle, such as berms, rocks, or vegetation used to prevent vehicles from leaving the road.





Ali'i Drive, Kailua, N. Kona, NPS photo



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

USER CAPACITY

The National Trails System Act, as amended, requires that carrying capacity be addressed in a CMP. Carrying capacity, now called "user capacity" by the NPS, is defined as the type and level of visitor use that can be accommodated while sustaining the desired resource and social conditions and visitor experiences that complement the purpose of the Ala Kahakai NHT and it desired conditions.

The nature of a national trail like the Ala Kahakai NHT provides a challenge to developing meaningful measures of user capacity. It traverses diverse landscapes, both ancient and modern, urban and rural. Trail boundaries are difficult to determine. Potential trail sites and segments are managed by several agencies and private landowners, often have uncontrolled access, and serve multiple uses. Each site or trail segment's capacity to withstand various types of uses depends on complex combinations of environmental, cultural, and social factors that range from extremely susceptible to remarkably resistant to impacts. Land uses and visitor experiences on specific sites and segments cannot be easily monitored or controlled. Nonetheless, a meaningful strategy is necessary to determine and evaluate sustainable uses and levels for individual sites and segments over time and, thus, to ensure that the full range of the trail's most significant resources are preserved to perpetuate the values and characteristics for which a trail was established as part of the National Trails System.

The premise behind user capacity is that some level of impact invariably accompanies public use; therefore, the public agency must decide what level of impact is acceptable and what actions are needed to keep impacts within acceptable limits. Two important components of user capacity for the national trail are trail-related resource conditions (e.g. condition of the trail surface, integrity of cultural sites, and health of wildlife and plant community populations) and social capacity (e.g. congestion or crowding

affecting solitude and opportunities to experience nature on the trail). Ideally, if user capacity in any given area of the trail were exceeded for either of these components, a management action would be elicited.

User capacity methodologies currently employed by most land-managing agencies follow the "limits of acceptable change" process developed by the USDA Forest Service in the mid-1980s. This process involves the following steps:

- develop prescriptions for resource and visitor experience conditions in various land units or zones
- identify indicators (measurable variables) of those conditions that can be monitored over time (e.g. number of areas of trail erosion or widening of the trail to twice the width of adjacent sections)
- set standards that represent minimum acceptable conditions (e.g. no more than two occurrences in each mile of trail)
- monitor conditions in relation to indicators and standards (e.g. annually inspect all trail segments to assess their condition)
- take managements actions to ensure that conditions remain at or above standard (e.g. temporarily close the trail until corrective measures are completed, or redesign the route, or organize and conduct trail work parties, or change the standard.)

With this approach, user capacity is not a set of numbers or limits, but rather a process involving establishing desired conditions, monitoring, and evaluation, followed by actions to manage visitor use to ensure that trail values are protected.

Since no established use patterns exist for the Ala Kahakai NHT, this CMP addresses user capacity as a set of potentialities in the following ways:

 It provides trail classifications and prescriptions (see the previous section) for desired resource conditions, visitor experience opportunities and general levels of

- development and management for different types of trail. These are the basis for user capacity decision-making.
- It suggests potential use-related concerns to serve as the foundation for considering indicators for monitoring and needed management strategies.
- It suggests potential indicators, based on the use-related concerns, which could be monitored as needed in the future to help identify unacceptable impacts from public use. In future specific site and segment management plans, when the trail staff selects an indicator to monitor, a corresponding standard will be identified.
- It suggests a general range of management actions that may be taken, as needed, to avoid and minimize unacceptable impacts from public use.
- Finally, it offers an approach to priority setting for monitoring called the "Index of Vulnerability." Monitoring is the last step of user capacity decision-making that continues indefinitely after approval of this CMP.

Potential Use-related Concerns

The NPS and key partners intend to work together to manage, coordinate, and expand trail user opportunities, including interpretation of the important stories of the trail. There is an expectation that public use will increase and the trail will become better known. With this potential for increasing public use, the following summary outlines some concerns that <u>may</u> arise as conditions change, challenging the ability of the NPS and the key partners to manage for the desired conditions outlined above.

- Increased public access and use could impact areas of deep spiritual or cultural significance to Native Hawaiians and their use of these areas to practice their cultural traditions. Trail users might not be respectful of these traditions.
- Cultural landscapes, archeological sites, historic structures, traditional places are the

- chief resources for interpretation and visitation. The trail, itself a cultural resource, is the major way for users to understand and experience the Hawaiian culture. These resources are particularly sensitive to public use and are non-renewable, so care must be taken in planning and managing use in these areas. In general, impacts from theft and vandalism may affect all classes of cultural resources along the trail. Unaltered trail segments, in particular, would need to be monitored and managed to maintain their integrity with on-going regular visitor use, including the evaluation of soil erosion, vegetation changes, and trail width.
- Informal trail activity, where visitors leave the designated national trail, may be a concern in the future. Informal trails cause vegetation damage, soil erosion and disturbance of wildlife. But more importantly for Ala Kahakai NHT, informal trails may lead people to direct contact (intentionally or unintentionally) with sensitive cultural and natural resources. When access occurs in non-designated areas near the Ala Kahakai NHT in close or direct contact with sensitive resources, a variety of impacts such as trampling damage, erosion, site disturbance, exposure of sensitive materials, and illegal collection may occur. The unearthed archeological resources, sacred sites, elements of the cultural landscape, and rare plants are particularly sensitive to these types of impacts.
- Camping along the trail may affect the cultural and natural environment. Similar to the impacts associated with informal trail activity, this type of use may cause trampling, erosion, site disturbance, exposure of sensitive archeological materials, or damage to other elements of the cultural landscape. If campsites are remote, the difficulty of supervision may lead to intentional or unintentional incidences of site damage, vandalism, and theft.
- Natural resources may also be affected by trail use. Sensitive and rare plants and wildlife

in certain areas may be affected by trampling and site disturbance. As feasible, the trail and interpretive points should be sited away from these resources.

- As the trail becomes a heritage tourism site, existing facilities that support public use could experience unintentional resource damage, visitor crowding, and disturbance of private property owners. In particular, the increasing presence of tour bus activity that is not regulated or pre-arranged may overcrowd sites and create visitor conflicts.
- Increasing public use may degrade visitor experiences by causing visitor crowding at sites along the auto tour. If visitors cannot gain access to an important vantage point or read an interpretive panel due to high volumes and density of use, visitor frustration may occur, along with a lost opportunity for understanding the trail's important stories. Further, visiting historic sites with long wait times may impact the visitor experience resulting in frustration and eventual displacement. Finally, use conflicts or crowding on the trail could be a problem for the local community if the trail becomes heavily used by other visitors.

Potential User Capacity Indicators and Related Management Actions

Based on the potential use-related concerns of the trail, the following section outlines possible resource and visitor experience indicators that may be monitored to address the concerns. A general range of potential management actions is identified for each indicator, but this list may not be inclusive of all management actions that may be considered in the future. Further, some management actions may not be appropriate to all trail classifications. The final selection of any indicators and standards for monitoring purposes or the implementation of any management actions that affect use will comply with National Environmental Policy Act, section 106 of the National Historic Preservation Act, and other laws, regulations and policy, as needed. Potential

indicators are listed below along with potential management actions.

- Incidences of effect on Native Hawaiian traditional practice.
 - Management actions that may be considered to avoid or minimize these impacts include: educate trail users to Native Hawaiian values and to respectful behavior, direct visitors to alternate locations along the trail when important cultural activities are underway, develop a reservation or permit system to redistribute or limit use, limit use on specific segments to guided tours.
- Incidences of site disturbance, trampling, or damage to elements of the cultural landscape or exposure of cultural material such archeological resources.
 - Management actions that may be considered to avoid or minimize these impacts include: institute a policy to restrict off-trail travel or climbing on above-ground cultural resources, provide information on the regulations and the importance of staying on the Ala Kahakai NHT and off resources to protect sites, manage sites to better define appropriate use areas, erect signage to better define appropriate use areas or areas that are off-limits to use, increase enforcement, institute a volunteer watch program, close specific areas, redirect use to alternate areas, rehabilitate sites, reduce use levels.
- Numbers of informal trails or areas of trampling disturbance, especially in close proximity to sensitive natural and cultural resources.
 - Management actions that may be considered to avoid or minimize these impacts include: institute a policy to restrict off-trail travel, educate the user to the fragility of the resources, provide information on the regulation for off-trail activity and the importance of staying on Ala Kahakai NHT to protect resources, manage sites to better define appropriate use areas, erect signage to



National Trails Day, Mauna Lani Resort, S. Kohala, NPS photo

better define appropriate use areas or areas that are off-limits to use, increase enforcement, close specific areas, redirect use to alternate areas, rehabilitate sites, reduce use levels.

Incidences of vandalism or theft of cultural resources

Management actions that may be considered to avoid or minimize these impacts include: institute a no-collection policy for the public, increase information on the sensitivity and value of the trail's cultural resources and on the no-collection policy, increase patrols and law enforcement in target areas, institute a volunteer watch program, discourage the purchase of archeological resources, direct use away from sensitive cultural resource areas, close areas with sensitive cultural resources.

Condition of trail tread (e.g., width, incidences of erosion, change in vegetation).
 Management actions that may be considered to avoid or minimize these impacts include: clearly define the trail by keeping the tread clear of weeds or other encumbrances,

educate the user to stay on the trail, increase information on the sensitivity and value of the trail's cultural and natural resources, close specific sections of the trail and re-route use, change allowed uses, reduce use levels.

 Condition of campsites (e.g. incidences of erosion, change in vegetation or wildlife patterns, damage to cultural elements of the landscape)

Management actions that may be considered to avoid or minimize these impacts include: educate the user on the resources of the area and on minimizing the impacts, limit or disallow fires, institute a permit system to manage the site for a specific number of users and duration of use.

Incidences of disruption to private property owners

Management actions that may be considered to avoid or minimize these impacts include: educate users on minimizing disturbance to private property owners, sign private property, manage the trail and sites to better define appropriate use areas, focus management on areas where trash dumping or vandalism is occurring, institute a licensed/certified guide program, increase enforcement, close specific areas, redirect use to alternate areas, reduce use levels.

People at one time at important interpretive sites, markers, or viewpoints (auto tour route). Management actions that may be considered to avoid or minimize these impacts include: provide advanced planning information to encourage visits to lesser used areas or offpeak times, provide real-time information about parking availability, close areas when full and actively redistribute use to other sites, re-route access points to better distribute use, reduce use levels.

Approach to Priority Setting for Monitoring of Indicators

Once indicators and standards are in place, it is important to set priorities and schedule of monitoring. One method that may be used to highlight priority areas of concern is the "Index of Vulnerability" model²⁹ proposed in the *Comprehensive Management and Use Plan/Environmental Impact Statement for the Oregon, California, Mormon Pioneer, and Pony Express National Historic Trails* (NPS, 1998c)³⁰. This approach proposes to predict specific trail sites and segments that have the highest potential for overuse and related impacts leading to the need for higher levels of management attention (monitoring actions).

Modified for the Ala Kahakai NHT, the index of vulnerability could take into account the following factors related to both resource and visitor experience concerns:

- fragility of the cultural resources (the type of trail fabric, the nature and number of cultural resources, the importance to Native Hawaiians, etc.)
- vulnerability of natural resources (the presence of invasive species, the nearness of nesting areas, the rarity of the plant communities, etc.)
- ease of access (proximity to a highway or access road, condition of the access road)
- proximity to population centers (resorts, tourist attractions, etc.)
- popularity of the sites or trail segment (proximity to popular sand beaches or other attractions)
- degree of unauthorized uses (presence of off road vehicles, for example)
- sensitivity of the user experience (solitude, contemplativeness, traditional use)

During the inventory and assessment of the entire trail, a rating could be assigned for each of the factors along specific trail segments:

- 1 = little potential for impact
- 2 = moderate potential for impact
- 3 = high probability of impact

Each site or segment would receive a composite score or index. Factors could be weighted so that the more important factor for a particular site or segment would receive more weight. Sites or segments receiving a high rating would be more likely to experience heavy visitation and would be least likely to tolerate added intense use without suffering long-term resource or user experience impacts. These sites and segments would be potentially threatened and require frequent and careful monitoring. If their condition showed unacceptable resource impacts or the user experience were compromised, management actions would be required. Until a more adequate strategy for their preservation or other values were developed, the trail segment could be temporarily relocated, interpreted from a distance, or even withdrawn from public use. Special measures should be adopted to prevent further destruction of the cultural, natural, and social resource values of these vulnerable places.

Regular monitoring requires close collaboration between the trail's administering office and the local management units along the trail. Trail conditions should be documented on a regular basis with the frequency determined by the index of vulnerability, by using photography and other means, at fixed points for easy comparison. These findings could be linked to GIS data sets.

²⁹ This method was developed by Susan C. Boyle, NPS historian at the Denver Service Center.

³⁰ The text on the Index of Vulnerability is generally quoted from this plan but modified for the conditions along the Ala Kahakai NHT.

TRAIL IDENTIFICATION MARKER

The logo unique to the Ala Kahakai NHT will be incorporated into the standard triangular shape of the national trails system marker. (See below.) The marker is a unifying emblem representing the trail and all of its partners. Marker use will be restricted to the NPS and its partners for applications that help further the purposes of the trail. This marker is protected against unauthorized uses as a federal insignia, as stipulated in 18 USC 701.

Sign specifications for marking the trail and use of the logo will be provided by the NPS through a sign plan developed in coordination with the Comprehensive Interpretive Plan. This plan will address the design, placement, and use of the logo on a variety of signs, such as highway information and directional signs, entrance signs at parking areas, trailhead information signs, regulatory signs, directional indicators, identity signs that distinguish unaltered and verified trail segments from linking trails, interpretive signs and wayside exhibits, wilderness area marking, private property signs, destinations signs, and trail partner or adopter signs. The sign plan will consider using both the NPS Unigrid standards

on federal lands and typical approaches on national historic trails that cross many nonfederal jurisdictions.

To help commemorate the trail's national significance, the official marker will be placed along federal and other managed trail segments and sites in compliance with the sign plan. The NPS will provide the markers, but local managers on nonfederal lands will install them. Markers will be placed on private property only with the consent of the landowner. Markers will help individuals who want to follow the route by showing them the actual trail. Furthermore, by indicating the presence of the trail, markers may help protect the trail landscape from inadvertent destruction or from development.

With the cooperation and assistance of road—managing agencies and in compliance with the sign plan, auto route signs will be placed along state and county roads at appropriate road junctions (consistent with the sign regulations of the managing highway department). Information signs to direct auto users to local sites or segments may also be used.



Ala Kahakai National Historic Trail marker





Signs at Kealakekua Bay State Historical Park and Pu'ukoholā Heiau National Historic Site

Introduction to Alternatives

The planning team gathered the ideas, concerns, and *mana'o* (thoughts) expressed during public scoping meetings, formal and informal community, private landowner, and governmental agency meetings, correspondence, and a survey in order to develop four draft alternatives for administration and management of the Ala Kahakai NHT. After public review of the draft alternatives, the team selected three alternatives for full consideration in the draft CMP: No Action; Single Trail; and Ahupua'a Trail System. The alternatives considered but eliminated from further study are discussed at the end of this chapter.

In all the alternatives, resource protection approaches, as described above, will remain the same although the extent of the resources and values protected may change. Within the limits of resource capability, the alternatives will vary in both what trail user services and experiences are provided and to what extent they are provided.

DECISION POINTS

Decision points are the questions the plan needs to answer in order to provide management direction. These are the issues around which alternatives can be developed. The public, other agencies, and NPS staff raised numerous issues during the scoping period. Several of these issues will be addressed subsequent to the CMP at a more specific level of planning, either in the trail segment management plans or in a comprehensive interpretive plan. The planning team sorted through all of the issues raised to determine which ones could be addressed appropriately in a comprehensive management plan. The team concluded that the following four basic questions needed to be addressed by the alternatives:

- To what degree should the traditional Hawaiian trail system be incorporated in the Ala Kahakai NHT?
- What should be the balance between agency and community management of the trail?

- What range of appropriate recreational, educational, and interpretive opportunities should be accommodated?
- To what degree should the NPS manage as well as administer state-owned segments of trail?

The alternatives address these questions differently, providing a range of actions to consider.

Alternative A: "No Action"

The "no action" alternative, a requirement of NEPA, is basically a continuation of the present course of action and serves as a baseline for comparison with all other alternatives. It does not mean that no federal action would occur, but that current federal administration would continue as it is with funding at the FY 2007 level. Increases, if any, would be less than the cost of living and no staff would be added.

Following the recommendation of the Feasibility Study, the goal of alternative A would be to complete a single continuous trail comprised of ancient and historic portions of the ala loa linked as needed by later pre-1892 trails, pathways, and modern connector trails. This alternative emphasizes the linear aspect of travel around the island. It reflects a Euro-American concept of a trail as a linear transportation corridor or a recreational and educational entity. High potential sites associated with the alignment would be incorporated into the trail as feasible. Management agreements would focus on establishment and protection of a single route parallel to or on the shoreline. Only the trail tread (state right-of-way, easements resulting from land use approvals, or other specified trail right-of-way) and negotiated adjacent areas would be included in the trail. Adjacent natural and cultural resources would be identified and protected as feasible along the trail route.

Given the limited staffing and funding under the No Action Alternative, the Ala Kahakai NHT would consist of trail segments within the four national parks through which it passes and only a few other segments, most likely on state lands and over easements required by land use approvals. While a continuous trail would be a goal, there would be little opportunity to reach the goal even in the very long-term. An auto tour route would be completed that would lead visitors to 18 sites associated with the trail. Recreation along the trail and interpretation of its history and significance would generally be limited to these sites.

This alternative received some stakeholder interest during the public review process. All of the principles of administration and management outlined above in Actions Common to All Alternatives would apply to this alternative, but with the limited available federal funding, the application of the principles would occur only as opportunities arise along the entire route. Generally, current management of ancient and historic trails and public access to them would continue. The map for alternative A appears on page 69.

ALTERNATIVE A: ADMINISTRATION, MANAGEMENT, AND PARTNERSHIPS

Agency Roles

An NPS trail superintendent and a community planner would help with segment management plans, planning, resource management, trail user experience, or other necessary activities. The superintendent would work closely with the four national parks, the Ala Kahakai Trail Association, Nā Ala Hele Trails and Access Program under the Division of Forestry and Wildlife, Department of Land and Natural Resources, and other community organizations as possible. Additional support services would be provided by the Hawai'i Island National Parks and the NPS Pacific West Region with offices in Honolulu, Hawai'i, Oakland, California, and Seattle, Washington.

Nā Ala Hele would continue to protect identified ancient and historic trails within the corridor and make them available as recreational trails to the public as its funding and staff time permits. Most trails identified as ancient or historic by Nā Ala Hele would be land-banked by the state as future elements of the Ala Kahakai NHT, if Nā Ala Hele could not manage them for public use.

Hawaii County would continue to require public access along and to the coastline as part of its land use approval process. An agreement with Nā Ala Hele and the county would allow the NPS to recognize and mark trail segments that meet the criteria set out in this CMP as official components of the national trail. NPS trail administration would work with Nā Ala Hele and the county to recognize the few segments of the Ala Kahakai NHT that have a plan in place for protection of resources.

Community Roles

This alternative would rely heavily on existing local organizations to implement the trail. They could receive minimal funding or technical assistance from the NPS. The superintendent would continue to work to develop the Ala Kahakai Trail Association to support the trail. With the limited federal funding available to assist the association, the nonprofit may not develop the needed capacity as a partner to provide help in managing the trail.

ALTERNATIVE A: RESOURCE PROTECTION High Potential Sites and Trail Segments

The four existing national parks protect significant sites and segments related to the Ala Kahakai NHT that would be the focus of this alternative. These would be identified and interpreted to the public as funds permit. It is probable that over time some sites listed in table 3 that are part of the auto tour route would become official components of the Ala Kahakai NHT. Currently, these sites are not recognized as part of the Ala Kahakai NHT. These actions would happen as opportunities arise and not as part of an overall, strategic plan.

Trail alignment

The trail on nonfederal lands would consist of the legal trail right-of-way and negotiated adjacent areas necessary to protect resources or the trail setting. The size of these adjacent areas would differ with each segment. Few studies required to develop segment management plans would be completed. These include resource inventory, assessment, and monitoring protocols. Therefore, few segments of the trail outside of federal lands would be added to the Ala Kahakai NHT. Uneven and slow progress would be made toward developing a continuous trail.

Protection program

The four national parks would become more aware of fundamental resources and values associated with the trail. Increased trail use within the parks could directly or indirectly adversely affect trail resources. The parks could employ a number of methods to protect the resources including inventory and monitoring, user education, national register nominations, or other means detailed in the actions common to all alternatives. Additional protection of the fundamental resources and values associated with the trail would occur as part of the few management agreements that could be completed and would focus on selected high potential sites and segments listed in this plan. Some limited funds might be available to identify additional archeological and historic sites and trail segments, but a comprehensive strategy for research related to the NHT would be limited. Management of non-federal resources along the trail route would continue under the present course of action either through state or county efforts.

ALTERNATIVE A: TRAIL USER EXPERIENCE

Due to inadequate staff numbers, opportunities would be very limited for the Ala Kahakai NHT staff to work with state and local agencies, Native Hawaiian families, the Ala Kahakai Trail Association, hiking groups, and landowners to provide a developed, coordinated trail user experience along the trail route.



Cultural Festival, Kaloko-Honokōhau NHP, N. Kona, NPS photo

Traditional users or practitioners

Trail management planning would aim to mitigate negative impacts on traditional cultural practices. Community planning teams for the few segments included in the NHT would seek input and advice from traditional gatherers and other practitioners to assure resource protection and sustainability, access timing, and other protocols.

Recreation

Generally, existing recreational opportunities along the trail would continue to be provided in federal, state, or county parks and facilities along the route. These activities would not necessarily be offered as part of the Ala Kahakai NHT program and would not provide a consistent trail experience. The Ala Kahakai NHT would provide few new trail opportunities since already existing trails on state lands or across resorts would most likely be the first segments to be incorporated into the national trail.

Within the timeframe of this CMP (about 15 years), after several of the ancient and historic sites have been incorporated into the Ala Kahakai NHT, the auto tour route would be marked and an interpretive brochure prepared. Visiting sites along the auto tour route would be the most integrated visitor experience. In the meantime, travelers would continue to drive along the existing highway and visit historic sites

open to the public, but would not necessarily know their connection to the Ala Kahakai NHT.

Current activities commemorating the culture of Native Hawaiians and interpretation of the trail would continue, but would not necessarily be related to or recognized as part of the Ala Kahakai NHT. Due to the limited scope of visitor education, the activities of traditional users in fishing, gathering, visiting shrines or gravesites along the route could be less likely to be respected.

Interpretation and Education

The four national parks would be encouraged to define sub-themes, related to the interpretive themes outlined in chapter 1 and to the character of the trail within their boundaries, and to develop site-specific messages that contribute to a complete trail story. Sub-themes would take advantage of the stories and *wahi pana* of the local area to develop heartfelt connections with the trail and park sites.

Once agreements with sites along the auto tour route are in place, a brochure would be developed incorporating all of the trail themes with emphasis on key events along the route, differing life styles, and daily use in the various areas. Later in the planning period, should an interpretive specialist be hired, a comprehensive interpretive plan could be developed. On the whole, under this alternative, interpretation would tend to be limited to sites that are part of the auto tour and not focused on the trail itself. Facilities and programs currently in place through resorts, landowners, agencies and other organizations would continue.

The NPS would encourage local entities to develop interpretive media and educational programs based on the trail interpretive themes and focused on the sites incorporated into the trail. Interpretation would emphasize the topics of connections to the past and events. Media and programs currently offered to the general public by various agencies or organizations about historic and traditional uses of *ala loa* would continue.

Trail Identification: Marker and Signs

The official marker incorporating the logo developed in this CMP would be used to mark segments of managed trail open to the public and at sites incorporated into the trail along the auto tour route. Over time, the general public would randomly encounter markers and identification signs along some segments of trail or at sites associated with the trail. At trailheads of segments of trail incorporated into the Ala Kahakai NHT, signs would be installed that identify permitted trail uses, directions to relevant public areas, information on safety, and protection of trail users and adjacent private property.

ALTERNATIVE A: FACILITY DEVELOPMENT

Trail administration could encourage the development of facilities that would enhance public access to auto tour sites and recognized trail segments. Appropriate visitor use facilities for the auto route include wayside exhibits, and signs and markers. Existing access roads, trailhead parking areas, visitor contact and comfort stations would be used. The level of local interest and support would help determine the extent and scope of support facilities. Costs for these facilities would be shared with the state, county, or community groups. Facility development should not impact archeological, historical, or natural resources. Any development should be environmentally and aesthetically compatible with trail resources.

ALTERNATIVE A: COSTS

The Fiscal Year 2007 NPS budget of \$259,000 for the Ala Kahakai NHT is assumed to be constant for alternative A. Small increases over the planning period of 10 to 15 years would not be expected to keep up with inflation.

Operations

A staff of two full-time persons is available for alternative A.

Table 4: Alternative A Staff

Superintendent (existing)
Community Planner (funded)

NPS base funding of \$259,000 would cover annual operations, including the salary and benefits for the superintendent and planner, travel for routine technical assistance to local groups and inter-island and mainland trips, office equipment, supplies, phone, signs, brochures, and publications.

Studies and One-Time Costs

Table 5 summarizes the total funds that might be available for a limited number of studies and some degree of trail development. Some of this funding could come from NPS base funds, but most would be sought from NPS Challenge Cost Share Program, NPS cultural resource programs, and other sources such as donations. It is estimated that the federal share of these one-time costs would be approximately 60%.³¹

Table 5: Alternative A One-time Trail Costs (cumulative for 15 year period)

Overview studies and inventories	\$375,000
Project Costs	\$300,000
Total One -Time Costs	\$675,000
Estimated Federal Share	\$405,000

ALTERNATIVE A: FUNDING

Administration

Funding for the annual operating costs would be provided by the base operating budget of the NPS. No increases in its base funding to meet the needs outlined in this alternative would be anticipated.

Funds for brochures, other interpretive media, signs, and other needs may be available for mutually beneficial partnership projects through the competitive NPS Challenge Cost Share Program, an appropriation from Congress that may not be available every year. The program requires the partner to provide a minimum 50% matching contribution in the form of funds, equipment, in-kind labor, or supplies from nonfederal sources. Partners may include hiking clubs, school groups, individuals, private landowners, non-profit organizations, charitable groups, or state and county government agencies.

It is anticipated that the Ala Kahakai Trail Association will engage in minimal fundraising under alternative A, but could provide volunteer help.

Technical Assistance

Funds and other support for technical assistance projects (planning, design, or preservation) beyond administrative staff capabilities would be requested from the NPS Long Distance Trails Program, the NPS Rivers, Trails, and Conservation Assistance Program, NPS planning funds, the NPS cultural resource preservation program, or other sources.

Development/Preservation

NPS resource preservation funds would be sought to fund cooperative preservation efforts for federal components or established sites and segments. Funds would be used to supplement existing data about high potential sites and to stabilize or otherwise conduct physical activities to conserve resources. Should recreational facilities become feasible, funds to develop them on nonfederal lands would be sought from state or local governments or private groups or individuals, either directly or in partnerships. Funds may be used for contracted services.

³¹ As with all national trails, federal project funds are limited and a variety of partners are expected to help with planning, constructing, managing, monitoring, and interpreting the trail with funds and in-kind services. The *Feasibility Study* projected a 50% nonfederal match for one-time costs. Alternative A estimates that the federal share would be approximately 60% because much of the trail work would be limited to the national parks. The approval of alternative A would not guarantee that funding and staffing needed to implement the plan would be forthcoming. Full implementation of alternative A could be many years in the future. These cost estimates suggest the range of federal funds in relation to partnership funds—state, county, nonprofit organizations, private entities, and individuals—required to open segments of the trail to the public.



Alternative B: Single Trail

CONCEPT

As in alternative A, a single continuous trail would be comprised of unaltered or verified ancient and historic portions of the ala loa linked as needed by later pre-1892 trails, pathways, and modern linking trails. This alternative reflects the recommendation in the Feasibility Study and emphasizes the linear aspect of travel around the island. High potential sites associated with the alignment would be recognized as part of the trail. Management agreements would focus on recognition and protection of a single route parallel to or on the shoreline. Canoe landings and mauka-makai trails that connect with the route could be noted in appropriate areas. Adjacent natural and cultural resources would be protected or restored as feasible along the trail route. Alternative B reflects a Euro-American concept of a trail as a linear transportation corridor or recreational element, while recognizing the need to support traditional uses.

Although alternative B shares the same overall goal of developing a continuous trail as alternative A, with added staff and funding more actions are potential, and in the very long term the goal could be accomplished. Within the planning period of 15 years, the goal would be to complete the linear trail within the priority zone from Kawaihae through Pu'uhonua o Hōnaunau National Park and to protect other segments outside of that area as feasible. The maps for alternative B appear on pages 81-85.

ALTERNATIVE B: ADMINISTRATION, MANAGEMENT, AND PARTNERSHIPS

Under this alternative, management planning would be community-based, but the NPS would rely on landowners and land managers to manage trail segments under the administrative

oversight of the NPS. Trail segments that result from easements required through the land use approval process would be managed by the landowner or a specified management entity. The state of Hawaii³² would continue to manage state-owned segments of the Ala Kahakai NHT. Segments in county parks would be managed by the county of Hawaii. All trail segments would become components of the Ala Kahakai NHT through a cooperative management agreement between the landowner, the state, or the county and NPS. The Ala Kahakai Trail Association and other non-profit organizations would aid these land managers as possible through fund-raising, volunteer work parties, and other activities.

Agency Roles

The National Park Service would be an active coordinator for administrative oversight taking an active role in promoting and supporting the Ala Kahakai NHT. The NPS would work with community-based planning teams to develop management plans for trail sites and segments and actively work with Native Hawaiians, government and land managing agencies, landowners, trail organizations, and other community groups to develop a single, linear, continuous and unified trail. To achieve the objectives of this alternative, the NPS will develop memoranda of understanding, cooperative and management agreements, or other instruments, as needed and appropriate, with other public agencies, non-profit organizations, and private entities.

The NPS would authorize or undertake all research and cultural and natural resource management planning and monitoring for the trail and provide technical assistance and oversight review of local segment management plans, their updates and revisions, for compliance with NPS policies and standards.

³² State agencies that manage trails or lands over which trails pass are the Nā Ala Hele Trails & Access Program for those segments owned by the state identified as ancient or historic consistent with the 1892 Highways Act; State Parks for those segments included within state parks; and the Natural Areas Reserve System (NARS) for lands in the reserves. The DLNR Division of Lands holds land until a management entity is identified.

The NPS would rely on a landowner or land manager or identify a community management entity to manage and steward each segment of trail as part of a management agreement. As an example, the Ala Kahakai NHT superintendent connected Nā Ala Hele with Parker School as a potential manager of the existing trail segment from Spencer Park at 'Ōhai'ula to Mauna Kea Resort. Parker School would work with the NPS to meet all criteria for trail management. When this trail segment becomes an official component of the Ala Kahakai NHT through an agreement with Nā Ala Hele, Parker School would be named as the trail manager.

As the trail becomes established, the projected NPS staff would include four permanent staff and six shared, temporary, or seasonal positions. The Pacific West Regional Office, Honolulu, would provide administrative and contracting support services, geographic information system (GIS) help, and other assistance. Additional support for planning or technical assistance could be provided from the Pacific West Regional Offices in Oakland, California or Seattle, Washington.

The four national parks may assist in local outreach programs, and they may monitor trail segment status, as feasible, for areas adjacent to their parks (for example, ownership changes, intrusions, site access changes).

The NPS would focus its assistance on state and county parks and Nā Ala Hele which would retain responsibility for management of those segments of trail found to be state-owned. Through individual site and segment management agreements, the NPS would establish protocols and oversee monitoring of resource protection efforts. The NPS would also offer technical assistance and limited financial assistance to private groups working together to accomplish the objectives of the Ala Kahakai NHT. Trail segment managers would be

independent of the NPS, but would work cooperatively to help commemorate the national historic trail. The NPS would provide County Planning with information on ancient or historic trail locations so that awareness of the Ala Kahakai NHT can be considered early in the planning process.

The NPS would encourage with limited funds and technical assistance the state and county and other participants in trail management to educate trail users about trail values and stories; protect resources along the route; monitor trail development; solicit funds for technical assistance, publications, and research from other federal agencies, state and local governments and private partners; and undertake a variety of other activities which support the objectives of the trail. As the trail administrator, the Ala Kahakai NHT office would become the central repository for all information related to the administration of the Ala Kahakai NHT and would seek information from the four national parks and all partner agencies and stakeholders. The NPS would add data and metadata to its GIS and provide maps to aid local managers to recognize, mark, and otherwise implement the trail and to help provide trail information for users. The GIS would aid the NPS, local managers and landowners, and others to evaluate development proposals along the trail route for their effects on trail viewplanes³³ and other resources.

Under alternative B, Ala Kahakai NHT would partner with Hawai'i Island national parks to link their community involvement programs with community-based efforts of Ala Kahakai NHT management.

The State of Hawaii, under alternative B, would manage all of the state-owned segments of the Ala Kahakai NHT through either Nā Ala Hele or State Parks in cooperation with and under the oversight of the NPS. Nā Ala Hele would work to

³² The term "viewplane" appears in Hawaii environmental documents and is similar in meaning to "viewshed," a term more familiar to mainland readers. Both words can indicate the entire area an individual can see from a fixed vantage point, but in Hawaii "viewplane" appears to refer to significant landscape elements seen from a public road or trail.

prepare land banked segments of trail for public use through developing inventories and management plans consistent with SHPD and Nā Ala Hele Hawaii Island Advisory Council recommendations. The state owns only the right-of-way, generally about 10 to 30 feet, as described in documents, oral histories, archeological studies, land deeds, by direct observation and other sources. Adjacent areas desired to protect trail related resources are generally outside of state ownership and would have to be negotiated with the landowner to be included in the Ala Kahakai NHT.

The NPS would help find funding and assistance for these state agencies so that they can manage the Ala Kahakai NHT effectively in accordance with the CMP. State ownership of trails removes landowner liability for trail user injury. Even on privately owned trail segments included in the Ala Kahakai NHT, landowners would not have liability for recreational use of trails on their lands through the Hawaii Revised Statutes, Chapter 520. (See appendix A.) Appendix F contains a draft agreement between the NPS, the State of Hawaii, and the county of Hawaii to work together to manage the Ala Kahakai NHT.

The County of Hawaii would continue to enforce, as a condition of land use approvals, county and state laws requiring public access to and along the shoreline that may create potential Ala Kahakai NHT trail segments; encourage private landowners who have public access requirements as conditions of land use approval to include these areas in the NHT, where appropriate; review county-owned public access easements to and along the shoreline for potential incorporation in the NHT; and coordinate the identification of trail segments through county parks. County Planning would include the NPS in the mailing list for the Planning Commission to alert the NPS to possible development affecting the Ala Kahakai NHT.

County Parks would manage segments of the Ala Kahakai NHT within county parks. The NPS would encourage the county to use its Parks Partnership Program with non-profit organizations that want to manage the Ala Kahakai NHT within county parks. Also, through an overall agreement, the state and county would agree to manage their segments of trail consistent with this CMP. (See Appendix F.)

Community Roles

Non-profit organizations, 'ohana (family, kin group), private landowners, resort managers, and other local entities would be encouraged to make agreements with the NPS to manage a particular site or help realize a specific objective related to the trail. Any appropriate and legal provision could be included in an agreement. Possible provisions could include trail marking, development and management activities, trail monitoring, support facilities, access and interpretation, right-of-way agreements with private landowners, and fund-raising activities.

Land trust organizations on the island of Hawai'i would play a critical role in preservation of open spaces that contain ancient or historic trails that could become a part of the Ala Kahakai NHT. These trusts include such groups as the Trust for Public Land, Nature Conservancy of Hawaii, Kona Land Trust, and the "kingdom trusts" of Kamahameha Schools, Queen Emma Foundation, and the Liliuokalani Trust. The acquisition of properties, purchases of conservation easements, or other arrangements could produce important results towards the goals of the Ala Kahakai NHT, as can be seen with the recent purchase of Honu'apo Fish Pond.



Kawaihae Canoe Club, S. Kohala, NPS photo