

FES 98-11

ALA KAHAKAI
National Trail Study
and
Final Environmental Impact Statement



National Park Service
Pacific West Region
Pacific Great Basin Support Office
San Francisco, California

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January 1998

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**National Trail Study
Final Environmental Impact Statement**

Ala Kahakai "Trail by the Sea"
January 1998
Hawaii County, Hawaii

This report has been prepared to provide the United States Congress and the public with information about the resources in the study area and how they relate to criteria for the National Trails System. Publication and transmittal of this report, including any discussion of a preferred course of action, should not be considered an endorsement or a commitment by the National Park Service to seek or support either specific legislative authorization for the project or appropriations for its implementation. Authorization and funding for any new commitments by the National Park service will have to be considered in light of competing priorities for existing units of the national park system and other programs.



**National Trail Study
Final Environmental Impact Statement**

Ala Kahakai "Trail by the Sea"
January 1998
Hawaii County, Hawaii

This *National Trail Study and Final Environmental Impact Statement* (FEIS) provides an analysis of whether the Ala Kahakai is nationally significant and whether it is feasible and desirable to add it to the National Trails System. To assist in gauging the feasibility, it analyzes a range of options for managing the trail.

The study concludes that the Ala Kahakai is significant under the three criteria for national historic trails outlined in the National Trails System Act, as amended, under National Register of Historic Places criteria A, B, C, and D, and as a traditional cultural property.

The study concludes that establishing a continuous trail is physically feasible.

The study concludes that desirability of recognizing the trail rests on two key items: first, communities along the way, native Hawaiians, and landowners all be involved in planning and implementing the trail; and second, adequate funding must be ensured at the time the trail is designated to protect cultural and natural resources. If the trail is designated without adequate funding from the start, resources may be more threatened by unregulated increased public use than they already are.

The study examines four alternatives for future protection, interpretation, and management of the Ala Kahakai. The examined alternatives include a no action alternative, a national historic trail (continuous), a state historic trail, and a national historic trail (discontinuous). Additional alternatives which were considered but rejected are summarized. The study recommends Alternative B, National Historic Trail (continuous), as the environmentally preferred alternative.

The environmental consequences of the alternatives were addressed in the draft environmental impact statement (DEIS) and are included in this FEIS. The public review period for the DEIS ended on October 17, 1997. Responses to agency and public comment are included in the FEIS. It is anticipated that with proper planning, management, and funding, potential adverse environmental impacts of the action alternatives can be minimized. At their November 21, 1997 meeting, the National Park System Advisory Board recommended a finding that the trail does have national historic significance based on the criteria developed under the Historic Sites Act of 1935.

Publication of the notice of availability in the *Federal Register* by the Environmental Protection Agency will initiate the 30-day no action period for this document, after which the NPS can prepare a Record of Decision for transmittal to Congress by the secretary of the interior. Agencies and the public may comment on the FEIS during the 30-day period. Any comments should be addressed to

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SUMMARY

INTRODUCTION

The National Trail Study and Final Environmental Impact Statement (FEIS) for the Ala Kahakai responds to congressional authorization of the study. This study provides Congress with a professional analysis of whether the Ala Kahakai is nationally significant and whether it is feasible and desirable to add it to the National Trails System, by considering a range of options for recognizing and managing the trail. Agency, organization, and public comments on the draft environmental impact statement (DEIS) are included in the FEIS along with National Park Service responses.

In the FEIS the cost estimate has been revised to include metes and bounds surveys which increases the estimate for phased costs for Alternative B from \$3,645,000 to \$3,679,000 and partner support which increases the estimate for annual operations costs from \$230,000 to \$265,000. The same items increase in Alternative D from \$1,475,000 to \$1,579,000 and from \$195,000 to \$224,000. Appendix B displays the cost information.

No other substantive changes to the DEIS are made in the FEIS. The final text clarifies the impacts to land use section (page 73). Four main clarifications to the intent of Alternative B are included: native Hawaiians would be substantially involved in planning and implementing the trail; trail construction and reconstruction would be limited; federal land acquisition for the trail is not anticipated; federal laws would apply only to federally owned or administered areas and not to adjacent private lands (pages 26-28).

BACKGROUND

In recent years, awareness has increased of the significance of and threats to the ancient around-the-island shoreline footpath, the *ala loa* (long trail), on the island of Hawaii. The need has become urgent for protection of this traditional footpath and its associated natural, cultural, scenic, and recreational values. In recognition of the needs and opportunities, in 1992 the U.S. Congress passed legislation to provide for a study of the potential inclusion of an approximately 175-mile segment of this *ala loa*, the Ala Kahakai (Trail by the Sea), into the National Trails System.

The *ala loa* was the major land route connecting the 600 or more communities of the island kingdom of Hawai'i from the A.D. 1400s-1700s, tying together the lives of over 120,000 people. The trail is associated with many prehistoric and historic housing areas of the island, nearly all the royal centers, and most of the major temples of the island. Its use is associated with the many rulers of the kingdom, with battlefields and the movement of armies during their reigns, and with annual taxation. That portion of the ancient trail traversing the west coast of Hawaii Island was particularly significant between the years 1779 and 1820 when a series of events unfolded that would have lasting consequences for Hawaiian cultural evolution: Captain Cook's landing and subsequent death at Kealahou Bay in 1779; Kamehameha I's rise to power and consolidation of the Hawaiian Islands under monarchical rule; the death of Kamehameha I in 1819, followed by the overthrow of the ancient religious system, the *kapu*; and finally, the arrival of the first Western missionaries in 1820. The trail continued in use throughout the 19th and 20th

centuries, although some sections were modified to accommodate first horses, and later, two-wheeled carts and motorized vehicles.

Approximately half (53.3 percent) of the 175 miles of trail is currently in local, state, or federal government ownership. Another approximately nine percent has public access easements or dedications. An additional twenty percent of the trail in private hands is shown on tax maps or old survey maps as "ancient trails" as defined in the Highways Act of 1892 (Act). In ancient Hawaiian governance, these trails were open to general use. The Act protects the right of the public to use these trails, and they are owned in fee simple by the state. However, representatives of the state trails program believe that a search of records of title would reveal that most of the Ala Kahakai is "ancient trail," as defined by the Act.

STUDY CONCLUSIONS

The study concludes that the Ala Kahakai is significant under the three criteria for national historic trails outlined in the National Trails System Act, as amended, all four of the criteria for the National Register of Historic Places, and as a traditional cultural property. The story of Hawaiian settlement, culture, and governance can be told along the Ala Kahakai providing a deeper appreciation of our history and environment than a single site can afford. The trail links natural resources, cultural resources (historic events, sites, sacred/spiritual values), and past and present experiences (trade and commerce, subsistence and resource gathering). The trail would be unique in the National Trail System. No trail in the system has the abundance of cultural resources along its entire route as does this trail. No trail provides the nearly continuous experience of an enduring indigenous culture which is still practiced along the entire route. At their November 21, 1997 meeting, the National Park System Advisory Board recommended a finding that the trail does have national historic significance based on the criteria developed under the Historic Sites Act of 1935.

The study concludes that reestablishing the route is physically feasible. Significant sections of the original trail remain intact. In locations where the trail fabric has been eroded away by the ocean, covered by lava flows, or damaged by vegetative overgrowth or human actions, the potential exists for establishment of recreational trail links that would create a continuous trail. In some cases, reconstruction using traditional building methods may be possible. Most of the trail was hiked by teams of hikers sponsored by M Mau Nā Ala Hele on National Trails Day in 1993.

The study concludes that desirability of recognizing the trail rests on two key items: first, communities along the way, native Hawaiians, and landowners all be involved in planning and implementing the trail; and second, adequate funding must be ensured to protect cultural and natural resources at the time the trail is designated.

MANAGEMENT ALTERNATIVES

The study presents four alternatives for future protection, interpretation, and management of the Ala Kahakai. Additional alternatives were considered but rejected. The examined alternatives include a no action alternative, a national historic trail (continuous), a state historic trail, and a national historic trail (discontinuous).

The no action alternative, **Alternative A**, would continue present conditions. The "Ala Kahakai" would remain as the 35-mile state demonstration trail. Over time, as ownership records are researched for various reasons, most of the 175-mile trail would be recognized as public, but the *ala loa* and its role in the lives of ancient and contemporary Hawaiians would not be consistently recognized and interpreted. There would be no overall administration of the trail as a unified whole as part of a system of island trails.

The national historic trail (continuous) alternative, **Alternative B**, would provide National Park Service (NPS) administration and oversight of the trail in coordination with the state and county. The trail would be recognized as a continuous route and over time would become continuous on the ground. The NPS would prepare a management plan actively involving native Hawaiians, landowners, trail users, and other interested groups and individuals. An advisory council would be appointed by the secretary of the interior. The trail would be interpreted as a portion of the ancient *ala loa*. The management plan would include a uniform marker for identifying the trail. State and local agencies, private landowners, local groups, and individuals would manage the trail on the ground. The study recommends that natural, cultural, and ethnographic resources would be inventoried and protected before trail segments would be promoted for public use.

The state historic trail alternative, **Alternative C**, would require state legislation to recognize the 175-mile trail as a continuous portion of the *ala loa*. The legislation would outline the requirements of a state management plan and the needs for protection of resources. Most likely, the state trails and access program, Nā Ala Hele, would administer the trail. To achieve the vision for the trail, the state would need to appropriate funds specifically for the planning, protection, development, interpretation, and maintenance of the trail. Funding of this alternative may be unlikely considering the state's current financial situation and priorities.

The national historic trail (discontinuous) alternative, **Alternative D**, would be similar to Alternative B, except that the trail would be recognized as a continuous route, but only intact prehistoric and historic sections would be protected and interpreted for the public. The trail would not be continuous on the ground.

RECOMMENDATION

This study finds that with proper planning, management, and funding, the potential for adverse environmental impacts resulting from any of the action alternatives can be minimized. In keeping with National Park Service (NPS) planning policy, which requires a NPS recommendation, this final study finds Alternative B to be the environmentally preferred alternative. Trail designation requires an act of Congress.

NO ACTION PERIOD

Publication of the notice of availability of the final study and EIS by the Environmental Protection Agency in the *Federal Register* will begin the 30-day "no action period." After 30-day period, the National Park Service can prepare a Record of Decision (ROD) for transmittal by the secretary of the interior to Congress. Agencies and the public may respond to the final study and EIS.

- TABLE 1 -
SUMMARY OF ALTERNATIVES

Topic	Alternative A No Action	Alternative B National Historic Trail (continuous)	Alternative C State Historic Trail (continuous)	Alternative D National Historic Trail (discontinuous)
CONCEPT	<ul style="list-style-type: none"> • A disconnected series of trail segments emphasizing lateral shoreline access. • The "Ala Kahakai" would remain as the 35-mile state demonstration trail. 	<ul style="list-style-type: none"> • A continuous trail on the ground following the route of the <i>ala loa</i>. • Remaining segments of the prehistoric <i>ala loa</i> and historic trails would be joined where necessary by more recent paths, jeep roads, and roads within the ancient trail corridor. 	<ul style="list-style-type: none"> • Same as Alternative B. 	<ul style="list-style-type: none"> • Trail designated as a continuous route, but only federal components and intact remnants of the prehistoric or historic trail would be protected and interpreted. • Trail discontinuous.
RESOURCE PROTECTION	<ul style="list-style-type: none"> • Piecemeal on a case-by-case basis as development or threats occur. • Relies on state and local government regulatory agencies to comply with and enforce laws and regulations in reviewing development proposals. • Sometimes requires individuals to contest development actions. 	<ul style="list-style-type: none"> • National Park Service (NPS) management on federal lands and oversight of certified components. • NPS technical assistance to state, county, landowners, and others. • Federal, state, and local laws apply. • Acquisition from donors or willing sellers possible. 	<ul style="list-style-type: none"> • Authorization required by state legislation describing responsibilities and roles. • Oversight by state expected to be through Nā Ala Hele program. • State and local laws apply. 	<ul style="list-style-type: none"> • Similar to Alternative B, but only intact prehistoric and historic remnants protected.
VISITOR EXPERIENCE	<ul style="list-style-type: none"> • No consistent or unified interpretation of the <i>ala loa</i>. • State demonstration trail marked but not necessarily interpreted as the <i>ala loa</i>. 	<ul style="list-style-type: none"> • Inventoried, protected, and managed portions of the trail made available to the public and marked with a uniform marker. • Trail-long, coordinated interpretation of <i>ala loa</i>, continuing Hawaiian culture, Kingdom of Hawai'i, rise of Kamehameha. 	<ul style="list-style-type: none"> • Expected to be similar to Alternative B. 	<ul style="list-style-type: none"> • Similar to Alternative B, but interpretation more likely to emphasize prehistoric period.
DEVELOPMENT	<ul style="list-style-type: none"> • Shoreline trails constructed as development occurs. • Facilities provided by resorts or by the state at its parks. 	<ul style="list-style-type: none"> • Trail route reestablished and appropriate facilities constructed on the basis of a plan for entire trail. 	<ul style="list-style-type: none"> • Expected to be similar to Alternative B. 	<ul style="list-style-type: none"> • Facilities constructed as necessary to allow appropriate public access to trail segments.
ADMINISTRATION & MANAGEMENT	<ul style="list-style-type: none"> • Possible overall coordination, administration, management of only the existing 35-mile state demonstration trail. 	<ul style="list-style-type: none"> • NPS prepares management plan and staffs advisory council. • NPS provides administration, overall coordination and oversight in cooperation with state and county. • State and local agencies and groups act as trail and site managers. • Local land managers and volunteers encouraged to develop, operate, and maintain the trail. 	<ul style="list-style-type: none"> • State prepares management plan which will describe roles and responsibilities of players. • State provides overall coordination, administration, and oversight. • Possible federal technical assistance. 	<ul style="list-style-type: none"> • Similar to Alternative B, but administration is of a discontinuous trail; staff would be smaller.

- TABLE 2 -
SUMMARY OF IMPACTS

Impact Topic	Alternative A No Action	Alternative B National Historic Trail (continuous)	Alternative C State Historic Trail (continuous)	Alternative D National Historic Trail (discontinuous)
NATURAL RESOURCES				
Anchialine Ponds	<ul style="list-style-type: none"> Fishers and other recreational users may continue to introduce exotic fishes, trash, soaps, shampoos, and sunscreen into ponds. Adverse impacts could be significant. 	<ul style="list-style-type: none"> Potential to lessen continuing adverse impacts through study, monitoring, and interpretation to protect ponds along trail. 	<ul style="list-style-type: none"> State response uncertain without authorizing legislation. Possible continued deterioration. 	<ul style="list-style-type: none"> Similar to Alternative B, but fewer miles of trail protected, and therefore, fewer ponds would be involved.
Sensitive Plant and Animal Species	<ul style="list-style-type: none"> Protection by state and federal laws. Potential for adverse impacts due to unregulated trail use. 	<ul style="list-style-type: none"> Protection by federal and state laws—paramount NPS concern. NPS would consult with USFWS and DLNR. Plans would avoid adverse impacts. 	<ul style="list-style-type: none"> State and federal laws would apply. Potential to avoid adverse impacts would depend on authorizing legislation, planning approach, and funding. 	<ul style="list-style-type: none"> Same as Alternative B.
Nearshore and Reef Resources	<ul style="list-style-type: none"> Continuing recreational harvesting. Locally significant adverse impacts could occur. 	<ul style="list-style-type: none"> Consultation with local traditional users. Recommendations developed. Adverse impacts due to trail use not expected to be significant. 	<ul style="list-style-type: none"> Same as Alternative B. 	<ul style="list-style-type: none"> Same as Alternative B.
CULTURAL RESOURCES	<ul style="list-style-type: none"> Considered on a case-by-case basis as threats or development occur. Landowners may protect through limiting access. Continued loss of trail resources due to natural causes, vandalism, looting, and development. Piecemeal approach to managing trail resources. Adverse impacts could be significant. 	<ul style="list-style-type: none"> Protection by federal and state laws – a paramount concern of NPS. Archeological inventory and ethnographic studies performed. Native Hawaiians involved in management planning and implementation. Trail segments open to public only after protection, maintenance, and monitoring planned for. 	<ul style="list-style-type: none"> Continued commitment of state to protect cultural resources. Full effect of state response uncertain without authorizing legislation. 	<ul style="list-style-type: none"> Same as Alternative B.
VISUAL RESOURCES	<ul style="list-style-type: none"> May be affected by piecemeal trail development along the shoreline. 	<ul style="list-style-type: none"> Affected by trailhead development and interpretive signs and markers. Design guidelines and coordination along entire trail corridor and careful site specific planning. Adverse impacts not expected to be significant. 	<ul style="list-style-type: none"> Same as Alternative B. 	<ul style="list-style-type: none"> Same as Alternative B.

- TABLE 2 -
SUMMARY OF IMPACTS (cont.)

Impact Topic	Alternative A No Action	Alternative B National Historic Trail (continuous)	Alternative C State Historic Trail (continuous)	Alternative D National Historic Trail (discontinuous)
SOCIO-ECONOMIC ENVIRONMENT The Economy and Nearby Communities	<ul style="list-style-type: none"> No impacts. 	<ul style="list-style-type: none"> Some small economic benefit may accrue to communities and landowners along the trail in addition to expected tourist dollars. 	<ul style="list-style-type: none"> Similar to Alternative B. 	<ul style="list-style-type: none"> Similar to Alternative B.
User Experience	<ul style="list-style-type: none"> The prehistoric and historic trail would be recognized in few locations. Opportunities for visitor education and enjoyment would be lost. 	<ul style="list-style-type: none"> Users could walk in the footsteps of the ancient people and experience the extent of the Hawaiian culture along a continuous trail—provides the most opportunity for education and enjoyment. 	<ul style="list-style-type: none"> Potential to be similar to Alternative B, depending upon the authorizing legislation. 	<ul style="list-style-type: none"> Users could experience and enjoy the most significant sites with highest integrity along the route of the prehistoric <i>ala loa</i>—fewer opportunities than Alternative B.
Landownership	<ul style="list-style-type: none"> No impacts due to trail authorization. 	<ul style="list-style-type: none"> No impacts from federal acquisition. "Ancient trail" crossing private land would be made available over time to the public in some way. Need to define trail boundary and special visual and cultural landscapes for protection. Landowners included in trail planning. Landowners encouraged to certify segments or associated resources as part of the national trail. State law protects landowner from liability for trail use. Potential for trespass. With proper management, adverse impacts not expected to be significant. 	<ul style="list-style-type: none"> Impacts would depend upon authorizing legislation. 	<ul style="list-style-type: none"> Similar to B, but fewer landowners may be involved.
Land Use	<ul style="list-style-type: none"> No change. 	<ul style="list-style-type: none"> State and county regulations would continue to apply to lands adjacent to trail. Access along the trail right-of-way may be promoted for public use. 	<ul style="list-style-type: none"> Similar to Alternative B. 	<ul style="list-style-type: none"> Similar to Alternative B.

- TABLE 2 -
SUMMARY OF IMPACTS (cont.)

Impact Topic	Alternative A No Action	Alternative B National Historic Trail (continuous)	Alternative C State Historic Trail (continuous)	Alternative D National Historic Trail (discontinuous)
UNAVOIDABLE ADVERSE IMPACTS	<ul style="list-style-type: none"> Cultural and natural resources along the trail corridor would continue to be lost. 	<ul style="list-style-type: none"> Potential for visual intrusion from signs, markers, and facility development. Potential in short-term to affect plants and animals due to construction. Long-term increased trail use may affect plants, animals, and fishes. 	<ul style="list-style-type: none"> Expected to be similar to Alternative B. 	<ul style="list-style-type: none"> Similar to Alternative B.
SHORT-TERM USE AND LONG-TERM PRODUCTIVITY	<ul style="list-style-type: none"> Short-term use could adversely affect long-term potential to complete a continuous trail and protect resources. 	<ul style="list-style-type: none"> No short-term use is anticipated to detract from the long-term effect of a protected trail corridor. 	<ul style="list-style-type: none"> Expected to be similar to Alternative B. 	<ul style="list-style-type: none"> Similar to Alternative B.
IRREVERSIBLE AND IRRE- TRIEVABLE COMMITMENT OF RESOURCES	<ul style="list-style-type: none"> No impact. 	<ul style="list-style-type: none"> Financial resources to build and remove trail facilities would be an ir retrievable investment. 	<ul style="list-style-type: none"> Expected to be similar to Alternative B. 	<ul style="list-style-type: none"> Similar to Alternative B.
CUMULATIVE IMPACTS Composed of past impacts, external impacts, and predicted impacts under each alternative	<ul style="list-style-type: none"> Trail resources would continue to be threatened by development and natural causes. Trail recognition would continue to be fragmented. Significant cultural and historical values of the <i>ala loa</i> would be lost. 	<ul style="list-style-type: none"> Combined effects of potential actions would be beneficial for natural and cultural resources. The <i>ala loa</i> and historic trail protected as much as possible within the limits of the National Trails System Act. The final effect, sometime in the future, would be a continuous trail administered by the NPS and enjoyed by the public in perpetuity. 	<ul style="list-style-type: none"> Cumulative impacts are unpredictable without the authorizing legislation. 	<ul style="list-style-type: none"> Similar to Alternative B, but the final effect would be the protection of significant segments of the prehistoric and historic trail in perpetuity under the administration of the NPS.

ACKNOWLEDGEMENTS

In addition to the many people who provided assistance in completion of this study report, the National Park Service owes a special debt of gratitude to four individuals and one group:

Deborah Chang, the first program manager of Nā Ala Hele, for help with trail location and description, information on anchialine ponds, and editing;

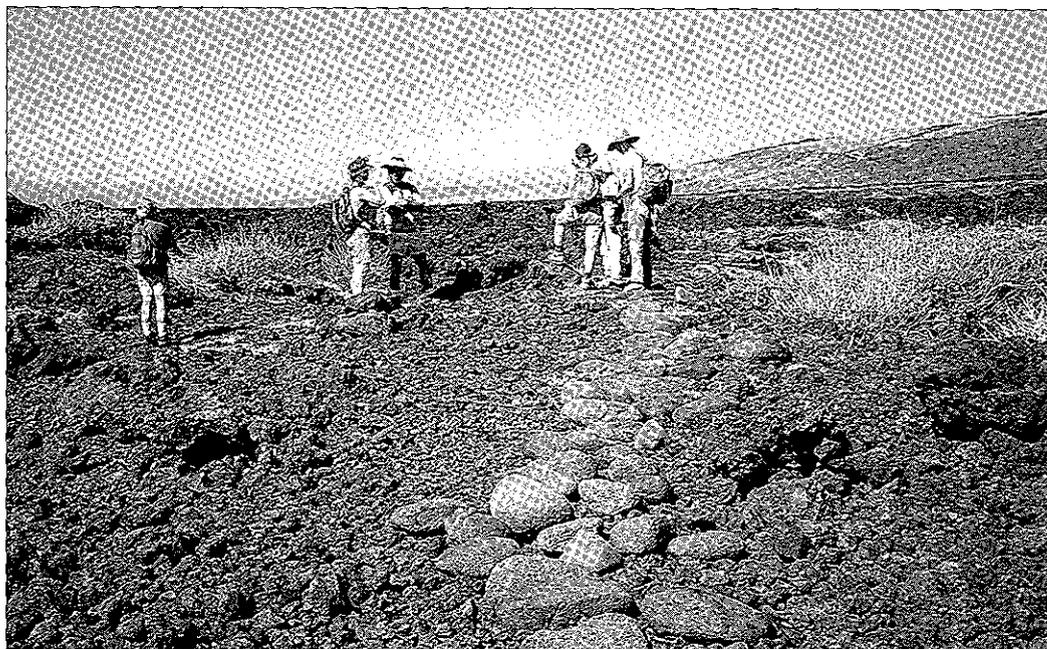
Ross Cordy, State Archeologist in the State Historic Preservation Division, Department of Land and Natural Resources, for preparing a report on the archeology of the Ala Kahakai and reviewing the draft text of the study;

Christine Meller, the Nā Ala Hele Program Manager for the first two years of the study and now in the Governor's Office with the Coastal Zone Management Program, for organizing initial meetings and contacts;

Susan Sakai, a member of the Nā Ala Hele Oahu Island Advisory Council and a professional planner with Belt Collins, for providing information during preparation of the study and expert help in editing the preliminary draft.

Ē Mau Nā Ala Hele, a non-profit Hawaiian trails organization, for providing information crucial to determining the physical feasibility of the Ala Kahakai by hiking nearly all of the trail on National Trails Day 1993. The organization provided the National Park Service the logs of the hikes and photos which are used in this document. Their work is summarized in Appendix F. Key contacts were Hugh Montgomery, Keith Wallis, Claire Hachmuth, and Judy Graham. For National Trails Day 1997, the group plans to begin a hike on the *ala loa* at Kēōkea and hike every weekend to arrive at Hilo on National Trails Day 1998.

Cover photo: Stepping stone trail in North Kona, ©Franco Salmoiraghi; all other photos courtesy Ē Mau Nā Ala Hele, except where noted.



A National Trails Day team east of Punalu'u, Ka'u.

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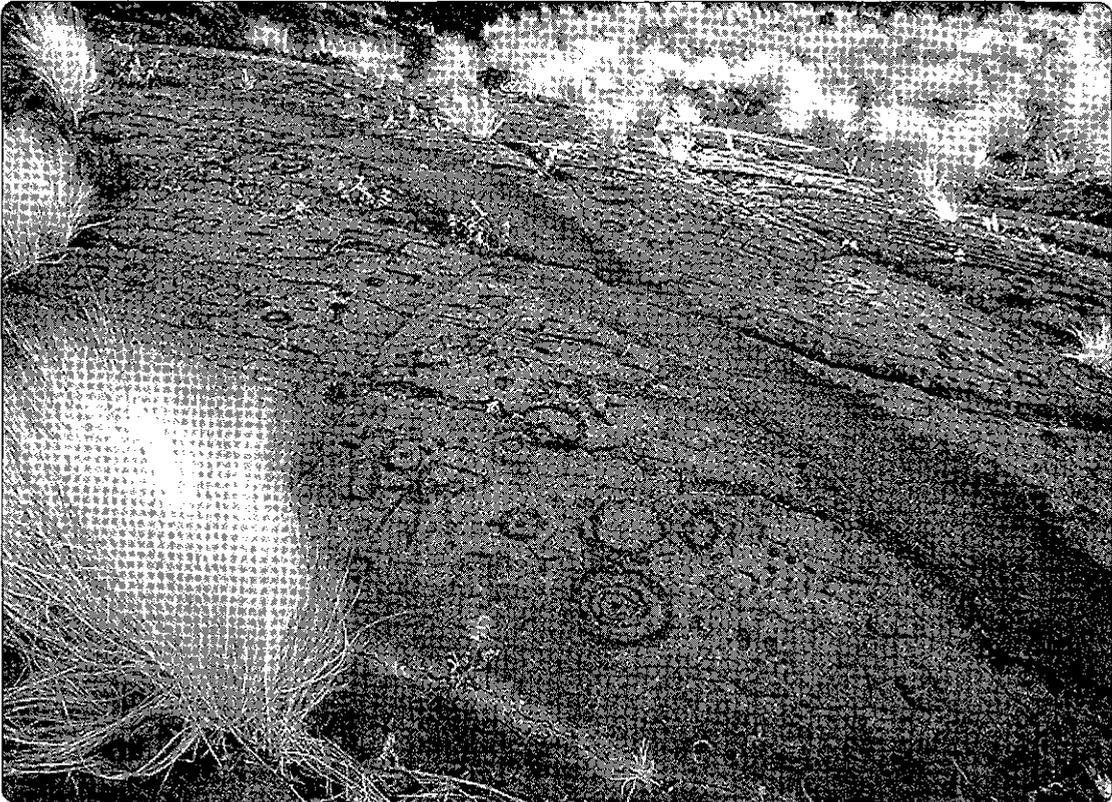
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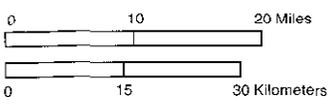
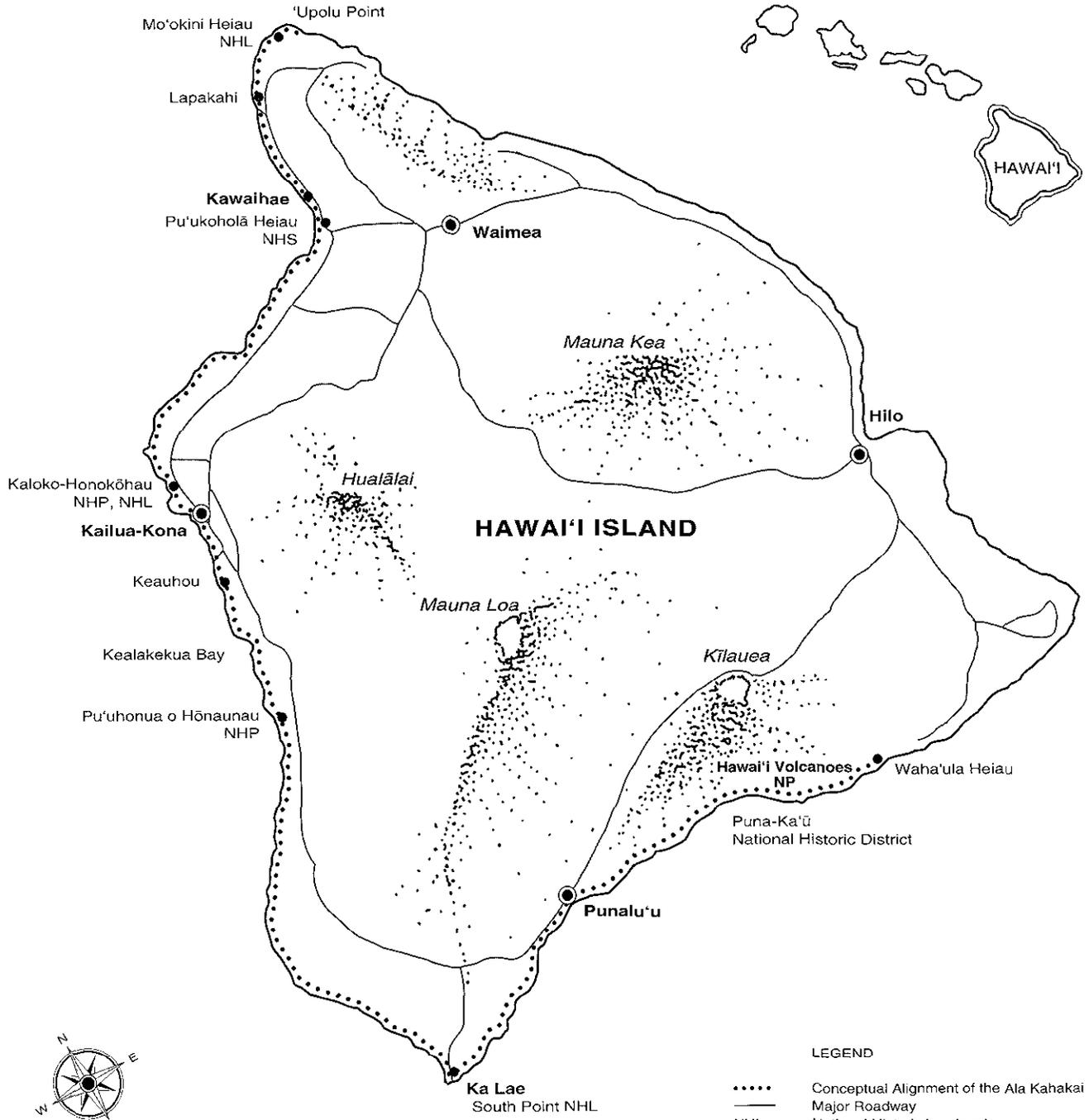
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INTRODUCTION



*Trail worn into pāhoehoe lava from foot traffic over
centuries in the Waikola petroglyph field — ©Franco Salmoiraghi*

VICINITY MAP AND LOCATION OF THE ALA KAHAKAI



LEGEND

- Conceptual Alignment of the Ala Kahakai
- Major Roadway
- NHL National Historic Landmark
- NHP National Historical Park
- NHS National Historic Site
- NP National Park

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INTRODUCTION

PURPOSE

The purpose of the present study is to provide information to the United States Congress on the national significance of the *Ala Kahakai* (Trail by the Sea) and on the feasibility and desirability of designating it as a National Historic Trail. The study evaluates the Ala Kahakai route against the criteria for national trail designation as set forth in the National Trails System Act (NTSA), as amended, and against criteria for the National Register of Historic Places. The study evaluates feasibility and desirability, as described in the NTSA, on the basis of whether or not it is physically possible to develop a trail along a route being studied, whether the development of the trail would be financially feasible, and whether there is public support for the trail.

To help assess feasibility and desirability, this draft study outlines four alternative strategies for protection, interpretation, and management of the trail and weighs the impacts and benefits of each alternative.

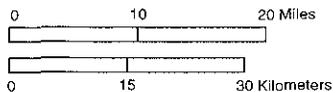
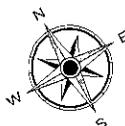
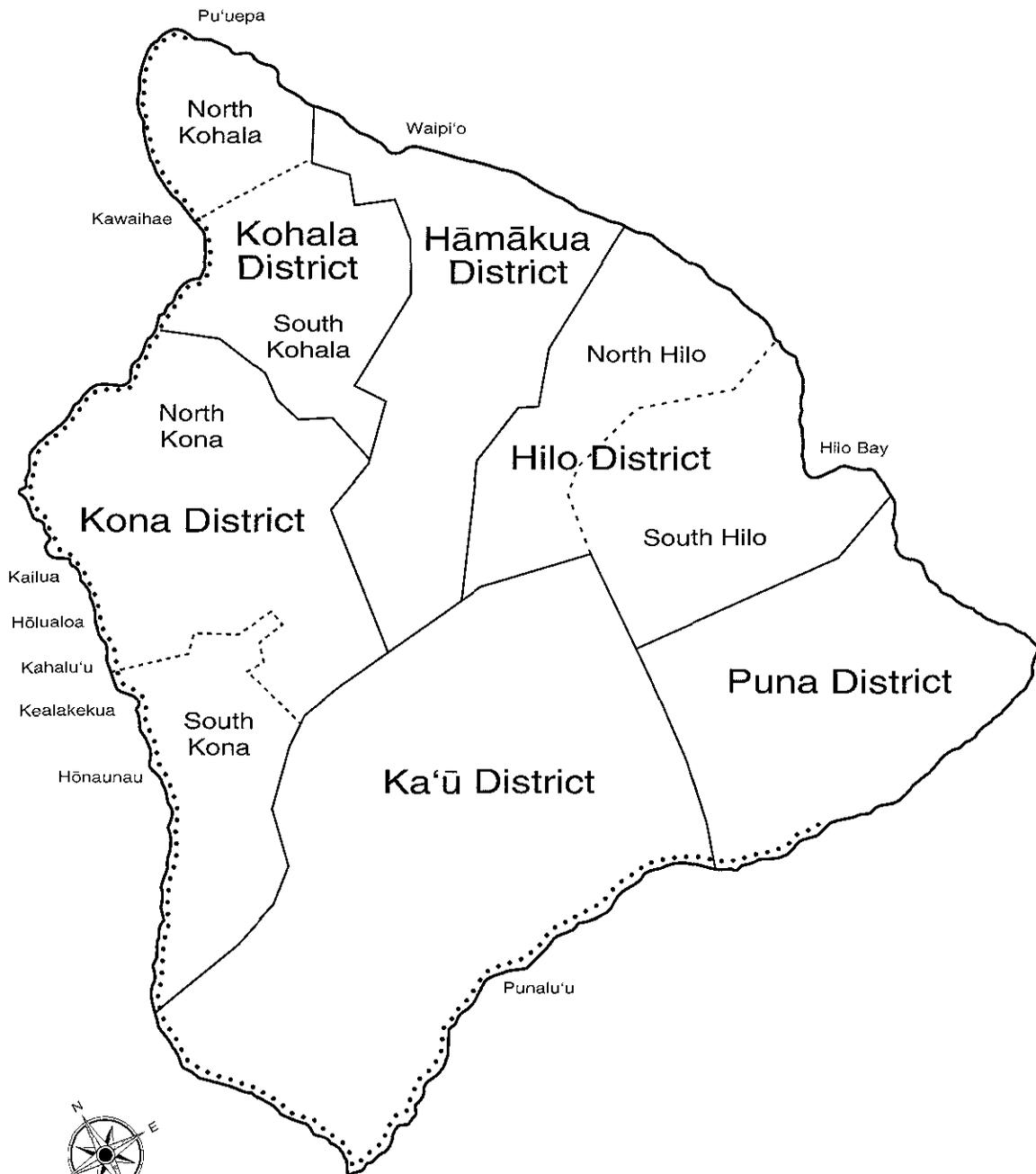
The study is not a user's trail guide. The study does not provide a detailed description of the trail treadway or associated resources. In some places the trail must be reestablished; in others, the trail and its resources are unprotected and not ready or available for public use. For purposes of the study, the trail is shown conceptually.

The study is not a management plan. Management approaches are evaluated for feasibility, but the study does not provide the detailed management programs necessary to minimize impacts to cultural and natural resources if the Ala Kahakai is authorized. That level of management guidance and environmental assessment would be provided through a subsequent comprehensive management plan as required by the NTSA, if the trail is authorized as a federal trail, or by Hawaii Revised Statutes, if the trail is authorized as a state trail.

DESCRIPTION OF THE TRAIL

The Ala Kahakai follows an approximately 175-mile portion of the prehistoric *ala loa* (long trail) roughly parallel to the seacoast extending from 'Upolu Point on the north tip of Hawai'i Island down the west coast of the island around Ka Lae (South Point, literally, "The Point") to the east boundary of Hawai'i Volcanoes National Park at the ancient shoreline temple (*heiau*) known as Waha'ula Heiau (Map 1). In prehistoric times, the *ala loa* circuited the entire island.

ANCIENT AND MODERN DISTRICTS OF HAWAII ISLAND WITH ANCIENT ROYAL CENTERS



LEGEND

- Conceptual Alignment of the Ala Kahakai
- Ancient Districts
- - - - Modern Districts

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Throughout the years of late prehistory, A.D. 1400s-1700s, and through much of the 1800s, transportation and communication within the Hawaiian kingdom was by canoe and by major trail systems. The major trails linked the 600 or so *ahupua'a*¹ of the kingdom's six districts on Hawai'i Island. These districts were Kohala, Hāmākua, Hilo, Puna, Ka'ū, and Kona (Map 2). Today, the ancient districts remain with the exceptions that Kohala, Kona, and Hilo each have two parts, north and south.

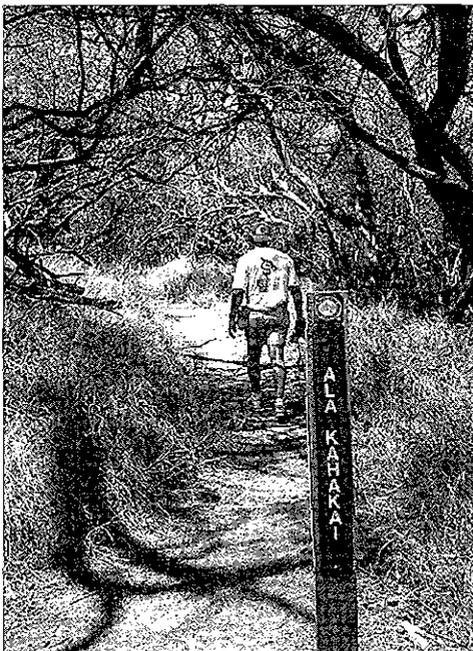
The Ala Kahakai combines surviving elements of the prehistoric *ala loa* with segments of later historic government trails (*alanui aupuni*) that developed parallel to the prehistoric route or were constructed over original trail segments, and with more recent pathways and roads.

BACKGROUND OF THE STUDY

Recognition of the value of Hawai'i Island's prehistoric coastal *ala loa* has been growing for decades. In the early 1970s, the State of Hawaii Departments of Land and Natural Resources and of Planning and Economic Development developed a planning concept called *Nā Ala Hele* (Trails for Walking), a proposal for cooperative management of a statewide trail system. In 1988, the concept became Hawaii's Statewide Trail and Access System with a mission to develop trail access, both historic and modern, throughout the state while conserving Hawaii's unique environmental and cultural heritage. *Nā Ala Hele* is a program in the Division of Forestry and Wildlife (DOFAW), Department of Land and Natural Resources (DLNR).

The *Nā Ala Hele* planning process proposed a demonstration trail for each island. On Hawai'i Island this trail was named the "Ala Kahakai." It is a shoreline route from Pu'ukoholā National Historical Park in Kawaihae to the Old Kona Airport Park at Kailua-Kona, an area that includes 50 miles of trails and 35 miles of shoreline. It was recognized at the time that the coastal trail system along the west coast of Hawai'i Island, with its abundance of significant cultural resources, scenic, and recreational potential, was more extensive than the original section designated as a demonstration trail.

In 1992, Senator Daniel Akaka introduced legislation (P.L. 120-461), proposing for designation an expanded 175-mile section of the coastal trail to be called the Ala Kahakai, or "Trail by the Sea." Subsequently, the Ala Kahakai Study Trail was authorized under the National Trails System Act (P.L. 90-543; 16 U.S.C. 1241 et seq., as amended through P.L. 102-461). [See Appendix A for selections from the act.]



A portion of the state demonstration trail.

¹ An *ahupua'a* is an ancient land division usually extending from the mountains to the sea, cross-cutting all environmental zones. This system provided residents, theoretically at least, with equal access to the necessities of survival: the bounty of the sea, the harvest of the inland garden areas, and products from the forested uplands.

ALA KAHAKAI NAME

The term Ala Kahakai is a modern conceptual designation coined for planning purposes and as a focal point around which advocacy groups such as Ē Mau Nā Ala Hele could rally for the preservation of Hawaiian trail systems (State of Hawaii 1991). We do not in fact know what the name of the ancient trail was, if it ever had a single name or perhaps different names in different districts, or how the name and the configurations of the trail itself changed over time. The term *ala loa* is taken from the writings of the traditional culture historian, Malo (1951:17) who said, "When a road passed around the circumference of the island, it was called the *ala loa*." Another source confirms the use of this term into the late 19th century. C.J. Lyons a surveyor for the monarchy, had been involved in surveying the private land awards and the communities or *ahupua'a*, which involved local informants accompanying the surveyors. His description of the *ahupua'a* altar stated it "was erected at the point where the boundary of the land was intersected by the main road, *alaloa*, which circumferented each of the islands" (1875:104). Thus, for the purpose of the present study, the term Ala Kahakai is considered to be synonymous with the *ala loa*.

HISTORIC OVERVIEW OF THE STUDY ROUTE²

THE HAWAIIAN TRAIL SYSTEM

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



An example of a stepping stone trail near Kūki'o, North Kona.

² The Historic Overview section is summarized from State of Hawaii Department of Land and Natural Resources (DLNR), *Description of the Ala Kahakai Trail*, Ms. on file, Trails and Access Program, DLNR, Honolulu; Helene R. Dunbar, *Cultural Resources Assessment, Ala Kahakai, Island of Hawai'i*, National Park Service, Pacific Great Basin Support Office, San Francisco, California, 1997. That study incorporates information from Ross Cordy, *The Ala Kahakai or the Ala Loa: An Archaeological and Historic Preservation Perspective*. Ms. on file, State Historic Preservation Division, DLNR, Honolulu.

Until the 1840s, overland travel was predominantly by foot and followed the prehistoric trails. With the use of horses and mules from the 1840s onward, prehistoric trails were often modified by removing the smooth stepping stones which caused the animals to slip. Wider, straighter trails were constructed to accommodate two horses passing each other and eventually horsedrawn carts (Apple). Unlike the earlier trails, these trails could not conform to the natural, sometimes steep terrain. They often by-passed the prehistoric route as coastal villages became less important.



'A'a trail with stepping stones removed near Ka'apuna in South Kona.

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

The Ala Kahakai is comprised of remnants of prehistoric and historic trails and more recent roads which illustrate the effects of changing modes of transportation from foot travel, to horse and mules, to carts, and finally jeeps and cars.

TRADITIONAL USES OF THE ALA LOA

- **Community Interaction** – Most of the island's *ahupua'a* had the bulk of their residences along the shore. The *ala loa* connected these land units and settlements. Encircling the entire island, it provided for economic and social interaction between people of adjacent communities.

- **Royal Centers** – Nearly all of the royal centers of the kingdom lay along the *ala loa*: Waipi'o in Hāmākua; Hilo Bay in Hilo; Punalu'u in Ka'ū; Hōnaunau, Kealahou, Kahalu'u, Hōlualoa and Kailua in Kona; and Kawaihae and Pu'uēpa (at 'Upolu Point) in Kohala. (See Map 2 for approximate locations.) In addition to the residences of the king and high chiefs, these centers each had major sacrificial temples (*luakini*), refuge areas (*pu'uhonua*), and sporting grounds, and in two cases royal mausoleums (Hale o Liloa in Waipi'o and Hale o Keawe in Hōnaunau). Other large *heiau* were present in some centers. Large populations were focused around these centers.

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

- **Tax Collection** – In addition, the *ala loa* was the route for the ruler’s tax collectors during the *Makahiki* season, a ritual period spanning approximately four months, from the last month of the dry season through the first three months of the wet season (from October or November to January or February). During this period, the strict religious ceremonies at the *luakini heiau* were halted. Other religious ceremonies and special sporting events were held. War was prohibited. For tax collection, a procession of priests, attendants, and athletes carried a wooden image of Lono clockwise around the island on the *ala loa* in a circuit of 23 days. In theory, the procession halted at the altar of each *ahupua’a*, collected tribute, and traveled on. In practice, several of the 600 *ahupua’a* most likely gathered their tribute in one place to expedite collection.

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

KAMEHAMEHA AND ISLAND UNIFICATION

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

Major events in Kamehameha’s life occurred along the *ala loa*. He was born near the northern end of the Ala Kahakai at ‘Umiwai Bay near ‘Upolu Point. At the time of Captain Cook’s arrival at Kealakekua Bay in 1779, Kamehameha was a military leader and high-ranking chief in the court of his uncle, Kalani’opu’u. After Kalani’opu’u’s death in 1782, Kiwala’o became king, and the Hilo chiefs were granted many of the lands of the kingdom. As a result, with Kamehameha as their leader, the Kona and Kohala chiefs revolted and fought the battle of Mokuohai at which Kiwala’o was slain. The kingdom broke into three: Kamehameha controlled Kona, Kohala, and Waipi’o; Keōua controlled the Ka’ū kingdom of Ka’ū and part of Puna; and their uncle, Keawema’uhili, controlled a Hilo kingdom consisting of most of Hāmākua, all of Hilo, and parts of Puna. (Cordy, 1997)

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

Kamehameha consolidated his rule of the island when Keōua was killed along the shoreline *ala loa* below Pu’ukoholā Heiau in 1791. Pu’ukoholā was Kamehameha’s temple of destiny. Early in the days of his drive for supremacy of Hawai’i Island, he began a reconstruction of Mailekini Heiau at Kawaihae for consecration to the family war god Kūkā’ilimoku whose favor he sought. However, a great *kahuna* (seer) told him that victory over Keōua and eventual mastery of the Hawaiian Islands would be his if he built an immense temple to the war god at Pu’ukoholā on the crest of the hill just above Mailekini Heiau (‘Ii 1959:17).

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

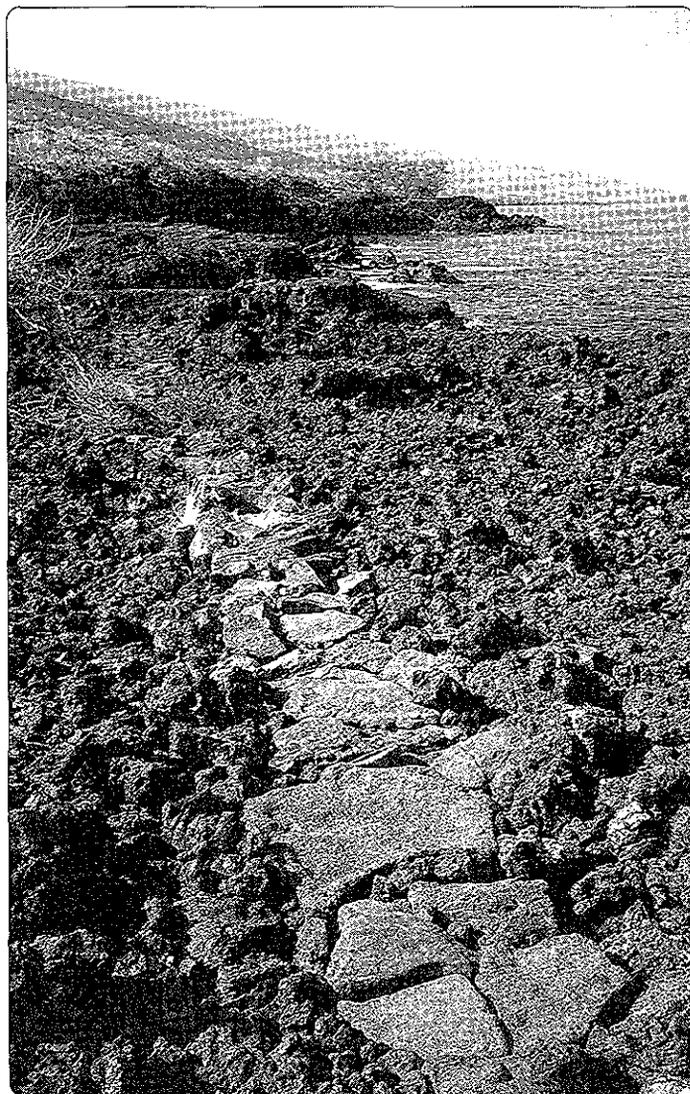
Kamehameha I lived out his final years from 1813-1819 at the chiefly complex of Kamakahonu in Kailua along the *ala loa*.

OVERTHROW OF THE KAPU

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

The overthrow of the *kapu* provoked the last historic battle to be staged along the *ala loa*. Leading a faction that opposed the overthrow was a high chief, Kekuaokalani, who with his supporters took arms to overthrow Kamehameha II, his government, and to reinstate the *kapu*. The ensuing battle took place at Kuamo'o, south of Keauhou Bay. Kamehameha II's forces were victorious and Kekuaokalani was slain. The bodies of those who fell in the battle were interred along the *ala loa* and covered with rocks. The rock piles still remain.

SIGNIFICANCE EVALUATION



*Flat pāhoehoe used to "pave" trail through
'a'ā lava in South Kona*

SIGNIFICANCE EVALUATION

As required by the National Trails System Act, as amended, the Ala Kahakai must be evaluated against criteria for national trails. In this section, the trail is evaluated as a national scenic trail and a national historic trail and for eligibility to the National Register of Historic Places. In addition, the section includes significance statements prepared by the May 1994 workshop group which provide potential interpretive themes.

CRITERIA FOR NATIONAL TRAILS

NATIONAL SCENIC TRAILS

Under the National Trails System Act (NTSA), as amended, the Ala Kahakai could be evaluated as either a national scenic or a national historic trail. A national scenic trail is defined as a continuous, long-distance route designed for hiking and other compatible non-motorized uses. These trails have high recreational values and pass through areas with nationally significant scenic, natural, historical, or cultural qualities. They should be able to attract visitors from throughout the country. They avoid as much as practical motor roads, mining areas, power transmission lines, and commercial and industrial developments that are incompatible with protecting the trail's natural condition and detract from the recreational experience.

Although the Ala Kahakai has potential to meet all requirements for a national scenic trail, adding it to the National Trails System on this basis would trivialize its true significance. The legislation authorizing this study and the trail resources themselves, confirm that its overriding significance lies in its cultural and historical value.

NATIONAL HISTORIC TRAILS

A national historic trail is an extended trail which follows as closely as possible the original trails or routes of travel of national historical significance. Designation of the route is continuous, but the established or developed trail need not be continuous on site. The purpose of such trails is to identify and protect the historic route and its historic remnants and artifacts for public use and enjoyment. The NTSA [Sec.5(b)(11)] describes the following three criteria which a trail must meet to qualify as a national historic trail:

- (A) It must be a trail or route established by historic use and must be historically significant as a result of that use. The route need not currently exist as a discernible trail to qualify, but its location must be sufficiently known to permit evaluation of public recreation and historical interest potential. A designated trail should generally accurately follow the historic route, but may deviate somewhat on occasion of necessity to avoid difficult routing through subsequent development, or to provide some route variations offering a more pleasurable recreational experience. Such deviations shall be so noted on site. Trail segments no longer possible to travel by trail due to subsequent development as motorized transportation routes may be designated and marked on-site as segments which link to the historic trail.

- (B) It must be of national significance with respect to any of several broad facets of American history, such as trade and commerce, exploration, migration and settlement, or military campaigns. To qualify as nationally significant, historic use of the trail must have had a far reaching effect on broad patterns of American culture. Trails significant in the history of native Americans may be included.
- (C) It must have significant potential for public recreational use or historical interest based on historic interpretation and appreciation. The potential for such use is generally greater along roadless segments developed as historic trails and at historic sites associated with the trail. The presence of recreation potential not related to historic appreciation is not sufficient justification for designation under this category.

EVALUATION AS A NATIONAL HISTORIC TRAIL

The Ala Kahakai, a substantial portion of the *ala loa*, meets all three criteria for national historic trails.

- (A) The *ala loa* had prehistoric and historic use and is significant as a result of that use. Much of the prehistoric and historic route currently exists as a discernible trail, and its location is sufficiently known to permit evaluation of public recreation and historical interest potential. The generally accurate historic route can be followed with some minor deviations due to land subsidence, lava flows, wave action, or development. Linking recreational trails within the historic corridor can connect the prehistoric and historic trail segments to make a continuous trail. The only trail segment which has been developed as a paved road, Ali'i Drive, may be designated and marked on site as a segment which links to the historic trail.
- (B) The trail is nationally significant with respect to broad facets of native Hawaiian and American history, including the social, economic, religious, and political aspects of the Kingdom of Hawai'i in prehistoric times and under Kamehameha, who eventually unified all the islands. Its importance to the Hawaiian culture continues today. Its 175-mile length includes four national parks and five national landmarks.
- (C) The trail has significant potential for public recreational use or historical interest based on historic interpretation and appreciation. It passes hundreds of archeological and cultural sites, follows the scenic shoreline of west Hawai'i, and provides access to a range of shoreline activities, including subsistence gathering and fishing activities of native Hawaiians.

CRITERIA FOR THE NATIONAL REGISTER OF HISTORIC PLACES

Not only does the Ala Kahakai meet the criteria for national historic trails, but it may be eligible to the National Register of Historic Places. Part 60.4 of Chapter I of Title 36 of the Code of Federal Regulations (CFR) outlines the four principal criteria for evaluating cultural properties that may be eligible for nomination to the National Register of Historic Places (NRHP):

"The quality of significance in American history, architecture, archeology, and culture is present in districts, sites, buildings, structures, and objects of state and local

importance that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and

- A) That are associated with events that have made a significant contribution to the broad patterns of our history; or
- B) That are associated with the lives of persons significant in our past; or
- C) That embody the distinctive characteristics of a type, period, or method of construction, or that possess high artistic value, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D) That have yielded, or may be likely to yield information important in prehistory or history (36 CFR 60.4)."

EVALUATION FOR NATIONAL REGISTER OF HISTORIC PLACES

Several sections of the trail are already on the NRHP as individual properties, or are incorporated as a contributing property of an archeological district. Additional trail segments that still retain integrity of construction and setting would most likely be deemed eligible under Criterion A (association with historic events), Criterion B (association with the lives of significant persons), Criterion C (embodiment of a distinctive construction style), and Criterion D (information potential). Dozens of other cultural sites along the ancient route are already listed on the national register as significant under one or more of the register criteria. Most of the National Historic Landmarks associated with the trail are, in fact, nationally significant under all four of the national register criteria. Many prehistoric and historic sites have been determined eligible by the State Historic Preservation Division, but have never been formally nominated to the national register. Still other cultural properties, probably in the hundreds, remain incompletely recorded and not yet evaluated.

A special class of properties associated with the Ala Kahakai that may be significant under any or all of the NRHP criteria is the traditional cultural property (NPS, 1990; 1993). A traditional cultural property (TCP) is a site or a place, that is eligible for inclusion on the national register because of its association with cultural practices and beliefs (1) that are rooted in the history of a community and passed down through the generations in oral literature or history, and are (2) important to maintaining the continuity of the community's traditional beliefs and practices.

Some TCPs along the Ala Kahakai are sacred to the extent that some are worshipped with offerings in the present day. They may include sites with significant legendary associations, associations with ancient religious practices, specialized subsistence gathering areas, and so on. Among Hawai'i Island's better known traditional cultural properties are Mo'okini Heiau and Waha'ula Heiau, associated with Pā'ao, the legendary priest-navigator from Kahiki; South Point, a famous fishing ground, marked with a fishing *heiau*, Kalaka, reputedly used by Kamehameha; and Kilauea Crater, home of the fire goddess Pele whose arrival from Polynesia and wanderings throughout the Hawaiian Archipelago in search of a home have been chronicled in the oral traditions and numerous legends. Mo'okini, Waha'ula, South Point, and Pele all had associations with the *ala loa*.

In addition to meeting the requirements of these federal acts, a workshop group articulated the following significance statements expressed from their experience. (See Consultation and Coordination section for a list of participants in the workshop.)

WORKSHOP STATEMENTS OF ALA KAHAKAI SIGNIFICANCE

Significance statements capture the essence of a trail's importance to the United States' heritage. They describe the distinctiveness of the totality of the trail's resources and place them within a broader context (regional, national, international). Significance statements identify those resources and values that must be preserved to accomplish the trail's purpose. These statements provide a framework for trail interpretation and education.

Workshop participants identified five general areas of significance: linkages, retracing footsteps, access, culture, and environmental protection. Small groups developed statements for each topic by summarizing several individual statements and then reviewed them with the entire group. These statements were reviewed by the public through a newsletter with comment form and found generally acceptable.

LINKAGES

The Ala Kahakai was essential to the early Hawaiian's movement from place to place. It links natural resources, cultural resources (historic events, sites, sacred/spiritual values), and past and present experiences (trade and commerce, subsistence resource gathering). It is the longest prehistoric and historic Hawaiian trail, has the most intact segments, has great natural and cultural substance, and has an extensive history related to the Kingdom of Hawai'i.

RETRACING FOOTSTEPS

On the Ala Kahakai, future generations can follow the footsteps of the *ka po'e kahiko* (people of old Hawai'i).

ACCESS

The Ala Kahakai provides the longest continuous shoreline access to subsistence uses, cultural resources, wilderness, and recreational areas. Experience of these can deepen personal values with respect to native Hawaiians, their traditions, and life styles.

CULTURE

The Ala Kahakai is a dynamic cultural resource reflecting the values of an island people and their continuing responsible relationship with their land and ocean resources. More events of historic importance took place along this shoreline than in any other one area in Hawai'i.

ENVIRONMENTAL PROTECTION

The Ala Kahakai passes through and must provide protection for significant natural areas and ecosystems with indigenous and endemic species along its route.

ISSUES



Papamū (checkerboard) for playing Kōnane, an ancient Hawaiian game resembling checkers. Many are found along the Ala Kahakai, this one at Kīholo, North Kona.

ISSUES

Several concerns about trail recognition emerged during the scoping process. Scoping involved two written communications to a mailing list of approximately 400 individuals. Public meetings were conducted in April 1994 at five locations on Hawai'i Island. A total of 69 people attended these meetings. In addition, the National Park Service met with 60 individuals representing county and state agencies, landowners, and native Hawaiians. General categories of concern developed from the scoping sessions were reviewed and corroborated through a newsletter and response form mailed in September 1995 to which 35 people responded.

RESOURCE PROTECTION

All categories of respondents—native Hawaiians, landowners, resort managers, trail users, historians, archeologists, resource managers—expressed concern for protection of natural resources and culturally important sites associated with the trail. Many worried that desecration of sacred sites and vandalism and looting of archeological sites, which is an ongoing problem, could increase if the trail is recognized nationally and promoted to the public.

Opinions on the best resource protection ranged from limiting public access to educating the public through providing access, management, and interpretation. On the one hand, some landowners stated that their management of trail resources is appropriately respectful of archeological resources and that the best protection for resources may be through the limited access they provide today. Some native Hawaiians supported this view.

On the other hand, some respondents cited the loss of cultural and natural resources due to development. County development processes have allowed destruction of some remnants of the prehistoric trail as long as developers provide public access to the shoreline. These respondents felt that the best hope for protection of cultural and natural resources is through public recognition and education.

The majority of respondents felt that federal recognition and administration in coordination with state and local management would provide the best resource protection. Some native Hawaiians supported these views.

Some native Hawaiians expressed deep concern for protection of natural and cultural resources, which are often one and the same to them. The trail connects hundreds of cultural sites and traditional use areas. Native Hawaiians are concerned that increased public use could impact areas of deep spiritual significance and their use of these areas to practice their cultural traditions. They also had concerns for the effect of trail recognition on their gathering and subsistence rights. They emphasized that the trail is a part of a way of life, that it includes not only the pathway but what is beside the trail. Desirability of a nationally recognized trail to native Hawaiians would appear to hinge on respect

for their culture, on native Hawaiian involvement in management, interpretation, inventory and monitoring, and maintenance, and on adequate funding to manage the trail appropriately.

LANDOWNERSHIP

Responding landowners generally expressed four concerns about trail recognition: liability, added bureaucracy, public perception, and vandalism.

- **Liability** – They fear that public use of a trail over their lands could open them to the expense of fighting liability suits even though state law protects them from liability for recreational use of their lands.

- **Added Bureaucracy** – They are concerned that national trail status would add another layer of government bureaucracy to already highly regulated land use, further hampering their flexibility in the use and development of their lands.

- **Public Perception** – Resort managers and large landowners such as the Kamehameha Schools/Bernice P. Bishop Estate expressed concern with public perception: if the trail is nationally authorized, it could become a rallying point for anti-growth groups and preservationists. They recognize that the trail is not just a pathway but a whole network of resources which, if protected as part of a national trail, could impact their ability to develop their land.

- **Vandalism** – Landowners worry that public access across their properties could lead to trespass, litter, and misuse, and that the burden of trail maintenance and protection would fall disproportionately on them.

For landowners, desirability of a nationally recognized trail would appear to hinge on not adding to existing limitations on the use and development of their land, a clear definition of the limits of trail resources, and adequate funding and public support to manage the trail appropriately.

DEVELOPMENT AND USE

Several respondents noted that some portions of the Ala Kahakai would not be easy to use. Much of the trail is located over difficult terrain with unsure footing in hot, unprotected areas with little water. Several respondents expressed concern for the potential adverse effect of commercial use, especially ecotourism, on trail resources and on the opportunity of native Hawaiians and others to use the trail. This feasibility study cannot address these issues, but a subsequent management plan could address safety and security of trail users, trail access and parking, and how tourism could be accommodated along the trail.

ALTERNATIVES



*Ala loa lined by housing sites, through Kí'ilae Village
south of Pu'uhonua o Hōnaunau National Historic Park,
South Kona – NPS photo*

ALTERNATIVES

ALTERNATIVES DEVELOPMENT

In May 1995, the National Park Service with the help of Sea Grant Extension Service, University of Hawaii, conducted a two-day workshop of 26 people representing groups with a range of interests in the trail: district, county, state, and federal agencies; politicians; native Hawaiians; trail users; experts on historic, cultural, and natural resources; large and small landowners. (See Consultation and Coordination for the list of participants.) This group addressed the issues raised during the scoping process. They drafted statements of trail purpose, significance, and vision, discussed opportunities and constraints, and outlined some possible management alternatives which would meet the vision for the feasibility study. These statements may alter during preparation of a comprehensive management plan as the trail is known in more detail.

STATEMENT OF PURPOSE FOR THE TRAIL

A statement of purpose defines why a particular trail is recognized. Alternatives for the trail's use and management should be consistent with the purpose. After reviewing Senator Akaka's testimony when he introduced the trail legislation to Congress (see Appendix A), the following statement of purpose was drafted:

The purposes for a proposed Ala Kahakai authorization would be (1) to preserve, protect, reestablish as necessary, and maintain a substantial portion of the ancient *ala loa* and associated resources, and (2) to provide for public use, enjoyment, and education—guided by native protocol and etiquette—while protecting the trail's natural and cultural heritage and respecting private and community interests.

VISION FOR THE TRAIL

A vision describes a "desired future," future conditions that should exist to accomplish the trail's purposes and maintain its significance. It describes the conditions under which trail recognition would be desirable. Workshop participants imagined all the conditions that should exist ten or 15 years in the future and described the trail in the present tense as follows:

- **Concept/Visitor Experience**
 - The Ala Kahakai is a continuous trail with adequate points of access and appropriate facilities to support its use.
 - The trail is clean, safe, and appropriately used.
 - The trail reflects mutual respect and understanding among landowners, the public, and agencies.
 - The special relationship of native Hawaiians to the trail and associated resources is recognized and integrated in the management program.

- **Resource Protection**
 - Remaining original sections of the prehistoric pathway are preserved.
 - Natural and cultural resources (including significant views) associated with the trail are protected and interpreted.
 - Well-designed informational and interpretive signage is effective in keeping trail users on the approved paths and away from sensitive areas.
 - Sensitive areas are monitored.

- **Management**
 - A supportive community helps with trail management.
 - Landowners play an important role in management decision-making in trail use and development.
 - Landowners who allow use are protected from liability.
 - Formalized agreements provide for regular maintenance of specific trail sections by trail user groups.
 - Enforcement of trail use regulations occurs when violations are reported.
 - Identified funding and support mechanisms (e.g., volunteerism, in-kind aid, etc.) exist to implement the management plan.

- **Development**
 - Facilities are environmentally friendly (for example, composting toilets are provided at regular intervals).
 - Trail restoration is modeled after traditional trail-building methods.
 - Traditional trail linkages between the *ala loa* and the uplands are perpetuated as much as possible through cooperative agreements, conservation easements, and other means.

ACHIEVING THE VISION

To achieve the vision, management responsibilities would have to be assigned for the following items:

- Overall administration and coordination
- Right-of-way protection (both for the trail, itself, and for points of access)
- Resource inventory, protection, and monitoring
- Proper use (carrying capacity, cultural and environmental sensitivity)
- Regulation of commercial and public use
- Interpretation of natural and cultural resources
- Protection of subsistence rights and traditional uses
- Development of facilities (the trail, parking, campsites, utilities, etc.)
- Marking and signs
- Maintenance
- Enforcement
- Liability and indemnification of landowners

Native Hawaiian cultural concepts can be incorporated into any alternative for trail management to achieve the purpose of providing for public use, enjoyment, and education guided by native protocol and etiquette. Among these are *kōkua*, "pulling with the back," pitching in to help; *kuleana*, responsibility; *laulima*, working together, cooperation; and *mālama*, caring for, maintaining.

ALTERNATIVES FOR MANAGEMENT AND USE

This is a feasibility study, not a management plan for the 175-mile Ala Kahakai route. Nevertheless, part of the feasibility and desirability of a trail relates to its potential management options. Three classes of alternatives are required by the National Park Service in a national trail study: a no action alternative (continues existing conditions; provides a baseline against which to measure other alternatives); a federal action (includes the trail within the National Trail System); and other reasonable concepts which could achieve the vision for the trail. The workshop group considered the no action alternative and developed two others: federal authorization as a national historic trail, continuous on the ground, and state authorization. The National Park Service added another alternative for consideration: federal authorization as a national trail route, discontinuous on the ground.

ALTERNATIVE A: NO ACTION ALTERNATIVE

There would be no overall coordinated recognition or administration of the entire 175-mile trail. Management, development, interpretation, use, marking, maintenance, and enforcement would occur in a piecemeal fashion, if at all, in the hands of interested agencies, groups, or property owners. Over time, as Nā Ala Hele funding permits, ownership of the trail would be identified through title searches. It is anticipated that a majority of the trail would be state-owned under old monarchy laws and provisions of the Highways Act of 1892. Without a vision for the trail and administration focused on it, the trail most likely would be a series of unconnected segments. It would not necessarily be recognized as a portion of the around-the-island *ala loa*.

There would be no unified effort to mark or otherwise interpret the prehistoric or historic trail. Segments would be recognized as development occurs, as exemplified in the South Kohala resorts. The emphasis would be on the "shoreline trail" and not on the *ala loa*. The "Ala Kahakai" would continue as the 35-mile state demonstration trail from Pu'ukoholā Heiau to the Old Kona Airport, limiting a continuous trail experience to the South Kohala and North Kona districts. The state would provide public access and facilities to this stretch of trail and could provide interpretation of the prehistoric and historic *ala loa*. The four National Park sites would have the option to recognize the trail. Most likely, while they would continue to protect prehistoric and historic trail segments, they would not necessarily interpret them for public use as part of the *ala loa*.

Protection of trail rights-of-way and resources would depend upon government regulating agencies to comply with and enforce laws in reviewing development proposals. Often, the trail would be protected on a case-by-case basis through legal actions and contested cases by native Hawaiians or others with an interest in the *ala loa*. For example, Hui Lihikai, Citizens for Protection of the North Kohala Coastline, have successfully fought on three separate occasions for location of the shoreline trail in its historic place rather than in a location preferred by a developer. The group also carried a resolution approved in 1994 by the State House and Senate which requested the Department of Land and Natural Resources (DLNR) to work with Hui Lihikai "to assess the recreational, scenic, and historic/cultural resources of the leeward North Kohala coastline for possible public acquisition prior to construction of any additional infrastructure" (Senate Concurrent

Resolution No. 116, S.D. 1). As another example, two citizens sued the owners of the Oceanside 1250 property in South Kona for public use of the "ancient trail" alignment rather than another alignment preferred by the developers. Nā Ala Hele was brought in to determine the alignment on the ground which was done by using remnants of the original trail. The width of this state-owned section of the *ala loa* is being negotiated.

State and county laws for shoreline protection, historic preservation, and property owner liability protection would apply. County planning would likely continue to balance historical/cultural preservation with the needs of development and shoreline access.

There would be no additional federal costs for this alternative.

ALTERNATIVE B: ALA KAHAKAI NATIONAL HISTORIC TRAIL (CONTINUOUS)

Under this alternative, the Ala Kahakai would be established as a national historic trail by Congress. Over time, the Ala Kahakai would be a continuous trail on the ground along the *ala loa* route. An effort would be made to use as much of the original trail as possible. In some cases the original trail is a faint trace over 'a'ā or pāhoehoe lava and could be marked with simple *ahu* or other traditional methods to help users find the way. In other cases, the original trail was constructed using stepping stones, fitted lava, crushed 'a'ā, or other means. Where portions of constructed trail have been lost due to neglect, vandalism, vegetative overgrowth, or other causes, they could be reconstructed using traditional techniques where appropriate and feasible. To accomplish continuity, original remnants would be joined where necessary by more recent paths, jeep roads, and roads within the *ala loa* corridor. No parallel auto tour route would be designated, although a portion of the trail would follow Ali'i Drive in North Kona. As required by the National Trails System Act, as amended, (NTSA) [See Appendix A.], federal segments would automatically become protected components of the trail. Non-federal trail segments would become components of the national trail through a process of certification, which is a voluntary, non-binding agreement.

This alternative would commit the federal government, in coordination with the state and county, to planning, historic interpretation, trail and resource protection, and development along the historic route under authority of the NTSA. This act describes certain actions the federal government must do and others that it may do as appropriate. Table 1 summarizes these actions.

The workshop group decided that all authorities available to the federal agency were appropriate except the use of condemnation. That is, while it would not be the intention of the federal government to acquire the trail, it could acquire land from willing sellers to protect significant trail segments and resources; but it could not condemn land to achieve these ends. This decision parallels the scope of other national historic trails.

As required by the NTSA, the lead federal agency, in this case the National Park Service, would prepare a comprehensive management and use plan. The secretary of the interior would appoint an advisory council comprised of representatives of affected federal agencies, state government, local agencies, representatives of the native Hawaiian community - preferably native Hawaiian cultural experts and cultural practitioners - corporate and individual landowners, users, and others with an established interest in the trail.

The National Park Service would encourage the state to review records of title to determine the extent of the trail owned in fee by the state. It is anticipated that under the

- TABLE 3 -
**SUMMARY OF FEDERAL AUTHORITIES
 UNDER THE NATIONAL TRAILS SYSTEM ACT**

Shall	May
5(d) Establish an advisory council	7(b) Relocate segments on federal land
5(e) Complete a comprehensive management plan	7(c) Permit public use facilities (non-motorized) and provide access Provide for trail interpretation sites
7(a) Consult with affected state and federal agencies Select rights-of-way, minimizing adverse impacts to adjacent landowner	7(d) Use lands within federal areas
7(c) Establish a uniform marker and provide to cooperating agencies	7(e) Enter agreements or acquire lands through cooperative agreements, donation, purchase, or exchange to ensure use of the land for a trail
7(e) Encourage state or local governments to enter cooperative agreements or acquire right-of-way	7(f) Accept title, exchange land
7(h) Provide for development and maintenance on federal lands <i>Encourage states to operate, develop, and maintain trails outside federal areas</i>	7(g) Use condemnation (limited to high potential areas for national historic trails)
7(i) <i>Prescribe and publish uniform regulations if issued</i>	7(h) Enter into cooperative agreements with state, landowners, and private organizations to operate, develop, and maintain any portion of trail
7(k) Authorize landowners to donate or convey real property interests to qualified organizations	7(i) <i>Issue regulations governing use, protection, management, development, and administration</i>
	7(j) Describe acceptable uses

1892 Highways Act the majority of the trail will prove to be state-owned and already held in trust for the people. For the portions of the trail not owned by the state or federal government, the National Park Service would encourage state and local governments and private entities to obtain cooperative agreements, easements, rights-of-way, and land in fee for the protection and permanency of the portions of the trail outside of state and federal jurisdiction. Where other entities are not able to protect the trail right-of-way or resources, the federal government could acquire trail lands through dedications, donation, or purchase from willing sellers. Before considering land acquisition, the federal agency would encourage cooperative agreements with landowners to certify trail segments and resources as a part of the national trail while maintaining ownership. Certification would help assure the public that site/segments are qualified historic sites and that protection, interpretation, and facilities meet the standards of quality expected in a traditional National Park Service area.

The federal management role would most likely be one of administration, overall coordination, and oversight with state and local agencies, native Hawaiian groups, and others as trail and site managers. Local land managers, native Hawaiians, and other volunteers would be encouraged to develop, operate, and maintain the trail. Both the NTSA and legislative history of the Ala Kahakai suggest that the best management scenario would provide state and local agencies a major role. In his statement to Congress

proposing the trail study, Senator Akaka said, "The designation of a trail as a part of the National Trails System and monetary assistance from the Federal government should not preclude local or state management. Sharing of management with state and local governments is economically and politically advisable." (See Appendix A for the full text.) The comprehensive management plan would determine more precisely the federal and state roles in right-of-way protection; resource inventory, protection, and monitoring; enforcement; proper use; interpretation of natural and cultural resources; protection of subsistence rights and traditional uses; development of facilities; and maintenance.

Inventoried, protected, managed, and certified portions of the trail would be made available to the public and marked with a uniform marker developed during the management planning process.

Relevant federal laws such as the National Environmental Policy Act, the National Historic Preservation Act, the Archeological Resources Protection Act, and the Native American Graves Protection and Repatriation Act would apply to areas under federal administration but not to private lands. Compliance with these laws would be coordinated by the National Park Service. State and county laws for shoreline protection, historic preservation, and property owner liability protection would still apply.

To develop a cost estimate, certain assumptions were made. During the management plan process, these assumptions could change. It is assumed that federal funds would most likely be spent on preparing a comprehensive management plan, completing resource inventories and protection plans, protecting resources, providing technical assistance and training in resource monitoring and interpretation, and supporting other activities related to implementation of the management and use plan. Generally, costs of land acquisition, if any, would be borne by the state. No federal funds for acquisition are anticipated or projected in the cost estimate, although federal funds could be used to acquire from willing sellers only "high potential" trail segments or sites (see definition in NTSA, pages A-15 and -16) in limited instances on an exception basis.

Initial federal cost to develop the comprehensive management plan and environmental impact statement required by this alternative and an initial interpretive brochure are estimated to be \$275,000. (All estimates are in 1997 dollars.) Phased costs such as archeological surveys, metes and bounds surveys, trail restoration and construction, and trail-head planning and development are estimated at a total of \$3,679,000. It is assumed that the federal government would fund about one-half of the total costs for facility planning and development. It is assumed that the state would bear costs of search of ownership records to determine the portions of the trail that are state-owned as "ancient trails."

Annual federal operational costs are estimated to be \$265,000. These include funding a full-time administrator, a cultural resource specialist/interpretive specialist, and a site monitoring/steward manager, office and supplies, support for an advisory council and partners, trail markers, and interpretive brochures. Appendix B provides a cost breakdown.

After consideration of agency and public review of the draft study and EIS, the National Park Service recommends Alternative B, which would include the measures to minimize impacts discussed on pages 59-76, as the environmentally preferred alternative.

ALTERNATIVE C:

ALA KAHAKAI STATE HISTORIC TRAIL

The trail would be authorized as a State Historic Trail by the state legislature. The legislation would outline the requirements for a management plan, and the responsibilities for protection, monitoring, management, development, and use of the trail. The objectives and policies contained in the Hawaii *State Plan* and the Hawaii County *General Plan* provide a supportive framework for establishing, protecting and managing an ancient Hawaiian trail such as the Ala Kahakai. Regulatory mechanisms have also been established to provide the necessary tools for accomplishing this task.

Because it already has broad trail responsibilities, the state Nā Ala Hele Program could provide overall coordination, administration, and oversight. This program seeks to develop a system which "(1) provides a **broad range** of recreational, cultural, religious, and subsistence opportunities for **all** of Hawaii's people, and (2) helps to **conserve** Hawaii's cultural heritage and environment (Division of Forestry and Wildlife, 1991)" [bold text provided in original]. The *Program Plan* describes the Ala Kahakai demonstration trail and states that it is "envisioned to be part of an extensive network of shoreline trails that would someday encircle the island and connect to traditional mauka-makai [mountain-ocean] accesses" (p.II-7). The program has an established advisory council for Hawai'i Island. The program addresses preservation and maintenance of established trails and defines mechanisms for adding new ones.

Federal segments would not automatically be part of the trail, but the national park sites could be encouraged to recognize the trail and participate in its protection and management. If funding were available, the federal government could provide technical assistance on resource inventory and protection, interpretation of natural and cultural resources, and proper use of the trail. State and county laws for shoreline protection, historic preservation, and property owner liability protection and indemnification would apply.

Federal costs in this alternative would be limited and would not come from funds appropriated for operation of the National Park Service. For instance, the state could request technical assistance from the National Park Service Rivers, Trails, and Conservation Assistance Program (RTCA), funding for which would come from the RTCA annual budget.

Current funding for the state Nā Ala Hele program is not sufficient to achieve the vision for the trail. If the state legislature were to recognize the entire 175-mile trail, specific funds would need to be appropriated for planning, acquisition (if necessary), development, and operations in order to achieve the vision. Such an appropriation may be unlikely considering current state funds and priorities.

**ALTERNATIVE D:
ALA KAHAKAI NATIONAL HISTORIC TRAIL (DISCONTINUOUS)**

Under this alternative, the trail would be designated as a continuous national trail route, but only federal components and intact remnants of the prehistoric or historic trail would be protected and interpreted. No estimate is available of the mileage of intact remnants. No attempt would be made to link these remnants with newer pathways to create a continuous trail. No auto tour route would be marked, but visitors would be provided information on access to these segments by automobile, as appropriate. Facility development would be limited to areas in which lengths of intact trail are significant enough for visitors to require parking, water, and rest rooms in order to experience the trail.

In management, this alternative would be similar to Alternative B, but it would not include the aspect of reestablishing the trail incorporated in Alternative B. The National Park Service would be the federal agency administering the trail. A comprehensive management and use plan would be prepared and an advisory council appointed. The federal management role would most likely be one of administration, overall coordination, and oversight with state and local agencies and groups as trail and site managers. Local land managers and volunteers would be encouraged to protect, operate, and maintain the trail. State and local agencies would have a major role. The management plan would determine more precisely the federal and state roles in right-of-way protection, resource inventory, protection, and monitoring, enforcement, proper use, interpretation of natural and cultural resources, protection of subsistence rights and traditional uses, development of facilities, and maintenance.

Inventoried, protected, and managed portions of the trail would be made available to the public and marked with a uniform marker developed during the management planning process.

State and county laws for shoreline protection, historic preservation, and property owner liability protection and indemnification would still apply. Relevant federal laws such as the National Environmental Policy Act, the National Historic Preservation Act, the Archeological Resources Protection Act, and the Native American Graves Protection and Repatriation Act would apply to federally administered areas but not to adjacent private property. Compliance with these laws would be coordinated by the National Park Service.

Costs would only be somewhat reduced from Alternative B because the entire 175-mile trail would still need to be inventoried. Also, since only the most sensitive areas in need of protection would be included in this alternative, funds for protection would be nearly equal to Alternative B. The management plan and environmental impact statement and brochure are estimated to cost \$275,000. (All estimates are in 1997 dollars.) Phased costs such as archeological surveys and trailhead planning and development are estimated at a total of \$1,579,000. Federal land acquisition would not appear to be necessary for this alternative.

Annual federal operational costs are estimated to be \$224,000. Two full-time and one part-time staff persons are estimated. It is assumed that the federal government would fund about one half of the total costs for facility planning and development. It is assumed that the state would bear the cost of search of ownership records to determine the portions of the *ala loa* that are state-owned as "ancient trails." A cost breakdown is provided in Appendix B.

ALTERNATIVES CONSIDERED BUT REJECTED

ALA KAHAKAI NATIONAL SCENIC TRAIL

The Ala Kahakai meets all the requirements for a national scenic trail, but this alternative was rejected for two main reasons. First, as noted in the "Significance" section of this study, the legislation authorizing this study and the trail resources themselves, confirm that its overriding significance lies in its historical and cultural value. Second, this designation would not necessarily recognize the alignment of the prehistoric *ala loa*. The emphasis on scenic rather than historic resources would allow the trail to be aligned in the most convenient development location and not in the most culturally accurate location. Valuable trail resources could continue to be lost as they have in the past.

ALA KAHAKAI NATIONAL HISTORIC TRAIL (FEDERALLY OWNED)

Under this alternative, federal administration of the Ala Kahakai would include federal ownership of the portions of the route not otherwise publicly owned. This alternative would afford the best protection of the trail right-of-way and trail resources. This alternative was rejected because of the exorbitant cost of purchasing land along the shoreline in Hawai'i and because it could require condemnation of private land, which is not a feasible or politically viable approach. Consideration of federal ownership may prove unnecessary as search for land ownership records may reveal that the state owns the majority of the trail.

ALA KAHAKAI NATIONAL HISTORIC TRAIL (LAND AND WATER)

Under this alternative, the Ala Kahakai would include those segments of the around the island route which were typically traveled by canoe except in the *Makahiki* season which coincided with adverse weather for canoeing. Although kayaking is increasingly popular, this alternative was rejected because of issues with management of visitor use and safety. Use of canoes can be interpreted from the land-based trail in those areas in which the canoe was used frequently.

ALA KAHAKAI NATIONAL HERITAGE AREA/CORRIDOR

Under this alternative, the Ala Kahakai would be recognized as a National Heritage Area or Corridor through special legislation defining the scope of federal involvement and identifying a management entity.

There is no legislation establishing a generic approach to national heritage areas to provide a designation process, qualifying criteria, or general authorities and guidance for provision of technical assistance and matching grants. Nonetheless, Congress has established 15 National Heritage Areas and Corridors, nine in its last session (104th). The intent of heritage areas is to establish corridors of historical and recreational sites which may help preserve cultural resources, but especially increase tourist interest to benefit local economies. The federal contribution takes the form of technical assistance and planning grants, not long-term management. The majority of these corridors are associated with former industrial areas seeking economic revitalization by capitalizing on now defunct sites and structures. They enjoy strong support by local organizations.

Each was established under somewhat differing terms. Most are administered by a federal department, usually the National Park Service, Department of Interior. Most are

managed by an interagency commission comprised of city, county, state and federal representatives, private groups, and interested citizens. Generally, this management entity must submit a management plan within three years. Federal assistance may be provided in drafting management plans, implementing the plans, and making matching grants and loans to other agencies for operations.

Unlike national trails which emphasize resource protection, these areas emphasize tourism and economic development. Also, unlike national trails which are designated in perpetuity, federal involvement in heritage areas is limited to ten years. Each of the nine new areas was authorized to receive up to \$1 million a year, up to \$10 million total over 15 years. However, no money was appropriated for these areas when they were authorized.

This alternative was rejected because the emphasis on tourism could detract from resource protection. Also, the required constituency promoting this alternative does not exist.

ALA KAHAKAI COUNTY REGIONAL TRAIL

Under this alternative, the trail would become a project of a private nonprofit group—a volunteer organization of private citizens and landowners, public land management agencies, and recreational, environmental, and community groups—which would create a board or council to administer the trail. This administrative body would develop public-private partnerships which would involve public agencies, nonprofit supporters, and citizen volunteers. It could plan and manage the trail through six district action committees, representing each of the districts through which the Ala Kahakai passes and working at the local level. One example of this type of trail management is the Bay Area Ridge Trail, a 400-mile ridgetop trail circling the entire San Francisco Bay in California.

This alternative was rejected because no group has formed or expressed an interest in taking responsibility for the Ala Kahakai. Ē Mau Nā Ala Hele, the nonprofit trails organization on Hawai'i Island, is a strong supporter of national designation of the trail. Additionally, while this approach may work well for a recreational trail, the significant resources to be protected along the Ala Kahakai require the funding capability, technical expertise, and commitment of state or federal government agencies.

THE AFFECTED ENVIRONMENT



Kiholo Bay

THE AFFECTED ENVIRONMENT

INTRODUCTION

Although the discussion below describes the affected environment in discrete categories of natural and cultural resources, for the native Hawaiian these categories are intertwined. In the Hawaiian culture, the natural world is not separate from the cultural world, but the two are intricately bound together; the spiritual world is not separate from the secular but everything has *mana* (spiritual power). 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. As another example, fishponds may be a natural resource where rare birds feed, but for the native Hawaiian, they are cultural properties, too, sources of abundant fish which were farmed by their ancestors.

NATURAL RESOURCES

GEOLOGY

The Island of Hawai'i lies at the southeastern end of the Hawaiian archipelago. It is 76 miles wide, 93 miles long, and has an area of 4,030 square miles. It was built by the combined action of five volcanoes—Kohala (extinct), Mauna Kea (dormant), Hualālai (dormant), Mauna Loa (active), and Kīlauea (actually an active caldera on Mauna Loa). Its highest point is the top of Mauna Kea at 13,734 feet (NPS, 1992a).

Hawai'i has "shield volcanoes" that build up gradually with wide-based gentle slopes, rather than by rapid explosion. Hence, tapering slopes drop down off the summits of Mauna Kea and Mauna Loa on Hawai'i Island. Kīlauea, its most active volcano, has been spurting lava since 1983 with only a brief respite in early 1997. Recent flows covered portions of the Ala Kahakai within Hawaii Volcanoes National Park. Older flows covered portions of the prehistoric trail along the west side of the island, and more recent, historic trails have sometimes been built over these flows.

Two types of lava pour from the volcanoes. Their Hawaiian names are used throughout the world: *pāhoehoe* and *a'ā*. *Pāhoehoe* is smooth, flowing in flat billows that wrinkle when the liquid flow beneath the cooling crust drags it forward. This smooth lava is easy to walk on, so trails are not usually constructed upon it, but they may be marked in some way. The fiery stream forms tubes under the crust, sometimes large enough to walk through. The ancient Hawaiians often used these tubes as burial chambers and shelter caves. The tubes also provide habitat for native invertebrates. *A'ā* lava is rough and knife-sharp, cast up in jagged rocks and boulders with solid interiors. It can cut through the soles of shoes. Special trail construction techniques were used by prehistoric and historic trail builders over this lava type.

Lava is the source of Hawai'i's black, red, and green sand beaches. Black sand is formed when an *a'ā* flow enters the sea causing explosions which may form clouds of

liquid lava drops. These drops chill on contact with the water or air and become volcanic glass sand. Ocean currents deposit the sand in a sheltered indentation in the shoreline to make a beach. Erosion of littoral (shoreline) cones comprised of black or red volcanic matter often produce black or red sand beaches at the base of the cone. Green sand beaches result from the separation through erosion of grains of olivine from certain 'a'ā lava which are then deposited on beaches. Wave action deposits large concentrations of the olivines on top of the other sands near the waterline. (Clark: 71-72) The Black Sand Beach and Green Sand Beach in Ka'ū are on the Ala Kahakai.

White sand is derived from calcareous skeletal material of corals and other invertebrate animals that live in shallow marine waters. Brown or gray sands are generally the result of the erosion or weathering of land. (Clark: 71)

The Ala Kahakai may be located on sandy or pebbly beaches, on pathways near the water's edge, or on cliff edges of varying heights above the water. From 'Upolu Point to South Point, approximately 20 percent of the shore is lined with over 20-foot high cliffs, 52 percent with five to 20-foot cliffs, and 75 percent is low-lying between zero and five feet in height along the shoreline. Of the low-lying shoreline, 12 percent is sandy, eight percent is pebbles (*ili'ili*) or coral, and 55 percent is boulders or other ('*alā*). From South Point to the eastern boundary of Hawaii Volcanoes NP, approximately 36 percent is lined with over 20-foot high cliffs, 39 percent with five to 20-foot cliffs, and 25 percent is low-lying. Of the low-lying areas, there are only three small sand beaches in this 67-mile trail section. (County of Hawaii, 1979)

Tsunami and seasonal high waves have eroded parts of the western shoreline including portions of the ancient *ala loa*. Portions of the sea edge of the Kona coast are sinking at a rate of about one-half foot to one foot per century. (NPS, 1994)

CLIMATE

Generally, Hawai'i has two seasons: "summer," roughly between May and October when the sun is more nearly overhead, the weather warmer and drier, and the trade winds most persistent; and "winter," between about October and April, when the sun is in the south, the weather cooler, and the trade winds more often interrupted by other winds and by intervals of widespread clouds and rain. (University of Hawaii)

Typical of all the islands, northeast winds (northeast trades) predominate. They bring frequent rain showers to the northern and eastern coasts which are lined with sharp cliffs and feature waterfalls, lush rainforests, and heavy crashing surf. The west and southwest shores where the Ala Kahakai is aligned are sunny, warm, and dry with pocket sand beaches and relatively quiet surf, although frequent high surf can occur in winter. West and southwest winds on these leeward (*kona*) or western and southern shores are infrequent, but are often associated with high winds with velocities of 30 to 40 miles per hour. The lowland leeward areas obtain their rainfall chiefly from a few winter storms, and only negligibly from tradewind showers. Their rainfall is strongly seasonal, their summers arid. Major winter storms bring with them very large storm waves which cause run-up on the shoreline and have removed some traces of the *ala loa*. Hurricanes are relatively uncommon having affected the island four times in the last 25 years (NPS, 1994).

Hawai'i is within the tropics and throughout the year has relatively uniform day length, received solar energy, and temperature. Because of these attributes, the study area receives at least two-thirds as much solar energy in the winter as the summer. On a clear

day, nearly three-fourths of the incident solar energy penetrates to sea level. Along several substantial sections of the Ala Kahakai, the user could be subjected to direct sun the year round and would need to be prepared against heat, sunburn, and dehydration.

Annual rainfall along the western and southern coastal edge of Hawai'i Island along the Ala Kahakai varies from less than 10 inches to nearly 75 inches. The wettest area along the trail is within Hawaii Volcanoes National Park (NP) in the Puna District with up to 75 inches, followed by the South Kona coast with over 40 inches, and then 'Upolu point and the shoreline in the Ka'u District from Ka'alela to Hawaii Volcanoes NP with nearly 40 inches. The driest areas are the South Kohala District with less than ten inches and the North Kona District with less than 20 inches. The year-round average ocean temperature is nearly constant, fluctuating between 75 and 82 degrees F (24-28 degrees C).

SOILS

The parent material for soil formation along the Ala Kahakai is predominantly of recent volcanic origin. Different microclimates have produced a diversity of soil types, but red or brownish-red soils are widespread. Along the Ala Kahakai some soils derived from coral occur. (Knapp)

AIR QUALITY

According to the County of Hawaii, the island enjoys good air quality, but prevailing patterns of air circulation can cause local concentrations of pollutants. The diurnal land and sea breeze pattern prevailing on the leeward coast is self-contained within a limited area unlike the tradewinds on the windward coast which are part of a much larger circulation system (County of Hawaii, 1989). This leeward pattern can allow concentrations of pollutants to occur which exceed National Ambient Air Quality Standard (NAAQS).¹

Man-made sources may create some pollution, but the major source by far is naturally occurring volcanic gases emitted from Kilauea. In its fourteenth year of continuous eruption (a brief break occurred between January 31 and March 28, 1997), Kilauea emits about 1,000 metric tons of sulfur dioxide (SO₂) gas each day. The SO₂ reacts chemically with sunlight, oxygen, dust particles, and water in the atmosphere to form a mixture of sulfate aerosols (tiny particles and droplets), sulfuric acid (H₂SO₄), and other oxidized sulfur. This gas and aerosol mixture produces a hazy atmospheric condition known as volcanic smog or "vog."

Vog may create health problems for trail users. Monitoring of SO₂ near Volcano House on the southern rim of Kilauea in Hawaii Volcanoes National Park reveals the NAAQS for SO₂, 24-hour average, were exceeded 29 times between 1991 and 1996. Elevated SO₂ readings are directly related to wind direction, so that the standard is exceeded when the wind is blowing from where lava is vented toward Volcano House. Concentrations of SO₂ and hydrochloric acid (HCL) were greatest near the ocean (NPS, 1995a) within the Ala Kahakai corridor where lava poured directly into the sea from August 1996 through January 1997 (U.S. Geological Survey).

The Environmental Protection Agency (EPA) has proposed a new intervention level program under the authority of the Clean Air Act² to supplement human health

¹ National Ambient Air Quality Standards for SO₂ are 0.03 parts per million (ppm) annual arithmetic mean, and 1.14 ppm maximum 24 hour concentration not to be exceeded more than once a year.

² *Environmental Reporter*, Vol. 27, 1/10/97, p. 1881.

protection provided by the NAAQS. The lower boundary of concern is set at 0.06 ppm SO₂ and the upper boundary or "endangerment" level is set at 2.0 ppm of SO₂ based on 5-minute hourly maximum value. Analysis of Hawaii Volcanoes National Park SO₂ data at 5-minute intervals resulted in estimated values above 3.0 ppm, a level clearly above the endangerment zone (NPS, 1995a). These data indicate that during lava flows, there is potential for trail visitors to experience high SO₂ levels periodically in certain locations along the trail, which could adversely impact their health.

WATER RESOURCES

- **Fresh Water** – Separated from the wet, windward side of the island by the Kohala Mountains, Mauna Kea, Hualālai, and Mauna Loa, the leeward side receives little rainfall on the shore. The route of the Ala Kahakai is characterized by a lack of stream drainages and aridity. Any rain water is quickly absorbed into the porous lava (NPS, 1992a), and large amounts of ground water percolate to the sea. Four or more miles inland of the shoreline, water is potable and wells supply domestic water to the coastal region. Closer to the shore, groundwater is brackish, but has been used successfully in recent years for golf course irrigation (Heard). Ancient Hawaiians captured fresh water which rises to the top of brackish water in anchialine pools and also collected pure, fresh water by placing gourds in caves (Chang).

- **Brackish Water (Anchialine Ponds)** – Anchialine ponds are scattered along the coast of Hawai'i within the Ala Kahakai corridor from 'Upolu Point around South Point to Hilo. They are especially abundant along the western shore of the island. In 1985, approximately 600-650 ponds existed within the Ala Kahakai corridor (Brock, 1985:2). They are standing waters in rocky (lava) basins which vary in salinity and exhibit tidal fluctuations although in most cases they lack a surface connection to the ocean. The ponds are generally small (less than 100 square meter surface area) and shallow (less than one meter deep) [Maciolek & Brock:15]. The combination of an underground connection to the sea and the influx of fresh water from basal ground water results in brackish water conditions. Anchialine pools are unique natural features not found in any of the other 49 states (Chang; Hawaii Heritage Program).

Within this environment, distinctive biota have evolved which are endemic (found only in Hawai'i). In some cases, organisms inhabit only a particular pool or complex of pools. The most numerous species is 'ōpae'ula, red shrimp (*Halocaridina rubra*). These shrimp are hypogeal; that is, they occur not only in the sunlit part of the system, but also in the interconnected watertable below. Brock (1985:11) speculates that with the destruction of ponds (as through filling), these hypogeal species would not entirely disappear, but their populations would be significantly lower. Epigeal species which require the sunlit part of the system (crustaceans, fishes, mollusks, and flora) would not survive pond destruction. A unique aspect of the flora of these ponds is the orange carbonate-producing algae crust (*Lyngbya* spp. and *Schizothrix calcicola*) in the bottoms.

Ancient Hawaiian settlements were associated with anchialine pools. Small pools provided potable water and bathing; larger pools were often adapted for fish culture (Maciolek & Brock). 'Aimakapā and Kaloko fishponds in Kaloko-Honokōhau National Historical Park along the Ala Kahakai are examples of the latter.

'Aimakapā and 'Ōpae'ula³ Pond within Makalawena Marsh National Natural Landmark are the two remaining ponds on this island which support a resident population of endangered nonmigratory Hawaiian stilt. These ponds are the only areas on the island of Hawai'i listed as essential water bird habitat in the U.S. Fish and Wildlife Service *Hawaiian Waterbirds Recovery Program*. 'Ōpae'ula Pond is also the principal nesting site for the Hawaiian coot and the only known breeding area on the Island of Hawai'i of the black-crowned night heron. Remains of an ancient Hawaiian fishpond are beneath the water surface.

MARINE RESOURCES

The West Hawaii coral reefs teem with life. Some typical species are *pāku'iku'i* (achilles tang, *Acanthurus achilles*), *'ala'ihi* (various squirrelfishes, *Sargocentron* spp.), *u'u* (various soldierfishes, *Myripristis* spp.), *moana* (*Parupeneus multifasciatus*), *po'opa'a* (various scorpionfishes, *Sebastapistes* spp.), *umaumale* (*Acanthurus triostegus*), and *kole* (yelloweyed or goldring surgeonfish, *Ctenochaetus strigosus*). According to Division of Aquatic Resources, Department of Land and Natural Resources (DLNR)[1996], "Available fisheries data indicate harvesting of reef fishes along the Kona Coast, both for the aquarium trade and by other commercial fisheries, have reached an all-time high in the last decade. It is doubtful this level of fishing is sustainable."

Typical species found close to shore and in the onshore splash zone are *opihi* (limpets, *Cellana exarata*), *wana* (various species of urchins), and *'u'ama* crab (*Grapsus grapsus tenuicrustatus*). The commercial collection of these species has been observed to have a negative impact on abundance and availability of these resources for subsistence fishers⁴ (Division of Aquatic Resources, 1996).

DLNR has recommended the creation of two Fishery Management Areas (FMAs) to better protect traditional fishing grounds and methods for the Miloli'i and Ho'okena communities. These communities are along the Ala Kahakai. The FMAs address the area from the shore vegetation line to a depth of 200 feet. Administrative guidelines for commercial fishing and collecting, commercial tours, night spearing, crossnetting, and other activities would be determined through the recommendations of regional councils comprised of experienced traditional fishers. Water quality related to inadequate toilet facilities would also be addressed.

Four Marine Life Conservation Districts (MCLDs) occur along the Ala Kahakai route: Lapakahi, along the shoreline of the state historical park; Waialea Bay in the southern portion of Kawaihae Bay; Old Kona Airport, just west of Kailua-Kona; and Kealakekua Bay extending from Cook Point to Manini Beach Point about 18 miles south of Kailua-Kona. In addition, a MCLD or MFMA (Marine Fisheries Management Area) is being considered for the Mahai'ula segment of Kekaha Kai State Park. MCLDs are established by DLNR to protect and replenish marine life and usually allow only limited fishing and other consumptive uses. They are popular as sites for snorkeling, diving, and underwater photography.

³ The name 'Ōpae'ula refers to the shrimp chum used for 'ōpēlu fishing. This name came to replace the Hawaiian place name of Kapo'ikai wetlands (Springer).

⁴ Subsistence fishers are those who engage in limited fishing and gathering activities to feed their extended families identified with a specific region and associated through bloodlines and friendships which have developed over generations.

Several protected marine species can be viewed from the trail area. Threatened green turtles (*Chelonia mydas*) occur in all the coastal waters where they feed on intertidal and subtidal algae. Endangered hawksbill turtles (*Eretmochelys imbricata*) are also found in nearshore waters in fewer numbers and nest on isolated beaches in the Ka'ū District. There are scattered sightings of endangered Hawaiian monk seals (*Monachus schauinslandi*) in the nearshore waters and hauled out on beaches all along the trail area. During the winter breeding season from December through May, endangered humpback whales are present in coastal waters, primarily within depths of 100 fathoms. The Ala Kahakai in the North Kohala District provides good whale-viewing areas.

Non-listed protected marine mammals that may be found in the coastal waters along the trail include spinner dolphins (*Stenella longirostris*), spotted dolphins (*S. attenuata*), bottlenose dolphins (*Tursiops truncatus gilli*), false killer whales (*Pseudorca crassidens*), pilot whales (*Globicephala macrorhynchus*), melon headed whales (*Peponocephala electra*), and pygmy killer whales (*Feresa attenuata*) [U.S. Department of Commerce, National Oceanic and Atmospheric Administration].

VEGETATION

Vegetation describes the plant cover that would be expected to occur in an area given the climate and the plant species currently present in an area. It does not include the plant materials in urban and resort areas or cropland, pastureland, and other factors. For the study area, the dominant or characteristic plants are mainly exotic (alien) species introduced to Hawai'i after western contact (1778). Immediately adjacent to the ocean, the strand vegetation is composed of hardy native species such as *naupaka kahakai* (*Scaevola sericea*) and *pohuehue* (*Ipomoea pes-caprae*). Often, immediately behind this strand zone is alien-dominated vegetation characterized by *kiawe* (*Prosopis pallida*) forest, fountain grass, or mixed alien shrublands of such weedy species as lantana or *koa haole* (*Leucaena leucocephala*). In some sections, native lowland vegetation extends nearly to the sea. Open dry forest of 'ohi'a (*Metrosideros polymorpha*) might be seen, or stands of *pili* (*Heteropogon contortus*) grassland, 'ilima (*Sida fallax*) shrubland, and other low-lying native vegetation. Much of the trail runs across near-barren lava flows of various ages. Around anchialine pools, wetlands with native sedges and other vegetation break the barren setting of volcanic flats. (Hawai'i Natural Heritage Program)

Even though alien species predominate along the Ala Kahakai, natives do occur along the way, sometimes in profusion. Examples are *maiapilo*, *puakala*, and *Portulaca hawaiiensis*. *Maiapilo* (*Capparis sandwichiana*), an endemic low night-blooming shrub seen along the Ala Kahakai in North Kona, had medicinal value to Hawaiians. *Puakala* (*Argemone alba var glauca*), an endemic white poppy, blooms seasonally along the trail in South Kona. It, too, had medicinal value to Hawaiians. *Portulaca hawaiiensis* is an extremely rare endemic found along the shoreline of Ka'ū.

The Polynesians introduced plants for food, fiber, medicine, and other uses which are a part of the appearance of the coastline today. Those growing in the coastal zone along the corridor of the Ala Kahakai include *milo* (*Thespesia populnea*), coconut (*Cocos nucifera*), *noni* (*Morinda citrifolia*), *kou* (*Cordia subcordata*), and *hala* (*Pandanus*).

ANIMALS

With the exception of the Hawaiian bat (*Lasiurus cinereus semotus*), most terrestrial mammals found along the Ala Kahakai corridor are introduced species, and most are considered pests to humans and native vegetation. These mammals include feral goats, jackasses, donkeys, pigs, domestic dogs and cats, Indian mongoose, house mouse, Polynesian rat, Norway rat, and roof rat.

Rats and mice as well as domestic animals carry a water-borne bacteria, *Leptospirosis*, which can cause flu-like symptoms and even death in humans. The bacteria can survive for long periods in fresh water or mud and enter the body through the eyes, nose, mouth, and broken skin. Warnings may need to be posted for trail users to avoid contact with water or mud which may have been contaminated with animal urine. (Hawai'i Department of Health)

Endemic birds such as the endangered Hawaiian hawk or 'io (*Buteo solitarius*) and Hawaiian short-eared owl or pueo (*Asio flammeus sandwichensis*) and indigenous birds such as wandering tattler (*Heteroscelus incanus*) and Pacific golden plover (*Pluvialis dominica fulva*) may be seen. In addition, a number of introduced bird species may occur. These include Indian black francolin, spotted dove, barred dove, skylark, Japanese white-eye, common Indian myna, warbling silverbill, ricebird, cardinal, and house finch. Seabirds such as the petrel and frigate bird can be seen from the trail. They are a part of oral stories and were used as food in Hawaiian culture.

A wide variety of native and introduced invertebrates inhabit the study area. These include insects such as ants, wasps, and bees; and mollusks such as snails and slugs. Also, reptiles such as skink and geccos are found within the study area. Scorpions and centipedes often inhabit *kiawe* forests and could cause discomfort to the trail user (Ron Bachman, Hawaii Division of Forestry and Wildlife, personal conversation, January 1997).

RARE, THREATENED, AND ENDANGERED SPECIES

The U.S. Fish and Wildlife Service (USFWS) lists as federally endangered one mammal, five birds, one reptile, and six plants which may occur along the Ala Kahakai corridor; as federally threatened, one reptile; and as species of concern, seven anchialine pool shrimps, one anchialine pool snail, and four plants. Appendix C lists specific species.

The Hawaiian Heritage Program Natural Diversity Database of the Nature Conservancy of Hawai'i lists as critically imperiled globally (typically one to five current locations) ten anchialine pool shrimp, five natural communities, three of which are anchialine pool communities; three plants; and four vertebrates. It lists as imperiled globally (typically six-20 locations) one anchialine pool community, five plants, and three vertebrates. Appendix C lists specific species.

CULTURAL RESOURCES

REMNANTS OF THE PREHISTORIC ALA LOA ALONG THE ALA KAHAKAI ROUTE

Oral accounts recorded in the 1800s, Māhele land records from 1848 to the mid-1850s, Boundary Commission transcripts from the 1870s, and Kingdom maps of the 1880s give an indication of the route of the *ala loa* and its companion major trails which cross-cut *ahupua'a* (traditional land division; community) borders. Unmodified remnants of the prehistoric *ala loa* have been documented in each district that the trail runs through in the general areas illustrated on Map 3 and described in detail in Appendix D. These sections represent only those areas that have been studied and are reasonably well protected. To date, no attempt has been made to archeologically document the entire *ala loa*. Generally, documentation occurs when a development or change in land use is proposed. For those areas which have not been studied, low altitude remote sensing photography may provide an opportunity to locate historic remnants (Comer).

TYPES OF CULTURAL RESOURCES ALONG THE ALA KAHAKAI

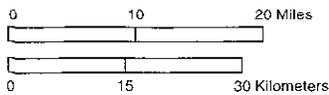
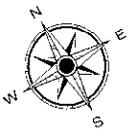
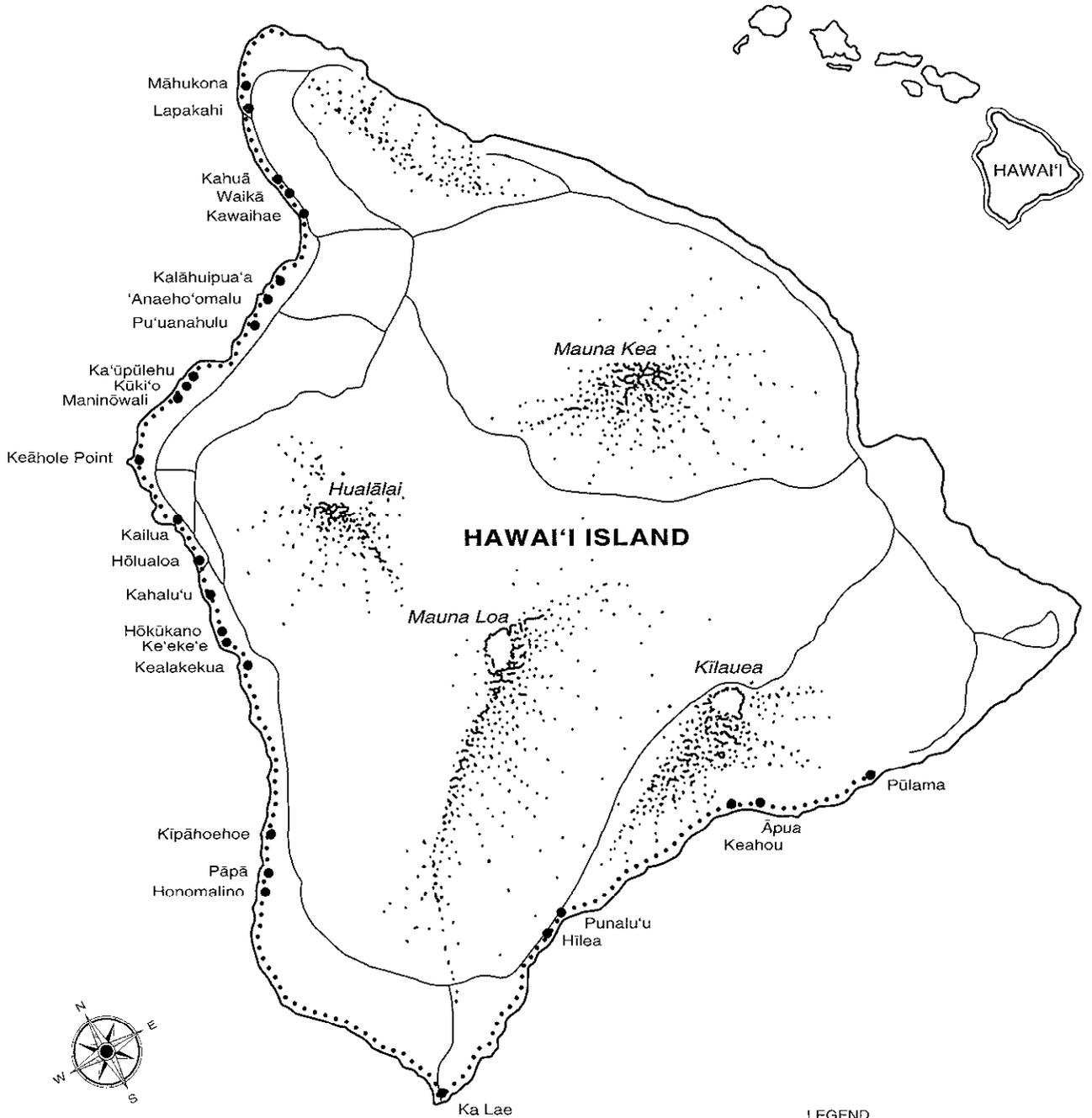
The *ala loa* connected the lives of the people of the Hawai'i kingdom. Therefore, found along the trail are archeological remains of housing areas, graves and small cemeteries, religious structures (*heiau*), *ahupua'a* shrines, fishing shrines (*ko'a*), and small agricultural shrines. Most of these structures are in the form of stone platforms or low enclosures.

The larger sacrificial (*luakini*) temples associated with the ruler are usually found at royal centers near the shore where population was clustered about the high chiefs. They are rectangular platforms and/or enclosures of dry-laid volcanic stone which often exceed 1,200 square yards (1,000 m²) in area (Cordy:17).

In addition, temporary shelters used by visitors, fishermen and travelers are often found along this shoreline trail. These usually take the form of small caves or small surface shelters of dry-laid volcanic stone (platforms, enclosures, C-shaped enclosures about 5-20 square yards (5-20 m²) in area (Cordy:20). As with permanent house sites, these shelters number in the hundreds and probably in the thousands along the trail.

In many areas, petroglyphs (*ki'i pōhaku*) are found along the trail. Two of the largest fields are found carved in the smooth *pāhoehoe* lava flows along the *ala loa* in South Kohala: the Puakō Petroglyph Archeological Preserve (within the Mauna Lani Resort) and the Waikoloa Petroglyph Preserve (Waikoloa Resort). Also along the *ala loa* are the Ka'ūpūlehu Petroglyph Site (within the Kona Village Resort) in Kona and sites in Ka'ū at Pōhue Bay and in Puna at Pu'u Loa (Hawaii Volcanoes National Park). Smaller clusters of stone carvings are sometimes found associated with house sites and shelters along the trail. (Dunbar)

**PLACE NAMES ASSOCIATED WITH SELECTED
PREHISTORIC REMNANTS ALONG THE ALA KAHAKAI**



Source: Cordy, p. 12

LEGEND

- Conceptual Alignment of the Ala Kahakai
- Major Roadway

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TRADITIONAL CULTURAL PROPERTIES⁵

The trail itself as well as components of it are traditional cultural places. Shrines and offering places along the trail are still used in prayers and ceremonies. Battles which took place along several stretches of the trail are associated with named places. Other trail sections are noted for robbers who waylaid travelers. For example, in the Nīnole–Punalu‘u area of Ka‘ū district, stories describe Luahinekaikapu and her daughter capturing people traveling along the trail. In some areas, quarry sites for the manufacture of stone tools are found. A large abrader quarry is located along the *ala loa* at the Kona–Kohala border.

Anchialine pools are associated with the raising of bait for fishing, with deities, and with chiefly events. Man-made fishponds, both *loko kuapā* and *loko pu‘uone*, consisted of great mortarless seawalls constructed of volcanic basalt and coral to enclose natural lagoons. Most were associated with former chiefly residential complexes where, as traditional gathering places, they provided an important source of food, usually ‘*anae* (mullet) and ‘*awa* (milkfish). Several ponds have associated legends that have come down to us in the ancient oral traditions of the Hawaiian people.

SIGNIFICANT CULTURAL SITES ALONG THE ALA KAHAKAI

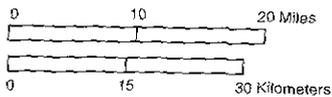
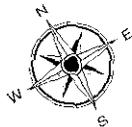
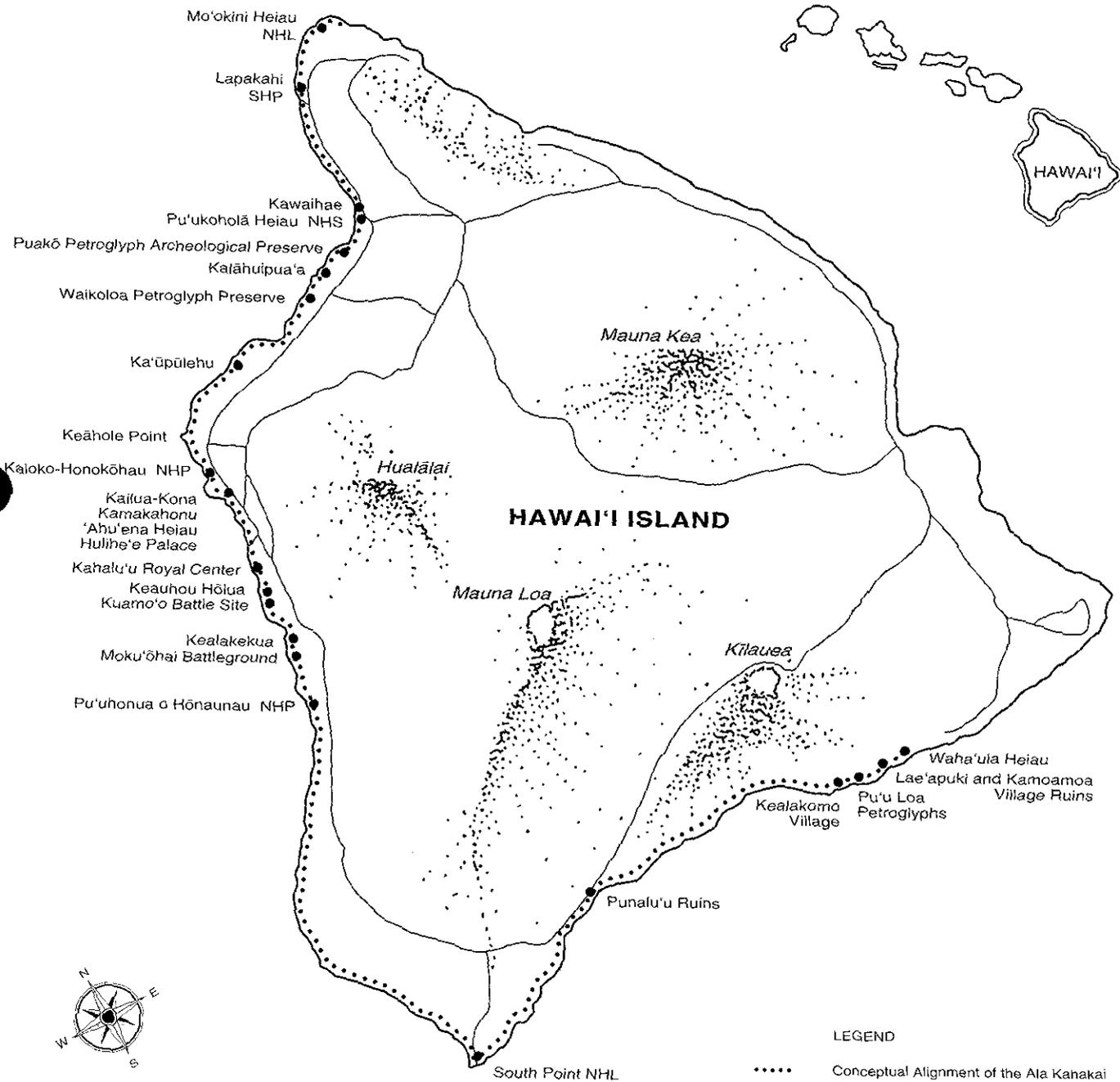
Several sections of the trail are already on the state and national historic registers as individual properties or are incorporated as a contributing property of an archeological district. Dunbar’s *Cultural Resource Assessment* describes 24 publicly known significant historic and cultural sites associated with the trail, many of them national or state historic landmarks. Many other cultural properties, probably in the hundreds, remain unprotected or incompletely recorded and not yet evaluated.

The cultural sites along a potential public trail in Hawai‘i, like the Ala Kahakai, are especially vulnerable. Many are not readily apparent to the non-archeologist, and can be inadvertently damaged. Others can be looted. For that reason in a public document such as this, detailed listings of sites along the *ala loa* are not given. Examples of the most significant protected sites are summarized in Table 4 and described in Appendix E. They provide an illustration of the range of significant sites available along the Ala Kahakai.

Map 4 shows the approximate locations of these sites.

⁵ A traditional cultural property is a place that is eligible for inclusion on the National Register of Historic Places because of its association with cultural practices and beliefs that are (1) rooted in the history of a community, and (2) important to maintaining the continuity of that community’s traditional beliefs and practices (NPS, 1990).

**LOCATION OF SIGNIFICANT CULTURAL SITES
ALONG THE ALA KAHAKAI**



LEGEND

- Conceptual Alignment of the Ala Kahakai
- Major Roadway
- NHL National Historic Landmark
- NHP National Historical Park
- NHS National Historic Site
- NP National Park
- SHP State Historic Park

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- TABLE 4 -
REPRESENTATIVE SIGNIFICANT CULTURAL SITES ALONG THE ALA KAHAKAI

District/Location (Approximate Mileage from 'Upolu Point - North to South)	Publicly known significant site	Period Exemplified a. Precontact b. Historic (1778 - 1819)	Recognition	Prehistoric or Historic Trail a. Visible b. Not Visible, e.g. Located on sand, soil Pāhoehoe
North Kohala/2.0 ⁶	Mo'okini Heiau; Kamehameha I Birthplace; Kāpakai	a, b	NHL ⁷ , SM, NR	b
North Kohala/8.5-10.5	Lapakahi State Historical Park preserves remains of a precontact Hawaiian settlement which includes house sites, canoe sheds, shrines, and burial cairns. Agricultural fields are several miles inland.	a	SHP, NR, SR	
North Kohala/23.5	Pu'ukoholā Heiau, Mailekini Heiau, former Hale o Kapuni Heiau, Pelekane, Kamehameha's "leaning post," and Pahukanilua (John Young's homestead)	a, b	NHS, NHL, NR	
South Kohala/30.0	Puakō Petroglyph Archeological Preserve (Mauna Lani Resort)	a	SPA	b
South Kohala/33.0	Kalāhuipua'a with its fishponds and small cave shelters (Mauna Lani Resort)	a, b	SPA	a
South Kohala/38.0	Waikoloa Petroglyph Preserve ('Anaeho'omalu)	a, b	SPA	a
North Kona/50.0	Ka'ūpūlehu (Kona Village Resort)	a, b	SPA	
North Kona/61.0-65.0	Keāhole Point to Kaloko Ahupua'a includes small clusters of permanent houses, associated graves, small heiau, and temporary shelters	a, b		b
North Kona/66.0	Kaloko-Honokōhau National Historical Park (temples, fishponds, housesites)	a, b	NHP, NHL, NR	a
North Kona/71.5	Kamakahonu and 'Ahu'ena Heiau, Kailua	a, b	NHL, NR	b
North Kona/72.0	Hulihe'e Palace	b		b
North Kona/77.0	Kahalu'u Royal Center (Ke'ekū, Hāpai Ali'ui, Kapuanoni Heiau, Kūemanu heiau, walled house lots. Agricultural fields in the uplands)	a, b	SPA	a (on lava)
North Kona/78.5	Kamehameha III birthplace, Keauhou	b		

⁶ The mileage estimates shown are taken from the County of Hawaii, *Public Access to the Shoreline, County of Hawaii*, September, 1979. Since in that report, mileages represent the intricacies of the shoreline, the trail measures 214 miles instead of the 175 estimated in the national trail study legislation.

⁷ NHL = National Historic Landmark; NHS = National Historic Site; NHP = National Historical Park; NP = National Park; NR = National Register of Historic Places; SHP = State Historical Park; SM = State Monument; SR = State Register of Historic Places; SPA = state preservation area set aside in historic preservation agreements.

- TABLE 4 -

REPRESENTATIVE SIGNIFICANT CULTURAL SITES ALONG THE ALA KAHAKAI (cont.)

District/Location (Approximate Mileage from 'Upolu Point – North to South)	Publicly known significant site	Period Exemplified a. Precontact b. Historic (1778 – 1819)	Recognition	Prehistoric or Historic Trail a. Visible b. Not Visible, e.g. Located on sand, soil Pāhoehoe
North Kona/78.75	Keauhou Hōlua (sled course)	a	NHL, NR	b
North Kona/79.75	Kuamo'o Battle Site and Burial Ground (1819)	b		a
South Kona/87.0	Kealakekua Bay State Historical Park (Captain Cook Monument, Hikiau Heiau, Ka'awaioa)	a, b	SHP, SM	
South Kona/90.0	Moku'ōhai Battleground (1782)	b		
South Kona/ 93.5-95.0	Pu'uhonua o Hōnaunau National Historical Park (place of refuge, ruler's residential area, royal mau-soleum, 'Ale'ale'a heiau, and hōlua slides)	a, b	NHP, NR	a
Ka'ū/147.0	South Point National Historic Landmark District (Heiau o Kalalea; ancient canoe moorings, salt pans, and habitation sites)	a	NHL District	b
Ka'ū/174.0	Punalu'u Ruins (remains include Punalu'unui heiau, a huge luakini temple)	a, b		a
Puna/204.0	Kealakomo Village	a, b	in NP, NR	
Puna/207.0	Pu'u Loa Petroglyphs	a	in NP, NR	
Puna/212.0	Lae'apuki and Kamoamoā Village Ruins (about 85% covered in 1988-95 lava flows)	a, b	in NP, NR	
Puna/214	Waha'uia Heiau	a, b	in NP, NR	

Source: Dunbar, Helene R. *Cultural Resources Assessment, Ala Kahakai, Hawai'i Island*, NPS, Pacific Great Basin Support Office, 1997.

SCENIC AND VISUAL RESOURCES

The trail provides frequent unobstructed ocean to mountain vistas. Depending on the point of view, the trail's upland background is formed by the Kohala mountain range, Mauna Kea, Hualālai, Mauna Loa, and Kīlauea. Ancient and more recent lava flows are visible along the majority of the trail, and the sea can be heard in the lava tubes as well as breaking on the shore. Volcanic formations, such as Kahuku Pali (cliff) and Kuili cinder cone, provide visual interest.

The trail offers a variety of visual experiences. It passes along the calm waters and white sandy coves of South Kohala and central and northern Kona, and crosses hot, barren lava fields which flank the shore. In central Kona, Kealakekua Bay is backed by a high cliff and green upland slopes. In Ka'ū, the trail passes the striking cliff and windswept, dry grassy plain of South Point (Ka Lae—literally "the point"), the southernmost point in the United States.

The trail crosses or passes adjacent to black sand beaches, green sand beaches, and all of the island's few white sand beaches. In remote areas, rocky shorelines still abound with *'opihi* (limpet) and other favored shellfish species. The trail skirts around lagoons, anchialine ponds, and fish ponds where the ancient Hawaiians practiced aquaculture.

The near-shore water is clear, and in some areas, threatened green sea turtles and brightly colored fish are visible from the high shore. In the winter months, whales can be seen. When Kīlauea erupts, volcanic haze (vog) can obscure scenic views. When prevailing winds blow away the haze, the islands of Maui, Kaho'olawe, and Molokai can be seen at great distance. The trail offers views of the full range of Hawai'i Island's seascapes.

RECREATIONAL RESOURCES

Present recreational use of the areas along the trail varies depending upon the ease of access and proximity to population centers. A few areas, especially in South Kohala and North Kona, receive intense use while others are rarely visited. The diverse activities available to visitors include water activities such as swimming, body and board surfing, snorkeling and scuba diving, fishing, boating, kayaking, and outrigger canoe paddling; passive land recreation activities such as walking, photography, birdwatching and nature study, camping, sightseeing, picnicking, and sunbathing; and in limited locations, more active land recreation such as jogging. A range of hiking experiences is available from short, easy walks to strenuous hikes with unsure footing across hot lava fields (DLNR, 1992). The continuous trail as it is experienced today is summarized in a table in Appendix F.

The trail corridor passes through a number of national, state, and county parks which provide recreation to the public, as illustrated in Table 5. In addition, shoreline areas on private land are open to the public. For example, 'Anaeho'omalū Bay at Waikoloa Beach Resort is a popular beach "park" with public parking and restroom facilities. Public shoreline access is provided by other resorts in the region as well.

- TABLE 5 -
FEDERAL, STATE, AND COUNTY PARK SITES WITHIN THE ALA KAHAKAI CORRIDOR

Park	Acreage	District
National Parks		
Hawaii Volcanoes National Park	229,176	Ka'ū/Puna
Kaloko-Honokōhau National Historical Park	1,178	North Kona
Pu'uhonua o Hōnaunau National Historical Park	182	South Kona
Pu'ukoholā Heiau National Historic Site	85	South Kohala
State Parks		
Hapuna Beach State Recreation Area	(est.) 61.8	South Kohala
Kealahou Bay State Historical Park	184.8	South Kona
Napō'opo'o Beach Park Section	73.6	
Ka'awaloa Section	111.3	
Keolonahihi State Historical Park	12.0	North Kona
Kohala Historical Sites State Monument	6.8	North Kohala
Kamehameha I Birthsite Section	0.5	North Kohala
Kukuipahu Heiau Section	3.1	North Kohala
Mo'okini Heiau Section	3.2	North Kohala
Keheha Kai State Park	1,642.5	North Kona
Lapakahi State Historical Park	262.0	North Kohala
Old Kona Airport State Recreation Area	103.7	North Kona
County Parks (Beach Parks Only)		
<i>Disappearing (White) Sands Beach</i>	2.35	North Kona
Ho'okena Beach Park	3.22	South Kona
Kahulu'u Beach Park	4.23	North Kona
Kapa'a Beach Park	26.34	North Kohala
Māhukona Beach Park	2.74	North Kohala
Manini Point (Napō'opo'o)[not developed/maintained]	5.60	South Kona
Miloli'i Beach Park	1.18	South Kona
Pāhoehoe Beach Park	0.66	North Kona
Punalu'u Beach Park	6.00	Ka'ū
Spencer Beach Park	13.36	South Kohala
Whittington Park	0.82	Ka'ū

Source: County of Hawaii, Data Book 1995, Department of Research and Development, pp. 146-147. Updated by Bill Gorst and Susan Sakai

SOCIO-ECONOMIC ENVIRONMENT

POPULATION

Estimates vary, but roughly 120,000 individuals populated Hawai'i Island at the time of Captain Cook's arrival in 1779 (NPS, 1992a). In 1995, the island had a resident⁸ population of 137,200. In 1990, the population was comprised of 23,120 (19 percent) Hawaiian, 25,044 (21 percent) Japanese, 15,540 Filipino, 47,736 (39 percent) White, and 8,877 (8 percent) Black, other Asian and Pacific Islander, and others. The de facto⁹ population was 149,700 which includes 16,756 visitors. Together, in 1990, the census districts containing the Ala Kahakai had a resident population of 44,763 or 37 percent of the total island population (County of Hawaii, 1996).

As shown in Table 6, the state projects an annual 1.6 percent increase in resident population and an average 2.0 percent increase in de facto population during the 1990 to 2020 period.

It is difficult to predict the number of residents who would intentionally visit the Ala Kahakai if it were to become a national trail. Given that it is a shoreline trail and that most residents prefer walking/jogging or beach activities (DLNR, p. 26), it would seem that a substantial portion of the population might encounter the trail, at least casually, as they access nearshore ocean recreation activities. If the trail were marked and interpreted, especially at public access points to the shoreline, many residents could learn of its significance. Development of a continuous trail could increase public access to the shoreline and encourage recreational trail use.

- TABLE 6 -
**RESIDENT AND DE FACTO POPULATIONS,
 STATE AND COUNTY OF HAWAII: 1990 to 2020**

Year	RESIDENT			DE FACTO		
	State Total	Hawaii County	Percent Change	State Total	Hawaii County	Percent Change
1990	1,112,900	121,500		1,257,000	136,500	
1995	1,179,200	137,200	1.2	1,287,100	149,700	1.9
2000	1,238,500	149,600	1.0	1,372,800	165,900	2.1
2005	1,304,000	160,800	1.0	1,463,000	181,900	1.9
2010	1,366,700	174,900	0.9	1,548,600	200,400	2.0
2015	1,430,500	189,100	0.9	1,633,300	220,900	2.0
2020	1,494,100	205,400	0.9	1,720,200	243,300	2.0

Source: Hawai'i State Department of Business and Economic Development, *Population and Economic Projections for the State of Hawaii to 2020*, March 1997, pp. 3 and 4.

⁸ Resident population is defined as the number of persons whose usual place of residence is in an area, regardless of physical location, on the estimate or census date. It includes military personnel stationed or homeported in the area, but excludes persons of local origin attending school or in military service outside the area.

⁹ The de facto population is defined as the number of persons physically present in an area, regardless of military status or usual place of residence. It includes visitors present, but excludes residents temporarily absent.

VISITORS (TOURISTS)

The visitor industry is an economic mainstay of the Island of Hawai'i. Visits to the island have increased steadily from 7,195 daily average in 1980 to 19,310 in 1994 (County of Hawaii, 1996). In 1994, the average length of stay for 2,280 eastbound visitors (from Japan and Asia) was 4.6 days, and for 17,030 westbound (from mainland U.S. and Europe) visitors was 7.3 days. In 1993, about 42 percent of visitors came for pleasure, 38 percent for conventions, meetings, or incentives, and the remaining 20 percent were on other business, visiting friends, or there for other reasons (based on County of Hawaii, 1996, p. 126). The portion of these visitors who would use the Ala Kahakai cannot be predicted. However, trail visitor numbers could be substantial based on the number of visitors to existing cultural sites along the trail route and those interested in shoreline use or hiking. Table 7 illustrates the number of visits for 1992 to 1994 to some cultural attractions located along the Ala Kahakai corridor.

- TABLE 7 -
ATTENDANCE AT CULTURAL ATTRACTIONS
ALONG THE ALA KAHAKAI ROUTE

Cultural Attraction	1992	1993	1994
Hawai'i Volcanoes National Park ¹⁰	2,493,364	2,494,908	2,498,785
Hulihe'e Palace	24,669	26,064	22,927
Kealahou Bay State Historical Park	191,000	221,000	218,000
Lapakahi State Park	108,000	155,000	336,000
Pu'uohoua o Hōnaunau National Historical Park	434,110	424,819	454,457
Pu'ukoholā Heiau National Historic Site	53,552	57,705	59,055

Source: *Data Book 1995, County of Hawaii*, p. 143

¹⁰ Only a small portion of park visitors would actually experience the Ala Kahakai route which is along the shoreline in a remote part of the park classified as wilderness. A portion of the trail was inundated by the latest lava flow from Kilauea.

Recreation surveys indicate that visitors to the Island of Hawai'i prefer water-related activities and hiking as shown on Table 8.

While playing golf or simply walking to the beach, guests at the Kohala resorts such as the Mauna Lani, Mauna Kea, and Waikoloa, and at the Kailua-Kona and Keauhou hotels would encounter the Ala Kahakai. Mauna Lani Resort has preserved portions of the prehistoric and historic trail as a marked and interpreted shoreline trail.

- TABLE 8 -
ISLAND OF HAWAI'I:
SUMMARY OF VISITOR PARTICIPATION BY PLANNING AREA

	Ka'ū	Kona (North and South)	Kohala (North and South)	Puna
Beach Activities	6%	56%	49%	5%
Diving/Snorkeling		76%	37%	
Ocean Boating	3%	90%	3%	
Bodysurfing/bodyboarding	5%	64%	36%	
Hiking	58%	9%	21%	18%
Tennis		54%	39%	
Golfing	4%	33%	63%	
Surfing	25%	75%		
Camping	50%		50%	
Windsurfing			100%	

Note: Percentages add horizontally, and each row would have a different base. Also percentages can sum to more than 100% due to multiple recreational activities.

Comments: For most activities, participation is concentrated in the major resort districts of Kona and Kohala. Of activities in which any significant number of visitors participate, only hiking draws visitors into other areas (including Ka'ū and Puna), where Hawaii Volcanoes National Park is presumably the magnet.

Source: *State Recreation Functional Plan, Technical Reference Document and State Comprehensive Outdoor Recreation Plan (SCORP)* Department of Land and Natural Resources, State of Hawaii, December 1990, p. 40

LAND USE

Land uses in the districts through which the trail is aligned (1,390,125 acres in total) are mainly unused open space (686,107 acres or 49 percent of the district areas), agriculture (495,639 acres or 36 percent), and recreation (185,987 acres or 13 percent). Only 22,326 acres or two percent of the area is used for residences, manufacturing, warehouses, commercial, services (including resort hotels), social and cultural activities, transportation (airports and harbors), and private roads. Most of these more intensive uses are located along the coastal strip, creating a complex mix of land use within the Ala Kahakai corridor. (County of Hawaii, 1989)

In North Kohala, land use along the trail corridor is mostly agricultural with some residential and recreational use. In South Kohala, land use is mainly comprised of resort developments, urban uses associated with the town of Kawaihae, residential use, and recreational use in national, state, and county parks.

North Kona, the most highly developed and urbanized district, is a mix of resort, residential, manufacturing, warehousing, commercial, service, social and cultural, recreational, and transportation uses. This district contains Keāhole Airport, the Natural Energy Laboratory of Hawai'i, Honokōhau Boat Harbor, the town of Kailua-Kona, several state and county beach parks, and one national park. Ali'i Drive, which follows the historic trail route from Kailua-Kona to Keauhou (about six miles) is paved and fully developed.

Land uses in South Kona and K'aū are mainly agricultural, open space, or recreational with some residential use and small communities such as Miloli'i and Punalu'u. These districts encompass two natural area reserves, a national park, a state park, and two county parks. The trail corridor in Puna is entirely within Hawaii Volcanoes National Park.

LAND USE REGULATION¹¹

The use of land in Hawai'i is highly regulated. Land use planning and control are exercised at two levels of government: state and county. In addition, federal law requires Army Corps of Engineers permits for uses in coastal areas and wetlands.

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

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

¹¹ Information for this section is taken from Brian Nishimura, *Land Ownership and Land Use Policy/Regulation Report for the Ala Kahakai National Trail System Study*, included in this report as Appendix G, from *The Hawaii County General Plan*, and from David L. Callies, "Land Use Planning and Priorities in Hawai'i" in Stone, 1987, no. 16. Reviewed and revised by Susan Sakai, Bill Gorst, and the County of Hawaii, March 1997.

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

Coastal Zone Management Act — Pursuant to passage of the Federal Coastal Zone Management Act (CZMA) in 1972, the State of Hawaii enacted the Shoreline Protection Act in 1975 which established a Special Management Area (SMA) program. The SMAs extend a minimum of 100 yards inland from the shoreline vegetation or debris line to ensure that proposed developments minimize adverse environmental impacts to coastal resources, protect public recreation and wildlife resources, and ensure adequate public access to these areas. The 1977 Hawaii Coastal Zone Management Act incorporates many of the features of the Shoreline Protection law and mandates objectives and policies for the management of Hawai'i's coastal zone. The counties have the authority to establish the SMA boundaries and adopt permit requirements.

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

- **County Land Use Regulations** – Hawaii County regulates the private use of land in state land use districts of Agricultural, Rural, and Urban in two primary ways: by state land use designation and by zoning, which regulates the intensity and type of use permitted on private land.

- **Other Regulatory Provisions** – Overlaying the general state regulatory framework are special laws which apply to coastal and shoreline development or specifically address trails and public access issues. A brief summary of the relevant laws from the Hawaii Revised Statutes (HRS) is provided below.

Chapter 205A-41, HRS — contains additional provisions establishing a shoreline setback law for the state. The law authorizes the counties to establish minimum shoreline setback requirements of 20 or 40 feet depending on the size of the parcel. Development and construction proposed within the shoreline setback area are subject to variance procedures administered by the counties. Shoreline setback variance conditions of approval have also been utilized to obtain public access dedications to and along the shoreline.

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

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

**STATE LAND USE DISTRICT CLASSIFICATIONS
ALONG THE ALA KAHAKAI CORRIDOR**

The entire offshore area of the Ala Kahakai corridor to the high wash of the waves or the debris line falls within the Conservation district. Land use is regulated by the BLNR. For most of the trail corridor (about 145 miles), land use is allocated as agricultural, orchard, conservation, or open area. For about 30 miles, lands are allocated as urban: nearly all the lands in South Kohala; about half of the lands in North Kona; and the Punalu'u area in Ka'u. The County of Hawaii has allocated these lands as high, low or medium density urban development, industrial, and resort (County of Hawaii General Plan, 1989).

LANDOWNERSHIP

Note: The source for this section is a report prepared by Brian Nishimura included as Appendix G, edited with comments from Deborah Chang and Susan Sakai.

Tax records and tax key maps indicate that approximately 53 percent of the Ala Kahakai route is government-owned land. The breakdown between federal, state, county and Hawaiian Home Lands is provided in Table 9. The remainder, or 47 percent, of the land through which the trail goes is privately-owned.

- TABLE 9 -
GOVERNMENT LANDS ALA KAHAKAI ROUTE, ISLAND OF HAWAII
(In Miles and Percent of Total)

Total Study Area	Federal ¹	State ²	County ³	Hawaiian Home Lands	Total Gov.
175	30.17	46.92	9.82	6.98	93.24
(100%)	(17.2%)	(26.8%)	(5.6%)	(3.9%)	(53.3%)

¹ Federal land including National Park and lighthouse sites

² State land, including those encumbered by private leases, those under Executive Order to the County and old government roads assumed to be owned by the state

³ County land including County roads

Within the portion of the Ala Kahakai classified as privately owned, approximately 15.49 miles of easements or dedications have been required by governmental action within the study area. Of this total, approximately 11.08 miles are in place and/or recorded on deed documents. Approximately 4.41 miles are situated on parcels which have not been developed and may not be currently available for public use.

In addition, within the privately owned classification are several miles of "ancient trail" which are owned in fee simple by the State. In the ancient Hawaiian method of governance, these trails were open for the use of all the people. State law, the Highways Act of 1892, continues to protect the right of the public to use these trails. The source used to gain information of these trails for this study is the County of Hawaii, *Inventory of Public Shoreline Access* (1979). It is important to note that only those segments which traverse through government land or are part of the tax maps or old survey maps as public trails were part of that inventory. It is certain that more miles of "ancient trail," perhaps the majority of the trail, exist and could be identified as part of a trail management plan.

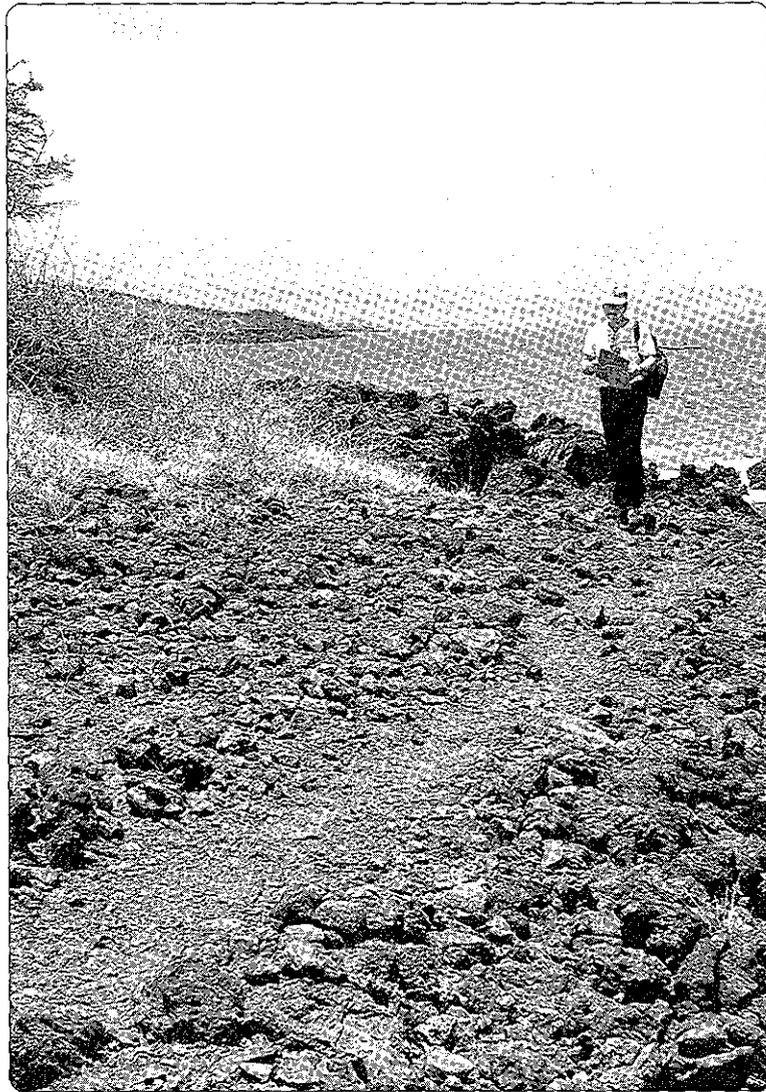
Approximately 68 miles of the properties within the study area have ancient trails described in the *Inventory of Public Shoreline Access*. Table 10 provides a breakdown between Federal, State and private ownership of these parcels. Approximately 32.62 miles (49 percent) are government owned while the remaining 34.94 miles (51 percent) are privately owned.

- TABLE 10 -
**PROPERTY WITH ANCIENT TRAILS DESCRIBED IN THE
 COUNTY OF HAWAII PUBLIC ACCESS TO THE SHORELINE INVENTORY**
 (In Miles and Percent of Total)

Total Study Area	Federal	State	Sub-Total Government	Private
68.10	10.60	22.56	33.21	34.91
(100%)	(16%)	(33%)	(49%)	(34.94%)

In summary, approximately 109 miles (62 percent) of the 175-mile trail appear to be publicly owned or protected at this time, although most of these miles would not be ready for public use. An undetermined number, most likely the major portion of the remaining mileage, has potential for public ownership and use as "ancient trail." Appendix A includes correspondence between the Department of Land and Natural Resources and the Deputy Attorney General, Land/Transportation Division, which discusses the application of Highways Act of 1892 on a segment of the Ala Kahakai.

ENVIRONMENTAL CONSEQUENCES OF THE ALTERNATIVES



Dirt path along shore in North Kohala

ENVIRONMENTAL CONSEQUENCES OF THE ALTERNATIVES

National Park Service (NPS) planning guidelines stipulate that an environmental assessment (EA) or an environmental impact statement (EIS) must be prepared for all national trail studies to evaluate the environmental implications of the alternatives. For the Ala Kahakai study, the NPS chose to prepare an EIS because there is broad public interest in the trail, and it was anticipated that native Hawaiians and landowners might have concerns. The alternatives establish broad management guidelines and their general nature requires that the assessment of impacts also be general. The NPS can make some reasonable projections regarding impacts, but these are based on assumptions that may not prove to be accurate in the future. The discussion describes generalized measures to minimize potential impacts. The study does not intend to suggest that these measures would work for every site or should be applied without further study of specific sites.

Future actions would be preceded by site-specific compliance, prepared in consultation with the Environmental Protection Agency (EPA), U.S. Fish and Wildlife Service (USFWS), the State Historic Preservation Division (SHPD or SHPO) of the Department of Land and Natural Resources (DLNR), and other state and federal agencies. It is anticipated that such documents would reflect a considerable shift in emphasis from qualitative to quantitative analyses.

Impact topics were selected to provide a focus for environmental discussion and to ensure that alternatives are compared based on the most relevant topics. Topics are based on federal laws, orders, and regulations, on NPS management policies, and on issues and concerns expressed during public scoping. Selected topics are natural resources (anchialine ponds, nearshore and reef resources, and endangered plant and animal species); cultural resources; visual resources; socioeconomic environment (the economy and nearby communities, visitor experience, land ownership, land use, and environmental justice); unavoidable adverse environmental effects; short-term uses and long-term productivity; irreversible and irretrievable commitment of resources; and cumulative impacts.

NATURAL RESOURCES

Natural resources which might be impacted by trail use are anchialine ponds, nearshore and reef resources, and endangered plant and animal species.

— ANCHIALINE PONDS —

• **Potential Impacts to Anchialine Ponds** - Ponds are degraded in a number of ways. These include 1) development which may result in pond filling and loss, 2) recreation in or near ponds which could include fishing, bathing, and littering, 3) refuse dumping, and 4) introduction of exotic (non-native) fishes (Brock, 1985).

Threats to anchialine ponds from trail use relate to all but pond filling. Increased recreational activities in and around ponds would be expected. Completion of the Queen

Ka'ahumanu Highway in 1975 opened access to coastal resources which were formerly quite inaccessible. Completion of the Ala Kahakai could have a similar effect on currently inaccessible areas. Generally the pools are used by recreationists for fishing, swimming, and bathing. Fishing may directly impact some native fish species found in anchialine systems (Brock, 1985:13). Anchialine ponds have been used for bathing by campers or refreshing stops by hikers for a long time. Ancient Hawaiians modified ponds with stone walls for bathing. No known negative impacts are attributable to these activities. The use of shampoos and soaps could have an effect on biota in the ponds, but there is no evidence for it (Brock, 1985:13). Also, human use could introduce contamination by fecal and coliform bacteria.

The trail could provide access for dumping of rubbish into ponds. Dumping of any kind is negative, even though this activity has gone on for over 100 years. Bottles and cans appear to have no short-term negative impact on the fauna, but dumping of substances such as used oil, grease, and oil filters caused the disappearance of 'ōpae'ula in a pond adjacent to Honokōhau Harbor (Brock, 1985:13).

The introduction of non-native fish into the ponds poses the most serious threat to the native invertebrates in the pools. Most likely, these fish are introduced by fishers, but then may colonize to other ponds (Chang; Maciolek & Brock). Native fish, which sometimes wash into the ponds with waves, do not pose a great threat to the shrimp because these fish cannot complete their life cycle in the ponds. On the other hand, non-native fish, which can complete their life cycles in the ponds, seriously impact shrimp populations (Brock, 1985:8). The major culprits are tilapia (probably *Oreochromis mossambicus*), topminnows (Family Poeciliidae—probably *Gambusia affinis* and *Poecilia mexicana*), and koi (*Cyprinus caprio*). In 1970, about 15 percent of the anchialine ponds along the Kona coast contained non-native fish; in 1985, the number increased to about 46 percent; and in 1990, to nearly 95 percent (personal conversation, Dr. Richard Brock, April 1997). Many of the anchialine ponds on the Kona coast are in a state of biological change primarily due to the presence of exotic fishes (Brock, 1985:16).

- **Significance Evaluation Criteria** - The single most important factor indicating the health of an anchialine pond is the visible presence of red shrimp, 'ōpae'ula (Brock, personal communication, March 1997). Trail users—through overuse of the ponds, introducing alien fishes or coliform bacteria, bathing using soaps and shampoos, swimming with suntan lotion applied, dumping of trash—could have a significant impact on anchialine pond resources. Before a trail segment is officially opened to the public, the presence of red shrimp in trailside ponds would need to be verified to provide a baseline of information. If, with trail use over time, the presence of alien fish in any pond increases, the negative effect would be significant. If the presence of alien fish decreases due to management actions, the positive effect would be significant.

- **Potential Measures to Minimize Adverse Impacts to Anchialine Ponds** - Protecting ponds that are easily accessible to trail users is difficult. Two methods appear to be effective in reducing negative impacts to the ponds: 1) public education through signs and interpretive exhibits and 2) monitoring of the ponds to remove alien fish immediately upon their introduction into ponds. Dr. Brock reports (personal conversation, March 1997) that the signed, interpreted and monitored 12-acre Waikoloa Pond Preserve, consisting of about 67 ponds, "is the single biggest complex of ponds on the Kona coast that does not have an alien fish problem."

- Other possible measures which might limit damage are the following (from Chang):
- extend educational efforts to schools, tourists, resort workers, fishers, and other community groups
 - establish rules and regulations regarding public use of the ponds as part of trail administration
 - restrict use of the most sensitive ponds for research, educational, and sanctuary purposes
 - refine methods for eradicating undesirable species
 - continue funding long-term studies, such as at Waikoloa and Kaloko-Honokōhau National Historical Park, of how the ponds' plants and animals are affected by surrounding activities,
 - impose strict requirements to protect, enhance, and monitor anchialine ponds at existing and proposed developments of properties where ponds exist
 - provide a live-in caretaker at the ponds which are most sensitive or representative of anchialine biota

- ANCHIALINE PONDS -
ALTERNATIVE A:
NO ACTION

Anchialine ponds along the Ala Kahakai corridor that are not already protected and monitored, as they are at Waikoloa Resort and Kaloko-Honokōhau National Historical Park, would likely continue to degrade from uncontrolled use. Sections of the *ala loa* would continue to be used to access nearshore resources in an unregulated fashion by fishers and other recreational users who could inadvertently harm the ponds through introduction of exotic fish or substances such as shampoos, tanning oils, and soaps. Continuing present use could have a significant adverse impact on the ponds.

- ANCHIALINE PONDS -
ALTERNATIVE B:
ALA KAHAKAI NATIONAL HISTORIC TRAIL (CONTINUOUS)

Anchialine ponds along the entire trail route could benefit from a management plan included within the comprehensive management plan required by the National Trails System Act, as amended. Pond preservation areas could be identified as recommended by Brock (1985). Protocols for managing and monitoring ponds developed at Waikoloa and underway at Kaloko could be applied to other ponds along the trail route. Even though more visitors would be attracted to the trail, with a pond management plan in place, the ponds would be more likely to be protected than they are now. The trail management plan could recommend measures to minimize negative impacts to the ponds, including interpretive signs, use restrictions, and monitoring. If effective measures are implemented, this alternative offers the potential to minimize adverse impacts to anchialine ponds. Without inventory and monitoring of anchialine ponds, increase in trail use due to national trail designation could have a significant adverse impact on the ponds.

- ANCHIALINE PONDS -
ALTERNATIVE C:
ALA KAHAKAI STATE HISTORICAL TRAIL

The state currently has no programs to monitor anchialine ponds. Even though environmental impact statements are required for most developments along the coast, these evaluations have not always been effective in protecting the majority of ponds from development or degradation. Pond protection could be incorporated into a trail management plan prepared by the state. The trail management plan could assess the effectiveness of and recommend potential measures to minimize negative impacts to the

ponds, including interpretive signs, use restrictions, and monitoring. Without inventory and monitoring of anchialine ponds, trail use could have a significant adverse impact on the ponds. If effective measures are implemented, this alternative offers the potential to minimize adverse impacts to anchialine ponds. Without inventory and monitoring of anchialine ponds, increase in trail use due to state trail designation could have a significant adverse impact on the ponds.

- ANCHIALINE PONDS -
ALTERNATIVE D:
ALA KAHAKAI NATIONAL HISTORIC TRAIL (DISCONTINUOUS)

The potential to minimize adverse impacts to anchialine ponds exists with this alternative similar to Alternative B. Only those ponds adjacent to intact prehistoric or historic trail segments would be managed and protected.

— ENDANGERED PLANT AND ANIMAL SPECIES —

- **Potential Adverse Impacts on Endangered Plant and Animal Species** – Threats to native plants from increased use include trampling off the trail, human-aided distribution of alien species, increased risk of fire, and contamination of water or soil by human waste. Garbage left uncovered could attract rats and mongoose that could be detrimental to endangered plants (e.g. chewing on the plants and their seeds) or animals (e.g. nest predation, competition). The nesting sites of endangered animal species could be disturbed by human presence or human activity such as camping. Examples along the trail are stilt and coot that nest at Aimakapā Fish Pond and the hawksbill turtle which nests only at Kamehame on Hawai'i Island (USFWS, personal conversation, 4/12/96). Habitats of endangered invertebrates can be lost as anchialine ponds are overtaken by alien fish, overused, or polluted from dumping. Facility development at specific sites along the trail could temporarily displace or disturb endangered species.

- **Significance Evaluation Criteria** – Any reduction in the survival or recovery of threatened or endangered species or migratory birds or reduction in the natural function or appearance of habitat areas of endangered or threatened native plants due to trail use would be a significant adverse impact.

- **Potential Measures to Minimize Adverse Impacts on Endangered Plant and Animal Species** – Evaluation of human impacts on plants and animals depends on the species and would have to be considered on a case-by-case basis. Measures to reduce impacts can range from complete avoidance of an area to minimizing impacts. For example, human activity could be limited or entirely restricted during breeding seasons for animals that are affected by human presence. Camping or other trail developments should be located away from endangered species habitats. Signs and interpretation should encourage users to stay on the trail. The State of Hawaii could be encouraged to establish stewardship and protection programs on their lands along the trail. Alien plants could be removed and replaced with native vegetation, especially during construction of facilities.

- ENDANGERED PLANT AND ANIMAL SPECIES -
ALTERNATIVE A:
NO ACTION

No protection additional to what is now available for endangered species would result from this alternative. Impacts from trail development for a national trail would not occur. Trail use in some areas would continue to occur and could adversely affect endangered species.

- ENDANGERED PLANT AND ANIMAL SPECIES -
ALTERNATIVE B:
ALA KAHAKAI NATIONAL HISTORIC TRAIL (CONTINUOUS)

As trail and site development occur and site-specific surveys identify species which have been listed or proposed by the U.S. Fish and Wildlife Service (USFWS), the National Park Service would 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 would be eliminated or reduced in compliance with the provisions of the Act. State and county laws would also apply.

- ENDANGERED PLANT AND ANIMAL SPECIES -
ALTERNATIVE C:
ALA KAHAKAI STATE HISTORIC TRAIL

State listed endangered and candidate species would 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, Hawai'i state law protects endangered plants on private property. Potential adverse impacts to listed and proposed species would be eliminated or reduced in compliance with the provisions of state law.

- ENDANGERED PLANT AND ANIMAL SPECIES -
ALTERNATIVE D:
ALA KAHAKAI NATIONAL HISTORIC TRAIL (DISCONTINUOUS)

The effects of this alternative would be similar to Alternative B.

- NEARSHORE AND REEF RESOURCES -

- **Potential Impacts on Nearshore and Reef Resources** - Commercial collection, the major adverse impact to the abundance of reef fishes and nearshore resources such as *'opihi* and *'a'ama* crab, is not generally related to trail use. This issue is being addressed by local communities and the DLNR Division of Aquatic Resources through Fishery Management Area plans. However, increased use of traditional fisher trails as they become linked as part of the Ala Kahakai would bring more people to the shoreline to enjoy and perhaps exploit nearshore and reef resources. Uses such as swimming, snorkeling, and photographing would have negligible adverse impacts on the resources. It is possible that trail users could diminish reef fish or nearshore resources through recreational harvesting or overuse. These impacts would be felt most keenly by subsistence fishers and gatherers.

- **Significance Evaluation Criteria** - Depletion of reef fishes and nearshore resources due to trail use would be a significant adverse impact. In order to determine the extent of impacts, if any, in areas where local fishers have expressed concerns, baseline data would need to be gathered to establish the abundance and diversity of the existing nearshore and reef areas. Once a baseline is established, then a monitoring program could determine the significance of the impacts.

- **Potential Measures to Minimize Adverse Impacts on Nearshore and Reef Resources** - Local fishers could be included in trail planning to identify gathering areas and to provide recommendations. This information could be gathered as part of the ethnography program. Trail signs, interpretive media, and promotional materials can convey the limitations on fishing and gathering and encourage appropriate activities.

- NEARSHORE AND REEF RESOURCES -
ALTERNATIVE A:
NO ACTION

Reef fishes and nearshore resources will continue to be protected by local residents, traditional users, and DLNR Division of Aquatic Resources through proposed Fishery Management Areas (FMAs). Those people who use trails to access the shoreline may continue to harvest fish and nearshore resources in areas which are traditional *ko'a* (fishing grounds) or gathering areas outside of the FMAs. Locally significant adverse impacts could occur.

- NEARSHORE AND REEF RESOURCES -
ALTERNATIVE B:
ALA KAHAKAI NATIONAL HISTORIC TRAIL (CONTINUOUS)

Under this alternative, traditional fishers and gatherers would be consulted. Recommendations developed for trail use for the FMAs could be applied to traditional fishing and gathering areas along the length of the trail. Negative impacts would not be expected to be significant.

- NEARSHORE AND REEF RESOURCES -
ALTERNATIVE C:
ALA KAHAKAI STATE HISTORIC TRAIL

Impacts would be similar to Alternative B.

- NEARSHORE AND REEF RESOURCES -
ALTERNATIVE D:
ALA KAHAKAI NATIONAL HISTORIC TRAIL (DISCONTINUOUS)

Impacts would be similar to Alternative B, but would apply to fewer areas.

CULTURAL RESOURCES

• **Potential Adverse Impacts on Cultural Resources** - Examples of cultural resources which might be affected by trail use are the prehistoric and historic trail itself, archeological sites, shrines (*heiau* or *'ahu*), burial sites/reburials, petroglyphs, and grinding surfaces. Included are traditional cultural properties, places sacred or special to native Hawaiians. Also, natural resources such as food and fish gathering areas, fish ponds, salt pans, and medicinal plants would be considered cultural resources.

Cultural resources along the shoreline trails can be inadvertently desecrated by unknowing trail users or vandalized and looted by artifact hunters. Native subsistence resources can be overused and even wiped out. These impacts could be more severe with added public use on existing trails or by making other areas more accessible to the public.

• **Significance Evaluation Criteria** - Any activity related to trail use that harms important cultural resources would be considered a significant adverse impact. Potentially significant impacts include movement, removal, or defacement of important artifacts or structural features or reduction of resources necessary to traditional cultural practices of native Hawaiians. Use of the trail itself would constitute an insignificant impact. Protection of resources that are not now protected would provide a beneficial effect.

• **Potential Measures to Minimize Adverse Impacts on Cultural Resources** – As with natural resources, protection of cultural resources can only be done on a case-by-case basis, but certain measures can be recommended for all portions of the trail under all action alternatives. Archeological and historical surveys should document features along the trail. Such surveys should be completed on public lands. Trail administration could encourage such studies on private lands. Archeological resources along the trail should be identified and documented in close coordination with the State Historic Preservation Division (SHPD or SHPO), which already has information on some segments of the trail.

Traditional cultural properties including nearshore gathering and medicinal plant gathering areas should be identified, in large part through ethnographic interviews with native Hawaiians. Assessments of traditional cultural significance should be added to already completed national register nominations. To ensure that the management plan includes traditional cultural properties, the inventory process should be based on landscapes or ecosystems rather than on narrowly defined boundaries. Community based management plans could be prepared. Guardianship and curator programs for specific sites could be established by involving concerned native Hawaiian groups. Based on management plans for the specific areas, some highly sensitive areas could require a native Hawaiian guide or trained docent to permit public use. Other areas may require trail rerouting to avoid sensitive sites. Still other areas may be able to bear unrestricted public use.

Trail planning and design should carefully consider the location of facilities so that no cultural resources are disturbed. Visitors should be directed away from burial sites if at all possible. Planning and design should 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. For interpretive purposes, preserving medicinal plants in proximity to the trail could provide the opportunity for education to their cultural value without causing visitors to stray from the trail (Williams).

Although state-owned trails are open for use, no segment of the trail should be promoted for public use until cultural resources within that segment are documented, sensitive areas determined, and a management plan describing culturally appropriate treatments for artifact and site feature preservation prepared. The SHPD will oppose promoting of any section of trail for public use until such a plan is in place. At issue is the size of the area of land adjacent to the trail that should be surveyed. This decision may be made on a case-by-case basis in consultation with the SHPD or by negotiating a programmatic agreement. The management plan should incorporate the expertise of local native Hawaiians, archeologists, cultural anthropologists, and natural scientists, among others. Sensitive archeological areas could be monitored and maintained at low cost through volunteer programs such as the curator program of the State Department of Land and Natural Resources, State Historic Preservation Division. All volunteer programs should have a training component so that the volunteers do not themselves accidentally harm resources.

- CULTURAL RESOURCES -
ALTERNATIVE A:
NO ACTION

No protection beyond what is now available for cultural resources would result from this alternative. Some resources may be protected by landowners by virtue of their limiting public use of their property. Trail resources could be adversely impacted by incremental development. Looting and digging by artifact hunters and amateur "archeologists" would continue.

- CULTURAL RESOURCES -
ALTERNATIVE B:
ALA KAHAKAI NATIONAL HISTORIC TRAIL (CONTINUOUS)

This alternative would provide federal funds to administer the trail, creating the potential for cultural resource inventories, assessment, protection, and monitoring. Compliance with the National Historic Preservation Act of 1996 and the Native American Graves Protection and Repatriation Act would be required including consultation with native Hawaiians. The trail as a whole would be considered when development actions are proposed, leaving less opportunity for piecemeal development. National Park Service technical experience with cultural resource protection and interpretation would be available. Methods for minimizing impacts to cultural resources would have a high likelihood of being included in the comprehensive management plan (CMP) and being implemented over time. In conjunction with the CMP, a Rapid Ethnographic Assessment Procedure (REAP) could be conducted. REAP consists of a battery of methods such as transect walks, community mapping, focus groups, and interviews that can provide an overview of ethnographic resources. Other studies would be identified in the CMP. As part of the Department of Interior, the nation's principal conservation agency, National Park Service administration would emphasize natural and cultural resource protection while providing for public enjoyment of the trail.

- CULTURAL RESOURCES -
ALTERNATIVE C:
ALA KAHAKAI STATE HISTORIC TRAIL

Like Alternative B, this alternative provides the advantage of considering the trail as one entity. The Nā Ala Hele *Program Plan* emphasizes cultural heritage and management of resources. As with the National Park Service, Nā Ala Hele must strike a balance between resource protection and public use. Given the current funding level for Nā Ala Hele and the demands of its broad statewide mandates, it seems likely that funds would be limited for resource protection under this alternative. However, since state funding for this alternative is not known, any adverse or beneficial impacts cannot be addressed. With adequate funding from the state, any of the measures to minimize impacts to cultural resources could be used to protect the Ala Kahakai. The effects of this alternative would be adverse if the trail were authorized and no operating funds were committed each year.

- CULTURAL RESOURCES -
ALTERNATIVE D:
ALA KAHAKAI NATIONAL HISTORIC TRAIL (DISCONTINUOUS)

This alternative would have similar effects to Alternative B except that only intact pre-historic or historic segments of trail would be protected. Since these segments are the most sensitive, a high level of cultural resource protection would be provided by this alternative.

VISUAL RESOURCES

- **Potential Significant Impacts on Visual Resources** – Trail facility development such as access roads, parking areas, rest rooms, trash receptacles, and signs could adversely affect the scenic quality of the trail corridor.

- **Significance Evaluation Criteria** – Trail facility developments which detract from significant views from the trail to the ocean, mountains, or other features or which create a cluttered appearance would be significant adverse impacts to visual resources.

- **Potential Measures to Minimize Adverse Impacts to Visual Resources** – A management plan could include design guidelines for the length of the trail. All planning before development would be site specific and would locate improvements in a manner to least affect the area's visual character and views. Signs should be kept to the minimum required to guide visitors and could be designed to be appropriate to the area. An interpretive exhibit plan for the entire trail could be developed and wayside exhibits and signs installed along the trail only at those sites that require interpretation for user safety, understanding, and enjoyment.

- VISUAL RESOURCES -
ALTERNATIVE A:
NO ACTION

Visual resources would continue to be affected as they are now. No effects to visual resources would result from trail development, marking, or interpretation for a national trail with this alternative.

- VISUAL RESOURCES -
ALTERNATIVE B:
ALA KAHAKAI NATIONAL HISTORIC TRAIL (CONTINUOUS)

Actions to minimize potential adverse effects of construction of trail facilities could be addressed in the management plan and implemented as the facilities are designed and built.

- VISUAL RESOURCES -
ALTERNATIVE C:
ALA KAHAKAI STATE HISTORIC TRAIL

Effects would be similar to Alternative B.

- VISUAL RESOURCES -
ALTERNATIVE D:
ALA KAHAKAI NATIONAL HISTORIC TRAIL (DISCONTINUOUS)

Effects would be similar to Alternative B.

SOCIOECONOMIC ENVIRONMENT

Socioeconomic factors considered are effects on the economy and nearby communities, user experience, land ownership, and land use.

— EFFECTS ON THE ECONOMY AND NEARBY COMMUNITIES —

- **Significance Evaluation Criteria** - Contributions to the local economy attributable to trail use in substantial sums per year would be a significant positive impact.

- EFFECTS ON THE ECONOMY AND NEARBY COMMUNITIES - ALTERNATIVE A: NO ACTION

No effects to the economy and nearby communities would result from this alternative.

— EFFECTS ON THE ECONOMY AND NEARBY COMMUNITIES — ALTERNATIVE B: ALA KAHAKAI NATIONAL HISTORIC TRAIL (CONTINUOUS)

Designation of the Ala Kahakai as a national trail would not have any noticeable effect on the national economy. Effects on the local economy would be neutral to somewhat positive. Any actions taken after trail designation would be spread out over time and space, thereby limiting beneficial effects. Efforts to protect, develop, maintain, and manage the trail would create some new spending which would be localized and relatively minor. Expenditures for labor and materials would be short-term and would accrue to a few individuals or firms. Some of the smaller communities along the route could benefit from increased tourist spending if trail management promotes trail use. Local businesses such as food service, lodging, camping, sporting goods, and book stores could receive some benefits from sales to trail users. Increased trail use would not be expected to affect the overall profitability of these businesses. Some trail proponents have envisioned small bed and breakfast establishments along the trail operated by local landowners. It is possible that some economic benefit could accrue to landowners in this instance.

— EFFECTS ON THE ECONOMY AND NEARBY COMMUNITIES — ALTERNATIVE C: ALA KAHAKAI STATE HISTORIC TRAIL

Effects would be similar to Alternative B.

— EFFECTS ON THE ECONOMY AND NEARBY COMMUNITIES — ALTERNATIVE D: ALA KAHAKAI NATIONAL HISTORIC TRAIL (DISCONTINUOUS)

Effects would be similar to Alternative B.

— IMPACTS ON USER¹ EXPERIENCE —

- **Carrying Capacity** - The National Trails System Act (NTSA), as amended, requires that carrying capacity be addressed in a national trail study. In 1978, when the NTSA was written, the concept had been borrowed from range and wildlife management to mean the amount of use (numbers of animals) an area of land could support on a sustained basis without destruction of the resource base (feed). By applying the idea of use limits (carrying capacity) to recreationists, the hope was to maintain quality resources and

¹ "User" includes residents and others who now use portions of the Ala Kahakai as access to the shoreline and nearshore resources, native Hawaiians exercising their subsistence rights to nearshore resources, and tourists.

experiences (Marion). Over time, the concept has shifted from a prescription of numbers of users to achieving desired resource and social conditions. The concept now addresses how to manage use to control physical and social impacts.

For the Ala Kahakai, the physical carrying capacity of the trail tread is relatively high. Much of the trail passes over lava or sandy beaches in an arid area, so erosion is not the problem it might be in the rain forest area. Even the stepping stones or stone paving placed in prehistoric times are sturdy and not apt to suffer from use.

Factors that need to be addressed are natural, cultural, and social. Use may need to be limited in some portions of the trail to protect natural resources including native Hawaiian subsistence resources, to protect cultural resources including traditional areas, and to protect the quality of experience that the visitor might expect. Hawaiian perceptions of social carrying capacity—crowding—are two to three times lower than national standards (personal conversation with Bill Gorst and George Atta, April 11, 1996). Concern for ecotourism was expressed many times during the study process as a belief that commercial groups may overuse trail resources or affect other visitors by their numbers on the trail.

Since national standards vary widely, it is difficult to state just what the perceived carrying capacity of the Ala Kahakai might be. The carrying capacity would vary over the length of the trail. It is possible, that the natural resource, cultural value, or social carrying capacity, once defined, might be exceeded on some segments if the trail has national recognition.

- **Health and Safety** – Trail users could experience adverse impacts to their health from volcanic smog (vog) 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, thin sections of *pāhoehoe* lava may collapse, or unexpected earthquakes or tsunami could occur. The Ala Kahakai offers easy access to the ocean, and visitors unfamiliar with ocean conditions may be tempted to swim in unsafe areas. Segments of the Ala Kahakai 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.

- **Significance Evaluation Criteria** – Significant impacts of increased trail use could include perceived crowding in areas expected to provide solitude, overuse of nearshore resources, reduction in natural or cultural resources, reduction in native Hawaiians' ability to practice their traditional rights, and exposure of visitors to unsafe conditions without warning and appropriate preparation.

- **Potential Measures to Minimize Adverse Impacts to User and Experience** – These measures are discussed under each Alternative.

- IMPACTS ON USER EXPERIENCE -
ALTERNATIVE A:
NO ACTION

Visitation to currently accessible areas of the trail area is expected to increase in conjunction with expected growth in tourism to the Island of Hawai'i. Crowding may be experienced in areas where it is not experienced now. Tourists and others could unknowingly desecrate cultural areas or impinge on native Hawaiians' traditional practices. An increased number of people would experience the *ala loa* without knowing or understanding its significance. Visitors would miss out on enrichment of their experience.

— IMPACTS ON USER EXPERIENCE —
ALTERNATIVE B:
ALA KAHAKAI NATIONAL HISTORIC TRAIL (CONTINUOUS)

Promotion of protected trail segments would result in more visitors to the trail. Users would be provided additional access to the prehistoric and historic trail and would benefit from interpretive, educational, and recreational opportunities. Higher levels of use would be expected near population centers and resorts in the South Kohala and North Kona districts. The more remote sections of trail or those in less developed areas may become valued for their primitive qualities and opportunities for solitude.

To help ensure the quality of visitor experience, a carrying capacity analysis should be included in the trail management plan. The National Park Service process, called "Visitor Experience and Resource Protection" (VERP), interprets carrying capacity not so much as setting limits on numbers of people who can visit parks, but as a relationship between desired ecological and social conditions. Visitor carrying capacity is defined as, "the type and level of visitor use that can be accommodated while sustaining the desired resource and social conditions that complement the purposes of the park units and their management objectives." (NPS, 1993:3) The program includes four key elements: a parkwide (or trail-long) management zoning scheme (based on the degree of resource sensitivity and the desired visitor experience); indicators and standards for each zone; management actions that address visitor use and infrastructure in each zone; and a monitoring program (NPS, 1994b). The management plan would include the first three elements. Monitoring would be a continuing process during plan implementation.

The NPS could expand its air quality monitoring to affected areas of the trail. Health advisories could be provided at trailheads or trail access areas informing visitors of air quality in trail areas affected by volcanic gases from Kilauea. Sensitive persons, for example those with asthma or existing respiratory disorders, could be issued a personal monitoring badge, similar to those used by firefighters to measure carbon monoxide. Users could also be advised of trail and swimming conditions on maps, guides, brochures, and signs so that they can prepare themselves with the proper shoes, water, sun screen, hats, and other protective items as needed.

— IMPACTS ON USER EXPERIENCE —
ALTERNATIVE C:
ALA KAHAKAI STATE HISTORIC TRAIL

Like Alternative B, promotion of protected trail segments would result in more trail users. They would have additional access to prehistoric or historic trail segments, gaining lateral shoreline access to areas not now easily accessible. Users would benefit from interpretive, educational, and recreational opportunities. Higher levels of use would be expected near population centers and resorts in the South Kohala and North Kona districts. The more remote sections of trail or those in less developed areas may become valued for their primitive qualities and opportunities for solitude.

The state could conduct a carrying capacity study as part of a management plan for the trail. The Nā Ala Hele program evaluates trail impacts using a method developed by the USDA Forest Service called "Limits of Acceptable Change" (LAC) [Chang, personal communication, March 1997]. Similar to the National Park Service VERP system, LAC addresses how to manage use (amount, type, timing, location) to control biophysical and social impacts. It is a process for setting objectives, monitoring conditions, and then gear-management to meet the objectives.

The state could issue monitoring badges and advise visitors of trail conditions as described under Alternative B.

- IMPACTS ON USER EXPERIENCE -
ALTERNATIVE D:
ALA KAHAKAI NATIONAL HISTORIC TRAIL (CONTINUOUS)

Effects would be similar to Alternative B.

- LAND OWNERSHIP -

• **Potential Impacts on Land Ownership** - If, as seems likely, the majority of the *ala loa* is legally determined to be owned by the State of Hawaii, landowners may have concerns with the trail alignment across their property. Landowners have expressed concerns that they may be affected by actions of recreational trail users such as trespassing, camping, picnicking, littering, vandalism, and theft, and by management if trail rules are unenforced. They also have concerns that trail designation could create leverage for public opinion which would affect their ability to use their lands. They are concerned that everything that can be seen from the trail, not just the trail tread, would be affected. They also have concerns for their liability if the public uses a trail across their land.

• **Significance Evaluation Criteria** - Landowners could be significantly affected as a result of trail designation if increased numbers of trail users trespassed on their property and engaged in negative activities such as littering, vandalism or theft, if archeological sites on their land were looted, if they were sued for negligence by trail users, or if their use of their land were severely limited.

• **Potential Measures to Minimize Adverse Impacts to Land Ownership** - For all action alternatives, landowners should be included on trail advisory councils and in the planning for any segment of trail that affects their property. The management plan could define, as feasible, the trail boundaries and identify special visual resources or cultural landscapes which might be selected for protection. Private property should be clearly marked along the trail. Trail segments should be promoted for public use only after an entity such as the National Park Service, the state, or a native Hawaiian or local volunteer group is identified to maintain the trail and monitor trail use.

For all alternatives, if the state owns the trail, then private landowner liability would not be an issue. If a private landowner owns the trail, Hawai'i state law provides liability protection. (See Appendix A for legislation.)

- LAND OWNERSHIP -
ALTERNATIVE A:
NO ACTION

Landowners would continue to experience whatever impacts of recreational use that occur now. As the public becomes aware that the *ala loa* is most probably owned by the state, pressure may be applied to landowners to open the trail on their property to public use. The amount of public use would be limited by Nā Ala Hele's ability, with limited funds, to prepare a cultural resource management plan and to manage and maintain the trail segments.

- LAND OWNERSHIP -
ALTERNATIVE B:
ALA KAHAKAI NATIONAL HISTORIC TRAIL (CONTINUOUS)

Trail designation would not impact landowners regarding federal acquisition because land would be acquired, if at all, only from willing sellers.

In cooperation with the state, the landowner, and other interested parties, the National Park Service would administer certified sections of state-owned trail crossing private lands of varying width depending on the width of the "ancient" trail. Even though these are most likely public trails today, they may not be open to the public because ownership records have not been reviewed. Under this alternative, ownership records would be reviewed and the trail made available to the public after management plans are completed. More trail users would be attracted to use the public trail as it passes through private land.

Federal, state and local laws would apply regarding protection of natural and cultural resources, native Hawaiian rights, and public access and accessibility. Federal laws that would apply are the National Environmental Policy Act of 1969, as amended; National Historic Preservation Act of 1966, including its 1992 Amendments and its interpretation in National Register Bulletin 38; the Endangered Species Act of 1973; American Indian Religious Freedom Act of 1978; Archeological Resources Protection Act of 1979; Native American Graves Protection and Repatriation Act of 1990; Coastal Zone Management Act; and Executive Orders 11988 (Floodplain Management) and 11990 (Protection of Wetlands). Federal laws would apply only to the trail and not to the adjacent landowner's property. In the State of Hawaii, many state laws address similar concerns to federal laws and in some cases are more stringent. Generally, for any action regarding any segment of the Ala Kahakai, joint state and federal environmental assessments (EAs) or statements (EISs) could be prepared. It is not anticipated that meeting federal requirements would add significantly to existing requirements of state and local regulations.

It is possible that a landowner may wish to protect for public use and enjoyment resources adjacent to and associated with the trail. Participation by landowners in the national trail is voluntary, though encouraged, and requires a certification agreement with the National Park Service (NPS). Experience on other national trails indicates that many landowners take pride in preserving trail resources. Certification of trail sites provides a positive way for landowners to help preserve resources without giving up ownership rights. Interested landowners could be encouraged to certify their trail resources so that they would receive the benefits of NPS technical and possible financial assistance in protecting those resources. Easements and partial interests in land can sometimes provide significant tax relief under the National Trails System Act, as amended, section 7(k).

Those landowners not wishing to participate may receive public pressure to do so, especially if the land represents a linking segment that could help create a continuous trail. The degree of pressure and the need for landowner response cannot be estimated at this time.

- LAND OWNERSHIP -
ALTERNATIVE C:
ALA KAHAKAI STATE HISTORIC TRAIL

Effects on landowners of this alternative would be related to provisions in the state legislation required to authorize the trail. The state would most likely pursue review of ownership records of "ancient trails" on private lands in order to own and manage a

continuous trail. Public use would be permitted on trails which are currently closed to the public because their ownership status is not now known. All state laws for environmental protection would apply. Landowners would not be expected to incur regulatory requirements additional to those now required by state and local law.

- LAND OWNERSHIP -
ALTERNATIVE D:
ALA KAHAKAI NATIONAL HISTORIC TRAIL (DISCONTINUOUS)

Effects would be similar to Alternative B. Since only intact prehistoric, historic, and "ancient" trails would be included, the pressure to create a continuous trail would not exist.

— IMPACTS ON LAND USE —
(ALL ALTERNATIVES)

Except for the access along the trail right-of-way itself, it is not expected that land use would be affected by federal or state trail designation. Over time, the trail may be promoted for public use as records of title are reviewed and management plans adopted. Permissible activities on adjacent lands would not change as a result of trail designation. Options for land use would continue to be affected by state land use classifications and either existing state or county regulations. The majority of the trail is in a Conservation district; therefore, permits for use and development would be required under any circumstance. State statutes (Chapter 6E, Hawaii Revised Statutes) protect archeological resources and would require permits for any site development in the vicinity of the trail under any of the alternatives, including the no action. Development proposals are now and would continue to be reviewed by the State Nā Ala Hele Program for public access issues and by the State Historic Preservation Division for cultural resource issues.

ENVIRONMENTAL JUSTICE
(ALL ALTERNATIVES INVOLVING FEDERAL ADMINISTRATION)

Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, requires all federal agencies to incorporate environmental justice into their missions. They are to identify and address disproportionately high and adverse human health or environmental effects of their programs and policies on minorities and low-income populations and communities. Designation of the Ala Kahakai is not expected to have any direct or indirect adverse effects on human health or the environment regarding any minority or low-income population. However, if the trail is designated a national trail and comes under federal administration, this Executive Order will be considered during preparation of the trail management plan or other action plans to ensure compliance.

UNAVOIDABLE ADVERSE ENVIRONMENTAL EFFECTS

ALTERNATIVE A: NO ACTION

Trail fabric and associated archeological, cultural, and historic resources would remain highly susceptible to natural deterioration, inadvertent human damage, and vandalism. It is likely that some important resources would be lost. Increasing unregulated visitor use and potential piecemeal private development along the Ala Kahakai route could contribute to the loss of trail resources.

ALL ACTION ALTERNATIVES

With proper planning and management, few long-term adverse impacts to trail resources would be anticipated from any of the action alternatives. The physical activities with potential for adverse effect would be installing route markers and interpretive exhibits in areas of public use, limited trail construction and reconstruction, and facility development associated with trailhead activities. These activities would have a long-term visual impact. With appropriate siting these effects could be minimized, but not done away with; most likely, they would be seen if the viewer is close by. If facilities were located in barren areas or areas of undesirable non-native plants (which would be removed as part of construction), then there would be no effect on native and endemic plant species. Construction activity could result in short-term disturbance of wildlife near construction sites, but construction should be so located that there would be no permanent disturbance. Visitor use could result in temporary displacement of species when people were present. The extent of impacts to vegetation and wildlife would have to be determined on a site-specific basis and cannot be predicted at this time; none are foreseen.

The potential for long-term soil compaction resulting from increased visitor use exists although much of the trail is either on lava or on sand and not readily subject to compaction. Soil compaction could result in increased run-off and erosion, again not a major concern in the arid area of the trail.

SHORT-TERM USES AND LONG-TERM PRODUCTIVITY

ALTERNATIVE A: NO ACTION

Illegal or negligent uses within the Ala Kahakai corridor could damage or destroy trail segments and associated resources and adversely affect the long-term opportunity to reestablish a continuous trail.

ALL ACTION ALTERNATIVES

In the long-term, a portion of the *ala loa* and its associated cultural and natural resources would be protected. Any short-term use would contribute to this long-term effect. Recognition and reestablishment of the trail would have negligible effect on the long-term productivity of adjacent land.

IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

ALTERNATIVE A: NO ACTION

There would be no commitment of resources under the no action alternative.

ALL ACTION ALTERNATIVES

It is possible, but highly unlikely, that over time and with effort and funds, any trail segments or facilities which would be constructed after trail designation could be removed and the land restored. Even though most developed areas could be restored to previous condition over time, the use of the land and financial resources to implement this alternative would, in a practical sense, be an irretrievable commitment of resources. In areas that were restored, the biological productivity would be expected to increase.

While this category of impacts is concerned with biological resources, the primary benefit of trail designation would be its enhanced protection and reestablishment of the prehistoric trail and historic trail. Reversal of this process would be counter productive even if, by some measure, it might increase biological productivity to do so.

CUMULATIVE IMPACTS

The total cumulative impact is composed of past impacts, external impacts, and impacts predicted under each alternative.

ALTERNATIVE A: NO ACTION

The trail fabric and associated resources of the *ala loa* have been adversely impacted by natural causes such as lava flows, tsunami and high waves, and the sinking of the western coast of Hawai'i Island. By far the greatest adverse impacts have come from construction of towns, transportation facilities, resorts, and residences. In 1991, *Backpacker* magazine and the American Hiking Society declared the trail a threatened resource (Curtis). Under the no action alternative, trail resources would continue to be threatened by development, looting, and vandalism. Trail recognition would continue to be fragmented and the public access value of the shoreline trail would override the cultural and historical values of the *ala loa* in requirements imposed on developers by state and county government.

ALTERNATIVE B: ALA KAHAKAI NATIONAL HISTORIC TRAIL (CONTINUOUS)

The combined effects of potential actions under this alternative would be expected to be neutral to beneficial for most rare and sensitive plants and animals, anchialine ponds and their biota in the immediate vicinity of the trail.

The combined effects of all actions potential under this alternative would promote preservation of the trail and its associated resources, including traditional cultural properties.

With the trail administered and managed as a single entity, effects on the trail and its associated resources for individual development actions would be reduced. Piecemeal development would less likely impact trail resources.

If the trail is authorized, but no funding is appropriated, the cumulative impacts could be adverse. Visitors might think they could use the trail before it is ready for use, and inadvertent damage or looting could take place. Users may also encounter hazardous trail conditions in the absence of proper management.

**ALTERNATIVE C:
ALA KAHAKAI STATE HISTORIC TRAIL**

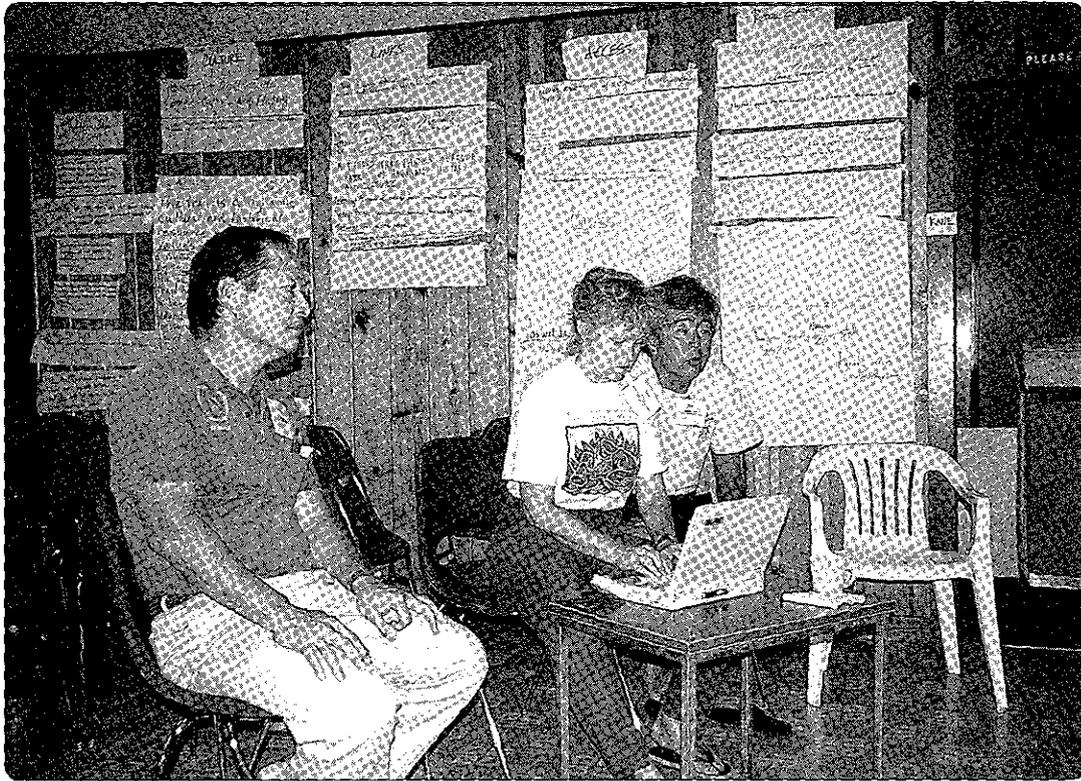
The cumulative impacts of this alternative would rely on the content of the authorizing legislation. If it is assumed that the legislation would include measures similar to Alternative B, then the cumulative impacts would be expected to be beneficial.

If the trail is authorized, but no funding is appropriated, the cumulative impacts could be adverse. Visitors might think they could use the trail before it is ready for use, and inadvertent damage or looting could take place. Users may also encounter hazardous trail conditions in the absence of proper management.

**ALTERNATIVE D:
ALA KAHAKAI NATIONAL HISTORIC TRAIL
(HIGH POTENTIAL SEGMENTS ONLY)**

Effects would be similar to Alternative B.

CONSULTATION AND COORDINATION



Workshop facilitators, (from left), Howard Takata, Sara Peck, and Raymond Tabata, summarize the day's work. — NPS photo

CONSULTATION AND COORDINATION

SCOPING

On December 14, 1993, a Notice of Intent to prepare an environmental impact statement for the National Trail Study for the Ala Kahakai was published in the *Federal Register*.

In March, 1994, the National Park Service sent a letter of invitation to public scoping meetings and a summary of the trail study process to approximately 200 individuals and groups from a mailing list provided by Nā Ala Hele.

Scoping meetings were held according to the following schedule:

April 19, 1994	—	Kailua-Kona
April 20, 1994	—	Pahoa
April 21, 1994	—	Punalu'u
April 23, 1994	—	Kawaihae
April 23, 1994	—	Hawi

In addition, during the week of April 18 to 22, 1994, the National Park Service met with representatives of State Parks, State Historic Preservation Division, Hawaiian Home Lands, U.S. Fish and Wildlife Service, Federal Highways Administration, Nā Ala Hele Advisory Council, Hawaiian Affairs Office, Kohala Coast Resort Association, Hawai'i Leeward Planning Conference, and three national parks: Hawaii Volcanoes National Park, Pu'uuhonua o Hōnaunau National Historical Park, and Kaloko-Honokōhau National Historical Park.

A summary of all meetings, dated June 28, 1994, was mailed to approximately 300 individuals and groups.

ALTERNATIVES DEVELOPMENT

On May 4-5, 1995, the National Park Service, with the aid of University of Hawaii Sea Grant Extension Service, conducted a workshop to help define the vision for the trail and to discuss management alternatives. The following persons participated in the workshop:

William Akau
Russell Apple
Linda Chinn, Department of Hawaiian Home Lands
Henry Cho, County of Hawaii [representing: Mr. Stephen K. Yamashiro, Mayor]
Ross Cordy, Historic Preservation Division, DLNR
Virginia Goldstein, Planning Director, County of Hawaii
Bill Gorst, DLNR, Division of State Parks
Claire Hachmuth, Ē Mau Nā Ala Hele
Pele Hanoa, Punalu'u Preservation & Ka'ū Historical Society
Faelyne Jardine, Hawaii Volcanoes National Park
Duane Kanuha, Chalco International [representing: Hawai'i Leeward Planning Conference]
Meredith Kaplan, National Park Service Planner
Keikialoha Keiki, Nā 'Ohana o Puna
Jan Keswick, Cultural Resource Management Specialist, Hawaii Volcanoes NP
Mike Kitamura, State Director, Office of Senator Daniel Akaka
Julie Leialoha, Natural Area Reserves System, Hawaii District
Ruby McDonald, Office of Hawaiian Affairs

Christina Meller, Program Manager, Nā Ala Hele [representing: Governor Benjamin J. Cayetano]
Jeff Melrose, Kamehameha Schools Bernice Pauahi Bishop Estate
[representing: Hawai'i Leeward Planning Conference]
Lurline Naone-Salvador, Kamehameha Schools Bernice Pauahi Bishop Estate
Robert Okawa, Nā Ala Hele Hawai'i Island Advisory Council
Rodney Oshiro, Nā Ala Hele, Hawai'i Island
Jerry Shimoda, Superintendent, Pu'uhoonua o Hōnaunau NHP
Hannah Springer, Kona Hawaiian Civic Club
Patrick Thiele, Nā Ala Hele, Hawai'i Island
Noelani Whittington, Executive Director, Kohala Coast Resort Association

Facilitators, University of Hawaii Sea Grant Extension Service:

Sara Peck
Raymond Tabata
Howard Takata

In September 1995, the National Park Service (NPS) mailed a newsletter to the mailing list summarizing the planning process and the workshop statements regarding purpose, significance, vision for the trail, and alternatives for management and use. A comment form was enclosed. Thirty-one response forms and four letters were received by the NPS. In September 1996, the NPS sent a second newsletter to the mailing list summarizing the responses and data collection to date.

STUDY REVIEW

In March, 1997, to ensure that issues were properly stated and addressed, an internal review draft of this document was sent to the State Historic Preservation Division, U.S. Fish and Wildlife Service, the four national park units on Hawai'i Island, other National Park Service reviewers, and reviewers in Hawai'i who have been involved in the study process and have a knowledge of the Ala Kahakai. This draft plan incorporates reviewer comments.

LIST OF AGENCIES, ORGANIZATIONS, AND INDIVIDUALS TO WHOM COPIES OF THE ENVIRONMENTAL IMPACT WERE SENT

Hawai'i Congressional Delegation

Senator Daniel Akaka
Senator Daniel Inouye
Representative Patsy Mink
Representative Neil Abercrombie

State Officials

Governor Benjamin J. Cayetano
Senator Andrew Levin
Senator Malama Solomon
Representative Robert Herkes
Representative Paul Whalen
Representative David Tarnas
Chairperson, Board of Land and Natural Resources, Michael D. Wilson

Hawaii County Officials

Mayor Stephen Yamashiro
Council Chairman James Y. Arakaki
Council Vice-Chairman Al Smith
Councilperson Aaron Chung
Councilperson Bobby Jean Lithead-Todd
Councilperson John Ray
Councilperson Joe Reynolds
Councilperson John Santangelo
Councilperson Curtis Tyler

Hawaii County Officials, continued

Councilperson Dominic Yagong
Chairman, Planning Commission, Hawaii County

Federal Agencies

Advisory Council on Historic Preservation
Department of Interior, National Park Service
Superintendent, Hawaii Volcanoes National Park
Superintendent, Kaloko-Honokohau National Historical Park
Superintendent, Pu'uhonua o Hōnaunau National Historical Park
Superintendent, Pu'ukoholā Heiau National Historic Site
Environmental Protection Agency
U.S. Army Corps of Engineers, Pacific Ocean Division
U.S. Fish and Wildlife Service, Honolulu
U.S. National Marine Fisheries Service

State Agencies

Department of the Attorney General
Department of Hawaiian Home Lands
Department of Land and Natural Resources
Division of Aquatic Resources
Division of Forestry and Wildlife
Division of Forestry and Wildlife, Nā Ala Hele Program
Division of Forestry and Wildlife, Natural Areas Reserves System
Division of Historic Preservation
Division of State Parks
Land Division, Charlene Unoki
Office of Hawaiian Affairs, West Hawaii, Ruby McDonald
Office of Hawaiian Affairs, Trustee Springer's Office
Office of Environmental Quality, Leslie Segundo

County of Hawaii

Parks and Recreation Department, Director
Planning Department, Director
Public Works Department, Director

Libraries

State Main Library, Honolulu
Hilo Regional Library
Kailua-Kona Library
Kealakua Library
Kohala Library
Pahala Community School Library
University of Hawaii at Hilo, Edwin K. Mo'okini Library

Landowners Listed in Land Owner Report (Appendix G)

1250 Oceanside Partners, Linda Sutherland
American Trust Company Hawaii, Inc. Trustee
Cai Pacific International, Inc. ETAL
Captain Cook 660 Partners
Cecil Carmichael Trust, ETAL
Chalon International of Hawaii, Inc.
Court Street Holdings
Dahlas & Mieko Antoku, ETAL
Elizabeth M. Stack, ETAL
Hawaii Ka'u Aina
Huehue Ranch Associates, L.P.
International Air Services Co., Inc.
Kahua Ranch Ltd., ETAL
Kamehameha Schools Bernice Pauahi Bishop Estate
Robert K. Lindsey, Regional Manager, Hawai'i Island Region
Jeff Melrose, Planner
Kalbert K. Young, Legislative Researcher
Lurline Naone-Salvador
Kapua Ventures, ETAL
Kau Agribusiness Company, Inc.
Kevin Yancy, Trustee, Lyle Anderson Vendee AS
Lanpar/HTL Associates-Global Resort Partners LE
Liliuokalani Trust Estate
Magoon Estate, Ltd.
Mahola Inc., William L. Moore
Mary A. Ulrich

Landowners Listed in Land Owner Report (Appendix G), continued

Matsuhei Okuna
Mauna Kea Beach Hotel Corporation
Mauna Kea Development Corporation
Mauna Lani Resort, Inc.
Nansay Hawaii, Inc.
Notepower Ltd.
Pacific Investment Hawaii, Inc.
Puakea Bay Ranch Park Owners
Richard Smart Trust
The Queen Emma Foundation
Thomas Okuna, ETAL
Waikoloa
Yee Hop Ltd.
Yukio Naito, Trustee

Organizations

Belt, Collins, and Associates, Honolulu, Susan Sakai
Carlsmith Ball Wichman Case & Ichiki, Joan Castberg
Conservation Council for Hawai'i, Kate Schuerch
Ē Mau Nā Hele, Claire Hachmuth, Barbara Schaefer, Clare Wilson, Scott Mandel,
Betsy Morigan, Sandy Ednie, Roland Kleger, Keith Wallis, Judy Graham, Jerrie Morisky
Fern Acres Community Association, June Gutmonis
Friends of the Future, Susan Maddox
Gaia Ohana, Daniel Morimoto
Group 70, George Atta
Hawaii Leeward Planning Conference, H. Peter L'Orange
Hawaii Ka'ū Aina, Thomas A. Bodden
Hawaiian Trail and Mountain Hiking Club, Oahu, Carole Keala Moon
Hui Lihikai, Toni Withington and Richard Boyd
Ka 'Ohana Okalae and Pele Defense Fund, Palikapu Dedman
Ka Lāhui Hawaii, Charles Young
Kawaihae Hawaiian Homeowners Community Association, Jojo Tanimoto
Kayak Historical Discovery Tours, Betsy Morigan
Kohala Coast Resort Association, Noelani Whittington
Kona Hawaiian Civic Club, Hannah Springer
Kona Kohala Resort Association, Sharon Sakai
Mo'okini Foundation
Na Ohana o Puna, Keikialoha Kekipi
Nā Ala Hele Hawai'i Advisory Council
Duane Kanuha, Chair
Leilani Hino, Vice Chair
James A. Head
Gilbert Kahele
Cathy Lowder
Hugh Montgomery
Robert Okawa
Norman Piianaia
Michael Tomich
Oceanside 1250, Linda Sutherland
PATH - Peoples Advocacy for Trails Hawaii, Ann C. Peterson and Ned Burns
Punalu'u Preservation and Ka'ū Historical Society, Pele Hanao
R.M. Towill Corporation
The Queen Emma Foundation, Les Goya
The Natural Energy Laboratory of Hawai'i
University of Hawaii at Manoa, Seagrant Extension Service, Richard Brock
University of Hawaii at Manoa, Environment Center

**INDIVIDUALS WHO REQUESTED THE DRAFT STUDY
OR COMMENTED DURING THE PROCESS**

William Akau	Judy Graham	Dawn Lundquist	Jim Raschick
Russell A. Apple	Bill Graham	Sonny A. Kaniho	Jerry Shimoda
Bonnie Bator	Dwight L. Hamilton	Kepā Maly	Florence Schultz
Wilmot B. Boone	Robert Hillier	Alan Decker McNarie	Darby Thompson
Deborah Chang	George E. Isaacs	Jan Moon	Keith Wallis
Sherry Chase	Nita Isherwood	Caitlyn Oliver	Mrs. Les Wishard
Keola Childs	Cindy La Plante	Mary Marvin Porter	Jackie Wright
Linda Cupman	Tanya Lee	Carole Price	Tanya Yates

PUBLIC REVIEW OF THE DRAFT NATIONAL TRAIL STUDY AND ENVIRONMENTAL IMPACT STATEMENT

This section includes a summary of comments received through letters and public meetings following release of the *Draft Ala Kahakai National Trail Study and Environmental Impact Statement* (DEIS). All oral and written comments were considered by the National Park Service (NPS) according to the requirements of 40 CFR 1503.

In late July, approximately 250 copies of the draft were distributed to government agencies, landowners, organizations, and individuals. Local libraries received a copy to place on reserve for public review. A notice of availability of the draft document was published by the Environmental Protection Agency in the *Federal Register* on August 8, 1997 (Vol. 62, No. 153). On September 2, after all printed copies had been distributed, the draft was made available through the internet.

The NPS held three public informational meetings in Captain Cook, Waimea, and Hilo from September 3 to 5, 1997. Notice of these meetings was given through an insert in the draft study and in local papers. Seventy-five persons signed in at the meetings. Attendees were offered the opportunity to express their preference for an alternative on a comment form and were told that their name would be given in the final study with their preferred alternative. These preferences are listed in this section.

At the Captain Cook meeting, a native Hawaiian, Gordon Leslie, stated that the study did not fully address native Hawaiian concerns. His letter, printed in the comment section along with the NPS responses, summarizes his comments. A landowner's representative stated that the DEIS does a poor job of articulating land ownership and land use impacts, and reiterated concerns for view planes, liability, the implications of federal designation, and the fact that a broader body of resources are affected than just the trail right-of-way. The letter of this landowner, and several others, is included in the comments section along with NPS responses. One speaker noted that the state does not own the trail, but that it is held in trust for the people of Hawai'i. Several people spoke in support of Alternative B. Some stated that the trail must be managed to respect native Hawaiian concerns. All views noted above are represented in letters in the comments section.

In the Waimea meeting, there was little discussion and no new issues were raised which were not addressed in the DEIS. A landowner noted that the present Special Management Area and the subdivision process adequately provide for lateral access, and there would be no benefit to federal oversight of a trail on private lands.

In the Hilo meetings, Hawaiians from the Puna District – Keikialoha Keiki, Emily Naeole, and Gabriel Kealoha – spoke of their *kuleana* or responsibility for their land. They emphasized that they *must* care for their area; it is not an option as it might be for a visitor or trail user. They said the public does not belong in Puna uninvited. They stressed strongly that they did not want the Ala Kahakai to come into the Puna District and noted that, by including Hawaii Volcanoes National Park, the trail would be in Puna. These native Hawaiians expressed a distrust of the federal government. Their message was that things need to be left alone. Several at the Hilo meetings supported Alternative B, national trail designation, but stressed that native Hawaiians or locals should manage the trail. One person suggested that there are several publics to be recognized: the Hawaiian with inherited *kuleana* rights, other native Hawaiians, and the general public.

In addition to assessing information conveyed in public meetings, the NPS accepted written comments postmarked by October 17, 1997. Sixty-two letters were received from governing bodies, government agencies, private landowners, organizations, and individuals during the comment period. All letters from governing bodies, government agencies, private landowners, and organizations are reprinted in this section. Also included are reprints of letters from individuals who raised points needing clarification. One letter, which is not reprinted, supported Alternative A, No Action, because the writer did not approve of federal interference with shoreline use such as the banning of nude bathing at Kaloko Hōnokohau National Historical Park. All other letters not reprinted in the final EIS supported Alternative B, National Historic Trail (continuous). Due to printing budget constraints, four letters were chosen to represent the range of comments included in individual letters which did not necessitate a response: the first letter received during the comment period, the last received, one received from a native Hawaiian, and one from a group of individuals. An additional four individuals sent cards, three telephoned, and 6 sent e-mail messages in support of Alternative B. For letters not reprinted, the writers' names are listed below under their preferred alternative.

The NPS responses to all substantive comments are also included in this section. Comments noting typographical or minor corrections in the text are incorporated in the final text without comment. Comments requiring clarification of information in the draft document are responded to in the NPS responses. Some comments required text modifications, which have been made in the final document and identified in the NPS responses. No responses are provided to comments that only express opinions or do not identify a needed text clarification, correction, or modification.

Preferences expressed on the comment form provided in public meetings. The notation "[letter]" indicates that the individual subsequently wrote a letter.:

ALTERNATIVE A: NO ACTION

Ann Cobb, Waikoloa Land Company [letter]
Andy Kunellis
H. Peter L'Orange, Hawaii Leeward Planning Conference [letter]
Emily Naeole
Jeff Melrose, Kamehameha Schools Bishop Estate
Ken Melrose, Waikoloa Land Company
Susan Osborne
Noelani Whittington, Kohala Coast Resort Association [letter]

ALTERNATIVE B: NATIONAL HISTORIC TRAIL (CONTINUOUS)

Ned Burns, PATH
Joseph S. Dalrymple, Hamakua Guild of Agroforesters
Duane Erway
Judith W. Graham
Bonnie Goodell
James R. Hope
Nita Isherwood, HIBBA [letter]
Jayne Lil Jegren
Ed Johnson, Share Onomea Access
Kaleopono (Steve Norris)
Lionel Kutner, Outspoken Outdoors
Harold P. Luscomb
Gerrie Anne Morisky [letter]
Betsy Morigan, Kayak Historical Discovery Tours [letter]
Robert (Bob) Okawa
Mary L. Osborne [letter]
Janice Palma-Glennie, Protect Kohanaiki Ohana and Hui He'enalu o Kona
Ann C. Peterson, PATH-Peoples Advocacy for Trails Hawaii

Norman Piianaia
 Mary Marvin Porter, Sierra Club Conservation Committee
 Ron Reilly
 Robert Ritter, Hawaii State Green Party and Hawaii County Green Party
 Daniel Rogers
 Helen Rogers
 Avram Sacks
 Barbara Schaefer, E Mau Na Ala Hele [letter]
 Ken Sheppard
 Kaz Shigezawa, Hawaii Island Lands Association
 Susan Siegel
 Patrick A. Thiele
 Keith Wallis, E Mau Na Ala Hele [letter]
 Mariah Walmsley
 Nancy Walmsley
 Yvonne Yarber
 Dianne Zink [letter]

ALTERNATIVE C: STATE HISTORIC TRAIL (CONTINUOUS)

None

ALTERNATIVE D: NATIONAL HISTORIC TRAIL (DISCONTINUOUS)

Rita Cowell

Preferences expressed by letter (in letters not reprinted in final EIS), card, e-mail, or telephone:

ALTERNATIVE A: NO ACTION

D. Murphy

ALTERNATIVE B: NATIONAL HISTORIC TRAIL (CONTINUOUS)

Shirley Bell	Mary Rose Krygsman-Sinkin	James Raschick
Wilmot B. Boone MD	Scott Mandel	Mr. and Mrs. Alan Robbins
Lora J. Bristow	Michael McCoy	Barbara Schaefer
Lisa Bunge	Hugh R. Montgomery	Sunny Seal-La Plante
Judith Donald	Jan Moon	Lanny Sinkin
Marjorie Ann Erway	Catherine Morgan	Antonette Thomson
Annette Felix	Betsy Morrigan	Carl Toubman
Jessie Hillinger	Joel Nelson	Maria E. Tseu
Nita Isherwood	Christopher Perreira	Carole de Vietro-Price
Garrett Judd	Mary Marvin Porter	Mari S. Wendland
Ben Konshak	William Price	Beverly Winge

ALTERNATIVE C: STATE HISTORIC TRAIL (CONTINUOUS)

None

ALTERNATIVE D: NATIONAL HISTORIC TRAIL (DISCONTINUOUS)

None

**COMMENT LETTERS AND
 NATIONAL PARK SERVICE RESPONSES**

All letters received, both printed and not printed herein, will be maintained in the administrative record for the project and are available for inspection in the National Park Service Pacific Great Basin Support Office in San Francisco. The following letters are organized into four categories: agency, landowner, organization, and individuals. Within each category, they are organized by date received.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

August 15, 1997

George Turnbull, Superintendent
Pacific Great Basin Support Office
National Park Service
600 Harrison Street, Suite 600
San Francisco, CA 94107

Dear Mr. Turnbull:

The Environmental Protection Agency (EPA) has reviewed the Draft Environmental Impact Statement (DEIS) for the **Ala Kahakai National Trail Study**. Our review is pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act.

In the DEIS, the National Park Service identifies four alternatives for protection, interpretation, and management of the Ala Kahakai trail: no action, continuous national historic trail, state historic trail, and discontinuous national historic trail. The DEIS does not identify a preferred alternative.

EPA commends the National Park Service on its plans to augment the protection of valuable cultural and natural resources associated with the Ala Kahakai trail. Increased protection is anticipated under all of the action alternatives. Accordingly, EPA has rated this DEIS LO (Lack of Objections).

1.

We have noted that this DEIS was prepared exclusively for use in determining the suitability of the Ala Kahakai trail for national trail system designation, and does not address important issues which will be dealt with at the management plan stage. EPA is particularly concerned about the role which private automobiles will play in providing access to the trail, and we look forward to working with the National Park Service to create an access strategy which will minimize impacts to cultural and natural resources. Please submit the environmental documentation prepared for the management plan to this office when it becomes available.

We appreciate the opportunity to review this DEIS. If you have questions, please call Leonidas Payne of my staff at (415) 744-1571.

Sincerely,

David J. Farrel, Chief
Federal Activities Office

Response to United States Environmental Protection Agency Region IX

1. Comment noted.



United States Department of the Interior

FISH AND WILDLIFE SERVICE
PACIFIC ISLANDS ECOREGION
300 ALA MOANA BOULEVARD, ROOM 3108
BOX 50088
HONOLULU, HAWAII 96850
PHONE: (808) 541-3441 FAX: (808) 541-3470

In Reply Refer To: JMC

CC: 22 1987

John J. Reynolds
Regional Director, National Park Service
Pacific West Field Area
600 Harrison Street, Suite 600
San Francisco, CA 94107-1372

Re: ALA KAHAKAI Draft Environmental Impact Statement and National Trail Study

Dear Mr. Reynolds:

The U.S. Fish and Wildlife Service (Service) has reviewed the Draft Environmental Impact Statement (DEIS) and National Trail Study for the Ala Kahakai on the island of Hawaii. The document provides an analysis of the national significance of the Ala Kahakai and the feasibility and desirability to add it to the National Trail System. The document identifies that this project is supported through congressional legislation Public Law 102-461. The project sponsor is the National Park Service (NPS). The following comments are provided for your consideration pursuant to the National Environmental Policy Act of 1969 (42 U.S.C. 4321 *et seq.*; 83 Stat. 852), as amended, the Fish and Wildlife Coordination Act (16 U.S.C. 661 *et seq.*; 48 Stat. 401), as amended, the Endangered Species Act of 1973 [16 U.S.C. *et seq.*; 87 Stat. 884], as amended, and other authorities mandating Service concern for environmental values.

GENERAL COMMENTS

The analysis provides an overview of the study, evaluates national and historic significance, addresses resource protection issues, considers a range of options for recognizing and managing the trail, and describes the trail environment and potential environmental consequences of management alternatives. Management options include: A) a no action alternative, B) designation as a National Historic Trail (*continuous*), C) designation as a State Historic Trail, and D) designation as a National Historic Trail (*discontinuous*). The document identifies several federally listed endangered species that occur along the trail including one mammal, five birds, one reptile and six plants and one threatened reptile. Furthermore, it identifies 3 anchialine pool communities along the trail. These resources are identified in Appendix C.

The Service believes that the document adequately describes consequences of the management alternatives to fish and wildlife resources. Based on the Service's review of the DEIS and knowledge of the trail environment and current management practices of the trail, the Service does not anticipate any adverse impacts to fish and wildlife resources to result from this study or the inclusion of the Ala Kahakai into the National Trail System. We support management alternative B and agree with your determination that sensitive plant and animal resources would receive the greatest protection under this management alternative.

SPECIFIC COMMENTS

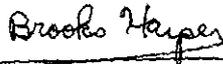
1. Federal listing categories have changed in recent years which should be reflected in the document. The Category 2 Candidate status no longer exists; species that formerly had that designation are now "Species of Concern". This change in terminology should be made on page 41 under Rare, Threatened, and Endangered Species, and in Appendix C. Also, federal status has changed within the last year for one species identified in Appendix C. The plant *Portulaca villosa* was found to be more abundant than previously realized and has recently been removed from the Species of Concern list. Finally, there are two misspellings of latin species names in Appendix C. The names of the Hawksbill turtle (*Eretmochelys imbricata*) and the name of the plant *Capparis sandwichiana* are misspelled.

SUMMARY COMMENTS

2. The Service supports implementation of the proposed management alternative B. The Service is willing to work with the NPS to develop special management strategies for the protection of endangered Hawaiian plants and animals and their habitat, including anchialine pools and beaches used for nesting by turtles and seabirds.

The Service appreciates the opportunity to comment on the proposed project. If you have questions regarding these comments, please contact Fish and Wildlife Biologist Mick Castillo at (808) 541-3441.

Sincerely,



Brooks Harper
Field Supervisor
Ecological Services

Response to United States Department of the Interior Fish and Wildlife Service Pacific Islands Ecoregion

1. Changes made.
2. Comment noted.

BENJAMIN J. CAYETANO
GOVERNOR



GARY GILL
DIRECTOR

STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL

236 SOUTH BERETANIA STREET
SUITE 702
HONOLULU, HAWAII 96813
TELEPHONE (808) 536-4188
FACSIMILE (808) 536-4188

September 29, 1997

Superintendent, Pacific Great Basin Support Office
National Park Service
600 Harrison Street, Suite 600
San Francisco, California 94107

Attention: Meredith Kaplan

Dear Superintendent:

The Office of Environmental Quality Control submits the following comments on the May 1997, Draft National Trail Study Environmental Impact Statement for Ala Kahakai, County of Hawai'i, State of Hawai'i.

CHAPTER 343, HAWAII REVISED STATUTES, ENVIRONMENTAL DOCUMENTATION

1. It is our understanding that the current project constitutes a major federal action, namely an analysis for Congress of the national significance, feasibility and desirability of including the 175-mile ala loa on the Island of Hawai'i in the National Trails System.

Because the project clearly involves the use of state or county lands, an environmental assessment and a notice of determination pursuant to Chapter 343, Hawaii Revised Statutes will be required by the state or county agency eventually proposing the project.

- | | |
|----|--|
| 1. | In the Final Environmental Impact Statement (FEIS), please describe any state or county permits that will be required to implement the project. |
| 2. | Please consult with the appropriate state and county agencies (Department of Land and Natural Resources, Department of Planning, etc.) regarding past Hawai'i environmental documents which may be relevant to the Ala Kahakai Trail. A listing of trail documents which may possibly be relevant is attached for your information. Please document the results of your consultations in the FEIS. |
| 3. | 2. The State Environmental Council, in conjunction with our Office, is working with the public to produce draft guidelines for assessing cultural impacts. The purpose of the guidelines are to encourage uniform and complete disclosure of impacts that a proposed project may have on cultural practices of Hawai'i's people. Please review the attached draft guidelines as presented below and incorporate any appropriate information not contained in the DEIS. We welcome any comments you may have on the contents or format of the draft guidelines. |

Response to State of Hawaii Office of Environmental Quality Control

1. At this time we do not know what permits, if any, would be required. The need for state and county permits required to implement the project would be addressed in the comprehensive management plan for any of the action alternatives.
2. During the planning process, the Na Ala Hele Program reviewed and prepared a report for the National Park Service on 48 environmental impact statements which had been prepared for areas along the trail route. The National Park Service reviewed the 17 documents which mentioned a coastal trail, and relevant information was incorporated in the narrative of the draft study. Results of consultation are documented throughout the draft study, and the agencies with whom we consulted are listed on page 80 of the study.

Superintendent, Pacific Great Basin Support Office
National Park Service
September 29, 1997
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If there are any questions, please call Mr. Leslie Segundo, Environmental Health Specialist at 586-4185. Thank you for the opportunity to comment.

Sincerely,



Gary Gill
Director of Environmental Quality Control

Attachments

c: Honorable Michael Wilson, Chairperson, BLNR

3. The discussion of impacts to cultural resources on page 65 of the study includes recommendations similar to the attached *Draft Guidelines of Assessing Cultural Impacts*. These draft guidelines provide a protocol which would be useful in preparing the comprehensive management plan and subsequent site-specific evaluations, if the trail is designated. The National Park Service would coordinate with your office at that time.

Environmental Council Notices

SEPTEMBER 8, 1997

DRAFT GUIDELINES FOR ASSESSING CULTURAL IMPACTS

I. INTRODUCTION

It is the policy of the State of Hawai'i under Chapter 343, HRS, to alert decision makers, through the environmental assessment process, about significant environmental effects which may result from the implementation of certain actions. An environmental assessment of cultural impacts gathers information about cultural practices and cultural features that may be affected by actions subject to Chapter 343, and promotes responsible decision making.

Furthermore, articles IX and XII of the State Constitution, other state laws, and the courts of the state require government agencies to promote and preserve cultural beliefs, practices, and resources of native Hawaiians and other ethnic groups.

The Environmental Council encourages preparers of environmental assessments and environmental impact statements to analyze the impact of a proposed action on cultural practices and features associated with the project area.

II. CULTURAL IMPACT ASSESSMENT METHODOLOGY

Cultural impacts differ from other types of impacts assessed in environmental assessments or environmental impact statements. A cultural impact assessment includes information relating to the practices and beliefs of a particular cultural or ethnic group or groups.

Such information may be obtained through ethnographic interviews and oral histories. Information provided by knowledgeable informants, including traditional cultural practitioners, can be applied to the analysis of cultural impacts in conjunction with information concerning cultural practices and features obtained through consultation and from documentary research.

In scoping the cultural portion of an environmental assessment, the geographical extent of the inquiry should, in most instances, be greater than the area over which the proposed action will take place. This is to ensure that cultural practices which may not occur within the boundaries of the project area, but which may nonetheless be affected, are included in the assessment. Thus, for example, a proposed action that may not physically alter gathering practices, but

may affect access to gathering areas would be included in the assessment. An ahupua'a is usually the appropriate geographical unit to begin an assessment of cultural impacts of a proposed action, particularly if it includes all of the types of cultural practices associated with the project area. In some cases, cultural practices are likely to extend beyond the ahupua'a and the geographical extent of the study area should take into account those cultural practices.

The historical period studied in a cultural impact assessment should coincide with the presence in the area of the particular group whose cultural practices and features are being assessed. The types of cultural practices and beliefs subject to assessment may include subsistence, commercial, residential, agricultural, access-related, recreational, and religious and spiritual customs.

The types of cultural features subject to assessment may include traditional cultural properties or other types of historic sites, both man made and natural, which support such cultural practices and beliefs.

The Environmental Council recommends that preparers of environmental assessments analyzing cultural impacts adopt the following protocol:

- (1) identify and consult with individuals and organizations with expertise concerning the types of cultural practices and features found within the broad geographical area, e.g., district or ahupua'a;
- (2) identify and consult with individuals and organizations with knowledge of the area potentially affected by the proposed action;
- (3) receive information from or conduct ethnographic interviews and oral histories with persons having knowledge of the potentially affected area;
- (4) conduct ethnographic, historical, anthropological, sociological, and other culturally related documentary research;
- (5) identify and describe the cultural practices and features located within the potentially affected area; and
- (6) assess the impact of the proposed action, alternatives to the proposed action, and mitigation measures, on the cultural practices and features identified.

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Office of Environmental Quality Control

The Environmental Notice

Attachment to Letter from State of Hawaii Office of Environmental Control

Environmental Council Notices

SEPTEMBER 8, 1997

Interviews and oral histories with knowledgeable individuals may be recorded, if consent is given, and field visits by preparers accompanied by informants are encouraged. Persons interviewed should be afforded an opportunity to review the record of the interview, and consent to publish the record should be obtained whenever possible. For example, the precise location of human burials are likely to be withheld from a cultural impact assessment, but it is important that the document identify the impact a project would have on the burials. At times an informant may provide information only on the condition that it remain in confidence. The wishes of the informant should be respected.

Primary source materials reviewed and analyzed may include, as appropriate: land court, census and tax records, including testimonies; vital statistics records; family histories and genealogies; previously published or recorded ethnographic interviews and oral histories; and other archival documents, including correspondence, newspaper or almanac articles, and visitor journals. Secondary source materials such as historical, sociological, and anthropological texts, manuscripts, and similar materials, published and unpublished, should also be consulted.

III. CULTURAL IMPACT ASSESSMENT CONTENTS

In addition to the content requirements for environmental assessments and environmental impact statements, which are set out in HAR §§ 11-200-10 and 16 through 18, the portion of the assessment concerning cultural impacts should address, but not necessarily be limited to, the following matters:

1. A discussion of the methods applied and results of consultation with individuals and organizations identified by the preparer as being familiar with cultural practices and features associated with the project area, including any constraints or limitations which might have affected the quality of the information obtained.
2. A description of methods adopted by the preparer to identify, locate, and select the persons interviewed, including a discussion of the level of effort undertaken.
3. Ethnographic and oral history interview procedures, including the circumstances under which the interviews were conducted, and any constraints or limitations which might have affected the quality of the information obtained.
4. Biographical information concerning the individuals and organizations consulted, their particular expertise, and their historical and genealogical relationship to the project

area. Biographical information concerning the persons submitting information or interviewed, their particular knowledge and cultural expertise, if any, and their historical and genealogical relationship to the project area.

5. A discussion concerning historical and cultural source materials consulted, the institutions and repositories searched, and the level of effort undertaken. This discussion should include, if appropriate, the particular perspective of the authors, any opposing views, and any other relevant constraints, limitations or biases.

6. A discussion concerning the cultural practices and cultural features identified, and their location within the broad geographical area in which the proposed action is located.

7. A discussion concerning the nature of the cultural practices and beliefs, and the significance of the cultural features within the project area, including a discussion of the time periods during which the cultural practice or belief existed, or the feature was known to be significant for cultural purposes.

8. An explanation of confidential information that has been withheld from public disclosure in the assessment.

9. A discussion concerning any conflicting information in regard to identified cultural practices and features.

10. An analysis of the potential effect of any proposed physical alteration on cultural practices or cultural features; the potential of the proposed action to isolate cultural practices or features from their setting; and the potential of the proposed action to introduce elements which may alter the setting in which the cultural practices take place.

11. A bibliography of references, and attached records of interviews which were allowed to be disclosed.

The inclusion of this information will help make environmental assessments and environmental impact statements complete and meet the requirements of Chapter 343, HRS. If you have any questions please call us at 586-4185.

Please submit any comments to the Environmental Council, 235 South Beretania Street, Room 702, Honolulu, Hawai'i 96813 by October 8, 1997.

BENJAMIN J. CAYetano
GOVERNOR
STATE OF HAWAII



KALI WATSON
CHAIRMAN
HAWAIIAN HOMES COMMISSION

JOSEPH K. M. YAMAGUCHI
DEPUTY TO THE CHAIRMAN

STATE OF HAWAII
DEPARTMENT OF HAWAIIAN HOME LANDS
P. O. BOX 1179
HONOLULU, HAWAII 96803

October 13, 1997

Superintendent
Pacific Great Basin Support Office
National Park Service
600 Harrison Street, Suite 600
San Francisco, California 94107
Attn: Meredith Kaplan

Dear Ms. Kaplan:

SUBJECT: Review of the Draft National Trail Study and Environmental Impact Statement (EIS) for the Ala Kahakai Trail (May 1997)

The Department of Hawaiian Home Lands (DHHL) has reviewed the Ala Kahakai Draft Environmental Impact Statement. We are very concerned over a number of significant impacts that the proposed trail presents.

The study was conducted without the benefit of specific information on the ownership of land. This is a major shortcoming that needs to be addressed before the requirements of the Environmental Impact Statement to disclose impacts and evaluate alternative can be satisfied.

1. The proposed trail includes lands designated as Hawaiian home lands under the provisions of the Hawaiian Homes Commission Act, which was enacted into law on July 9, 1921, under the exclusive authority of the Hawaiian Homes Commission, and managed by the Department of Hawaiian Home Lands. The study provides no evidence whatsoever to dispute this.

The burden of proof of land ownership rests with the National Park Service to provide sufficient and specific evidence to DHHL, such as its legal basis and supporting documents.

Significant Impacts

Views

2. The EIS states that, "the trail provides frequent unobstructed ocean to mountain vistas." (EIS pg. 48) "Natural and cultural resources (including viewplanes) associated with the trail are protected and interpreted" (Ala Kahakai workshop Draft pg. 2).

The protection of these unobstructed ocean to mountain viewplanes will affect our ability to carry out our mission to make Hawaiian home lands available for native Hawaiian use.

Response to State Of Hawaii Department of Hawaiian Home Lands

1. Table 9 on page 55 in the draft and final study notes that 6.98 miles or 3.9 percent of the trail crosses Hawaiian Home Lands. Land ownership or rights would not change with trail designation under any alternative. Also, the draft states that "non-federal trail segments would become components of the national trail through a process of certification" (p. 26). Certification of any trail segment as a component of a national historic trail is voluntary. It will neither add to nor detract from the rights or obligations of private property owners which are prescribed as a matter of law. Should a review of records of title show that the *ala loa*, an ancient trail as defined in the Highways Act of 1892, crosses Hawaiian Home Lands property, then the trail itself would be public and come under the jurisdiction of the Board of Land and Natural Resources. The land surrounding the trail would remain as Hawaiian Home Lands property.

Ms. Meredith Kaplan
October 13, 1997
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Maintenance

3. The study states that private landowners would be responsible for the maintenance of the proposed Ala Kahakai trail. DHHL cannot divert trust resources to maintain a trail for the benefit of the general public.

Liability Issues

4. "Landowners who allow use are protected from liability." If a landowner does not permit use, is the landowner liable for those who trespass onto their lands from the trail?

Enforcement

Hawaiian Homestead communities would be impacted by this proposed trail with potential trespassing onto Hawaiian home lands by trail users and potential vandalism to private property on the homestead.

DHHL asserts that the requirements of the Environmental Impact Statement have not been satisfied. Without sufficient and specific information on land ownership, it is not possible to evaluate the impacts of the proposed trail system, for example, issues related to viewplanes, maintenance, liability, and enforcement.

Should you have any questions, please call Linda Chinn, our Hawaii Island Land Agent, at (808) 586 3691.

Aloha,



KALI WATSON, Chairman
Hawaiian Homes Commission

2. The trail does provide frequent unobstructed ocean to mountain vistas, but we do not conclude that this fact would affect Hawaiian Home Lands use. The Ala Kahakai Workshop Draft is not a part of the Study/EIS. The study states: "Natural and cultural resources (including significant views) associated with the trail are protected and interpreted" (page 24). This statement does represent a vision statement from the workshop group, which while perhaps desirable, may be most feasible on federal and state lands. State and county laws for land use would continue to apply to land adjacent to the trail. The National Trails System Act states that ". full consideration shall be given to minimizing the adverse effects upon the adjacent landowner or user and his operation" [SEC.7.(a)(2), p. A-7 in study]. Protection of significant views on private property would be feasible only to the extent that a landowner were interested in protecting them.
3. The study states that "Local land managers and volunteers would be encouraged to develop, operate, and maintain the trail" (page 27). Please refer to page 71 under "Potential Measures to Minimize Adverse Impacts to Land Ownership." It states that trails would be promoted for public use only after an entity is identified to maintain the trail and monitor trail use. That entity does not have to be the land owner, although the land owner would be consulted.
4. Trespass is an illegal activity that is handled by state and local laws.



STATE OF HAWAII
OFFICE OF HAWAIIAN AFFAIRS
711 KAPIOLANI BOULEVARD, SUITE 500
HONOLULU, HAWAII 96813-5249
PHONE (808) 594-1888
FAX (808) 594-1886
October 15, 1997

Superintendent, Pacific Great Basin Support Office
National Park Service
600 Harrison Street, Suite 500
San Francisco, California 94107
Attn: Meredith Kaplan

Re: Draft Ala Kahakai National Trail Study and Environmental
Impact Statement

Dear Ms. Kaplan:

Thank you very much for the opportunity to review the above-referenced Draft Trail Study and Environmental Impact Statement (TS/EIS). The TS/EIS analyzes the national significance of the Ala Kahakai, on the island of Hawai'i and the feasibility of incorporating it into the National Trails System (NTS).

The Office of Hawaiian Affairs (OHA) finds the TS/EIS to be a well researched and informative document. The report adequately addresses the potential impacts to natural and cultural resources along Ala Kahakai as well as mitigative measures. OHA finds that the study's conclusion that the Ala Kahakai qualifies as a significant national historic trail and that it is physically feasible to establish a continuous trail has merit.

The TS/EIS explores the feasibility of four alternatives for trail development. Alternatives A and C would continue the trail system under the authority of the State of Hawai'i. The limitation of these alternatives is the extreme fiscal constraints of current state funding. Alternatives B and D would provide for management of the trail system under the authority of the National Park System. Alternative B is preferable because it provides for a continuous (as opposed to a discontinuous) trail system. (Note: We bring to your attention two inconsistencies. In Tables 1 and 2 (pp. viii - xi) Alternative B is listed as being "discontinuous", this should read "continuous". Also, Alternative D is mislabeled as Alternative C.)

1.

Response to State of Hawaii Office of Hawaiian Affairs

1. Corrections made.

Superintendent, Pacific Great Basin Support Office
National Park Service
October 15, 1997
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OHA suggests that Alternative B (National Historic Trail - Continuous) is the most viable option. In terms of the protection and preservation of cultural and natural resources it is the most comprehensive. In addition, Alternative B provides the means for implementation.

Alternative C (State Historic Trail - Continuous) is also a feasible alternative. However, its contingency upon the passing of state legislation and the uncertainty of available funds makes it less attractive than Alternative B.

Although Alternative B is the most viable plan, OHA would like to make a few recommendations with regard to the administration and management of the proposed trail under this alternative.

2. Under Alternative B the secretary of the interior will appoint an advisory council "comprised of representatives of affected federal agencies, state government, local agencies, corporate and individual landowners, users, and others, including native Hawaiians" (page 26). OHA feels the knowledge, views, and input of native Hawaiians is an integral and essential component of the advisory council's function. Therefore, we recommend that the advisory council must include representatives of the Native Hawaiian Community, preferably native Hawaiian cultural experts and/or cultural practitioners.

3. OHA agrees that "local land managers and volunteers be encouraged to develop, operate, and maintain the trail...and the best management scenario would provide state and local agencies a major role." (page 27). OHA urges that the comprehensive management plan, when prepared, include a provision identifying the role of native Hawaiians in trail management in addition to the role of native Hawaiians on an advisory council.

4. Native Hawaiians should be permanently involved in all phases of trail development including, planning, implementation, and management. The importance of including a permanent cultural specialist/advisor in the management scheme is that it would maintain a connection to the native Hawaiian community directly associated with the Ala Kahakai Trail. It is essential to note that Hawaiian culture did not cease to exist at some point in the past. Rather, it is an enduring and tangible culture which is practiced each and every day. The Ala Kahakai needs to be managed with this in mind.

2. The sentence in the draft study is summarized from the National Trails System Act [SEC. 5(d)(1)(2)(3) page A-6 of the study]. The National Park Service added the words "including native Hawaiians" to the list of participants because of the importance of their involvement in this trail. To clarify the intent, the language of the final study states "an advisory council comprised of *representatives* of affected federal agencies, state government, local agencies, representatives of the native Hawaiian community -preferably native Hawaiian cultural experts and cultural practitioners -corporate and individual landowners, users, and others with an established interest in the trail (page 27)."
3. Comment noted
4. The intent of the action alternatives was to emphasize the importance of native Hawaiians in planning, management, and development, but we see upon review that the language of the study could more clearly make that point. Paragraph two on page 27 of the draft and final study has been changed to add native Hawaiians as potential trail and site managers and also as among those who would develop, operate, and maintain the trail.

Superintendent, Pacific Great Basin Support Office
National Park Service
October 15, 1997
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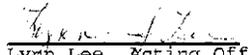
6.

Since, the TS/EIS is not a comprehensive management plan, but rather a feasibility study, OHA would appreciate NPS cooperation by providing our office with copies of the Management Plan and Final EIS for review when they become available. If you have any questions or need additional information, please contact Lynn Lee, Acting Land and Natural Resources Division Officer or Richard Stook, EIS Planner at (594-1888).

Sincerely yours,



Randall Ogata
Administrator



Lynn Lee, Acting Officer,
Land & Natural Resources

RS:rs

cc: Trustee Frenchy DeSoto, Board Chair
Trustee Hannah Springer, Land and Sovereignty Chair
Trustee Haunani Apoliona, Board Vice-Chair
Trustee Colette Machado
Trustee Abraham Aiona
Trustee Rowena Akana
Trustee Clayton Hee
Trustee Moses Keale

5. We agree.

6. Comment noted.

BENJAMIN J. CAYSTANO
GOVERNOR



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF FORESTRY AND WILDLIFE
KENDALL BUILDING
888 MILILANI STREET, SUITE 700
HONOLULU, HAWAII 96813

16 October 1997

Superintendent, Pacific Great Basin Support Office
600 Harrison Street, Suite 600
National Park Service
San Francisco, CA 94107

TO: Meredith Kaplan, National Park Service

FR: Curt Cottrell, Na Ala Hele Trail and Access Program *CC*

RE: Draft Ala Kahakai National Trails Study and Environmental Impact Statement

MICHAEL D. WILSON
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTY
GILBERT S. COLOMA-AGARAN

ADMINISTRATIVE DEVELOPMENT
PROGRAM
AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
CONSERVATION AND
ENVIRONMENTAL AFFAIRS
CONSERVATION AND
RESPONSES TO DEVELOPMENT
CONSERVATION
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
LAND MANAGEMENT
STATE PARKS
WATER AND LAND DEVELOPMENT
WATER RESOURCE MANAGEMENT

Thank you for the opportunity to review and comment on the Draft National Trail Study (DNST) and Environmental Impact Statement for the Ala Kahakai. DLNR appreciates NPS efforts toward recognizing the public value of the Ala Kahakai, and the DNST reflects NPS sensitivity to the natural and cultural resources located along this historic trail. The enclosed DNSTs been thoroughly reviewed by Na Ala Hele Program (NAH) staff on the Big Island - specific technical revisions are included in the margins. There are some additional topics that I would like to address in the following comments.

NAH Historic Trail Development Scenario

1.

The NAH Program has been working towards resolving the complex issues related to recreational hiking along a State owned, linear historic feature with ancillary archaeological sites and adjacent private property. The following template describes tasks that are necessary to initiate and then implement public recreational use of historic trails through the NAH Program. The actual necessity and sequence of these tasks is based on circumstances relating to the specific trail (or trail section) project:

1. Review development plans and other pertinent planning documents and continue adding data to the NAH trail and access inventory to identify and locate trails
2. Select the trails and trail segments that may be suitable for public use and development by the NAH program through discussions between NAH staff and the respective NAIH Advisory Councils.
3. Ascertain that the State has clear title by insuring that the State has not relinquished title to the trail or trail segment (if the alignment was in existence before the Highways Act 1892) by

Response to State of Hawaii Department of Land and Natural Resources, Division of Forestry and Wildlife

1. This work and the ten steps outlined will be helpful to planners during the management planning and implementation process under any of the three action alternatives.

conducting an abstract through the NAH Abstractor at the DLNR Division of Land Management. Also, determine that there is public access to the alignment in question and where applicable, adequate parking is available.

4. Review and approval by the Board of Land and Natural Resources on designation of the trail or trail section as part of the NAH system. Until this step, the trail would be unencumbered State land under the purview of the DLNR Division of Land Management.
5. Confirm the historic trail alignment's location (if possible) with support from the DLNR Division of Historic Preservation (HP).
6. Conduct a metes and bounds or centerline survey to exactly describe the physical location of the trail alignment in relation to adjacent private land (if applicable.)
7. As necessary, conduct research for a Environmental Assessment (EA), which would include a Historic Preservation Management Plan (HPMP) on historic and archeological features located along the trail corridor. The scope of the HPMP will be determined jointly by IIP and NAH staff utilizing: 1) existing data from HP, 2) the collection of information from other sources (such as data collected by adjacent private landowners that have initiated development plans) and 3) by input from the local community. The HPMP will be produced either by NAH staff in consultation with HP staff and/or through contracting a private consultant. Submit the EA and HPMP for review and approval. **Note:** There is still some ambiguity as to the distance from a state owned trail corridor that must be addressed by a HPMP. Chapter 6E-8, HRS provides for the review of State initiated projects, and we are proceeding on that basis for the development of select sections of historic trail corridors. Chapter 6E-10 has authority on private land for historic sites that are on the Hawaii register of historic places. Chapter 6E-10(e) also provides for government access to private land for examination and survey and if access is denied, a complaint may be submitted to the district court in the circuit in which the land is located. However, it is unclear as to what authority DLNR has to include private land in the HPMP, which implies that DLNR would be responsible for managing sites on private property - even though the State only has title to the trail. Of course, given associated costs, jurisdictional questions and the very clear issue regarding trespassing, NAH prefers mitigations such as including in the HPMP methods to effectively constrain the public from proceeding off the trail through signage or other strategies.
8. Determine and then document if trail maintenance and stewardship will be conducted by either: 1) adjacent landowners (where the trail is bordered on either side by private land,) 2) community organizations, or 3) by existing DOFAW and NAH staff. If either 1 or 2, NAH will draft a Memorandum of Agreement on trail stewardship for DLNR approval.
9. Implement the HPMP, trail development and stewardship. Development includes, but is not limited to: brushing the trail of encroaching vegetation, trail reconstruction, and installation of appropriate informational, directional, or interpretive signage in addition to other mitigative measures for public safety. Trail improvements and signage are also intended to keep the public along the State owned trail corridor and off any adjacent private property, in addition to deterring

the public from investigating or tampering with archaeological or historic sites located along the trail on the adjacent private property (where applicable.)

10. Trail is open for managed public use.

Oceanside 1250 Ala Loa

On page 26 of the DNTS, there is reference to one of the sections of the ala loa where State ownership is confirmed. On July 11, 1997, the Board of Land and Natural Resources approved the DOFAW/NAH Board submittal that determined that the State owns a 10 foot wide trail traversing their property, which was designated as a NAH Program trail. Survey documents were attached to the submittal. The general concept and vision for this section of ala loa - extending from the terminus of Alii drive, at the Kamehameha Schools/Bishop Estate (KSBE) property boundary to the public Kaawaloa four wheel drive road - is to restore this alignment for recreational hiking. Motorized, equestrian and bicycle use will be prohibited, except for the existing one mile segment that also provides vehicular access through KSBE property. In addition, install appropriate informational, directional and interpretive signage at the trail heads and, as necessary, along the route. Long term plans include further trail restoration past Kaawaloa road and connecting to the proposed Kealakekua Bay State Historical Park. Two community organizations - Plan To Protect and the Kona Hawaiian Civic Club, have generously agreed to enter into an MOA for trail stewardship of sections of the trail. Oceanside 1250 Partners have also expressed a desire to provide trail stewardship for the trail section that leads through their property. The next step is to determine that the State has clear title to the trail segments not already confirmed. Other private landowners along the trail alignment have been notified of NAH's intention to make the trail available for public use. NAH is currently coordinating with Historic Preservation to determine the scope of the HPMP.

Appendix B: Estimated Federal Costs (page B-1)

2. NAH recommends that a metes and bounds or centerline survey be included in the Phased Costs and that the NPS also consider the cost of long-term trail maintenance. While community and private landowner support is imperative to successfully implement this project, concessions must be made for instances where public or private landowner partnerships for trail and campsite stewardship do not occur.
- 3.

ACT 106 - Amending Chapter 198D

Attached for your information is a recent amendment to Chapter 198D: ACT 106, Relating to the Statewide Trail and Access Program.

NAH Administrative Rules

The Hawaii Administrative Rules (AR) for the NAH Program have been approved by the Office of the Attorney General and are pending approval by the BLNR. Upon further approval, NAH will initiate statewide public hearings to solicit comments. These Administrative Rules will provide NAH with specific regulatory authority for NAH trails. DOFAW AR and Land Management AR are currently applicable to

2. Metes and bounds survey may be a necessity when the trail crosses private land. Costs for this were not included in the draft study. An estimate has been included in the final study in Appendix B under "Phased Costs" in the revised category "Trail identification/restoration/construction." The revised costs are also reflected in the cost summary figures on page 28 of the final study.
3. The National Trails System Act [SEC.7(h)(1)] emphasizes federal encouragement of state and local agencies, landowners, organizations, and individuals in operating, developing, and maintaining national trails. Limited financial assistance may be included in agreements with these entities. We note that this item was inadvertently left out of the cost estimate on page B-1 of the draft study. It is now listed as "Partner Assistance" under annual operations costs in Appendix Bin the final study. In the case of the Ala Kahakai, where the state may be shown to own the majority of the trail, ultimate maintenance responsibilities may fall to the state if landowners, organizations, or other stewards are not available. The NPS can provide tools and other equipment to help with maintenance. These costs are included in the category "Office, equipment, supplies." The Appalachian National Scenic Trail provides an example of volunteer construction, maintenance, and

most NAH trails, but in some instances lack the detail required for the NAH Program. These rules are important to regulate and attenuate public use of historic trails.

Alternatives

The NAH Program is looking forward to reviewing the information and comments compiled during the community review process coordinated by NPS during the month of September, 1997 on the Big Island. This is essential information for determining the appropriate implementation process. NAH acknowledges and deeply appreciates these efforts by the NPS to solicit community input. In the interim, NAH has few general comments on the Alternatives listed in the DNTS.

- **Alternative A - No Action Alternative**

4.

NAH generally concurs with the results outlined in Alternative A, but takes exception to the premise that NAH effort would not extend beyond the Ala Kahakai Demonstration Trail. NAH will continue to perform Abstracts of Title on sections of the ala loa to confirm State ownership, and review development plans to collect data on historic trail location - for all Big Islands projects, regardless of location. This will include mauka/makai trails, which may provide potential linkages and public accesses to the ala loa. Over time, the opportunity to link sections of ala loa will present themselves, and following the historic trail development scenario previously delineated, NAH will proceed with trail restoration. Over time, the opportunity to interpret the ala loa on the basis of its cultural and historical significance will be developed - with Big Island NAH Advisory Council, community organization, and private landowner input and ideally stewardship assistance. Granted, NAH budget limitations do preclude a large-scale comprehensive planning process for the ala loa.

- **Alternative C - State Historic Trail**

At this point in time, this alternative is an unlikely scenario. This would require a significant collaboration between NAH and Historic Preservation - existing workloads and staffing limitations preclude this. There is not an immediate utility in designating the ala loa under Chapter 6E, HRS, as a historic trail. However, given the potential federal support, or continued State efforts, this is a plausible future action.

- **Alternatives B and D - National Historic Trail**

The NAH Program generally concurs with either of these proposed alternatives. Ultimately, it is estimated that title searches will determine that the ala loa is State owned. DLNR would support and look forward to a collaborative agency effort in protecting associated resources and developing this recreational resource for public use.

Attachments

xc: Michael Buck, DOFAW
Don Hibbard, HP
Rodney Oshiro, HNAH
Gary Gill, OEQC

3. cont. monitoring (among other activities). The approximately 2000-mile trail, which is nearly fully federally owned, is maintained by 27 trail volunteer clubs through an agreement with the Appalachian Trail Conference (ATC), a non-profit organization. However, some federal funds are transferred to the ATC each year to help support the organization's contributions to trail management.

4. Comment noted.

ACT 106

H.B. NO. 417

A Bill for an Act Relating to the Statewide Trail and Access Program.

Be It Enacted by the Legislature of the State of Hawaii:

SECTION 1. Section 171-19, Hawaii Revised Statutes, is amended by amending subsection (a) to read as follows:

“(a) There is created in the department a special fund to be designated as the “special land and development fund”. Subject to [the provisions contained in] the Hawaiian Homes Commission Act of 1920, as amended, and [in] section 5(f) of the Admission Act of 1959, and except as provided under section 171-138 for the industrial park special fund, all proceeds of sale of public lands, including interest on deferred payments[, and]; all rents from leases, licenses, and permits derived from public lands; a portion of the highway fuel tax collected under chapter 243; fees charged by the department for the commercial use of public trails and trail accesses under the jurisdiction of the department; and private contributions for the management, maintenance, and development of trails and accesses shall be set apart in the fund and shall be used only as authorized by the legislature[, except that, without prior legislative authority, the board may use the fund] for the following purposes:

- (1) To reimburse the general fund of the State for advances made [which] ~~that~~ are required to be reimbursed from the proceeds derived from sales, leases, licenses, or permits of public lands;
- (2) For the maintenance of all lands under the control and management of the board, including repairs or improvements[,] thereon; provided that the department shall not expend in excess of \$500,000 in any fiscal year without the prior approval of the governor;
- (3) To repurchase any land, including improvements, in the exercise by the board of any right of repurchase specifically reserved in any patent, deed, lease, or other documents or as provided by law;
- (4) For the payment of all appraisal fees; provided that all fees reimbursed to the board shall be deposited in the fund;
- (5) For the payment of publication notices as required under this chapter; provided that all or a portion of the expenditures may be charged to the purchaser or lessee of public lands or any interest therein under rules adopted by the board;
- (6) For the [planning and construction of roads and trails along state rights-of-way] management, maintenance, and development of trails and trail accesses under the jurisdiction of the department not to exceed [\$5,000] \$500,000 in any fiscal year; and
- (7) For the payment to private land developers who have contracted with the board for development of public lands under section 171-60.”

SECTION 2. Section 198D-2, Hawaii Revised Statutes, is amended to read as follows:

“§198D-2 Establishment of Hawaii statewide trail and access program.

(a) There is established the Hawaii statewide trail and access program, to be known

ACT 106

as Na Ala Hele. The department of land and natural resources shall plan, develop, acquire land or rights for public use of land, construct, restore, and engage in coordination activities to implement the program in accordance with this chapter.

(b) The trail and access program shall ~~[prepare an annual report for the legislature concerning the amount of moneys accruing to the credit of the general fund] use funding for the management, maintenance, and development of trails and trail accesses under the jurisdiction of the department~~ from the following sources:

- (1) ~~[All] A portion of the highway fuel taxes collected under chapter 243 [on non-highway recreational fuel, or in the alternative, 0.3 per cent of the proceeds under chapter 243 deposited into the state highway fund established under section 248-8];~~
- (2) ~~Federal government grants [for the management, maintenance, and development of trails and accesses];~~
- (3) ~~Private contributions [for the management, maintenance, and development of trails and accesses]; and~~
- (4) ~~Earnings on the investment of the moneys specified in paragraphs (1) to (3), which became a part of the general fund.~~

The trail and access program shall submit the report to the legislature not fewer than twenty days prior to the convening of each regular session of the legislature.]

- (4) ~~Fees established pursuant to administrative rules and charged by the department for the commercial and other use of trails and trail accesses under the jurisdiction of the department.~~

(c) The moneys specified in subsection (b)(2) shall be deposited in the state treasury; provided that moneys received as deposits or contributions from the federal government [or private sources] shall be accounted for in accordance with the conditions established by the agencies [or persons] making the contribution. [Earnings on the investment of these moneys shall become a part of the general fund.]

(d) ~~[All moneys to meet the general operating needs and expenses of the trail and access program shall be allocated by the legislature through appropriations out of the state general fund. The department shall include in its budgetary request for each upcoming fiscal period, the amounts necessary to effectuate this chapter.] The moneys specified in subsection (b)(1), (3), and (4) shall be deposited in the special land and development fund under section 171-19 for the management, maintenance, and development of trails and trail accesses under the jurisdiction of the department.~~

SECTION 3. Section 248-8, Hawaii Revised Statutes, is amended to read as follows:

§248-8 Special funds in treasury of State. There are created in the treasury of the State three special funds to be known, respectively, as the state highway fund, the airport revenue fund, and the boating special fund. All taxes collected under chapter 243 in each calendar year, except the "county of Hawaii fuel tax", "city and county of Honolulu fuel tax", "county of Maui fuel tax", and "county of Kauai fuel tax", shall be deposited in the state highway fund; provided that:

- (1) All taxes collected under chapter 243 with respect to gasoline or other aviation fuel sold for use in or used for airplanes shall be set aside in the airport revenue fund; and
- (2) All taxes collected under chapter 243 with respect to liquid fuel sold for use in or used for small boats shall be deposited in the boating special fund.

As used in this section, "small boats" means all vessels and other watercraft except those operated in overseas transportation beyond the State, and ocean-going

tugs and dredges. The chairperson of the board of land and natural resources, from July 1, 1992, and every three years thereafter, shall establish standards or formulas that will as equitably as possible establish the total taxes collected under chapter 243 in each fiscal year that are derived from the sale of liquid fuel for use in or used for small boats. The amount so determined shall be deposited in the boating special fund.

An amount equal to [all moneys] 0.3 per cent of the highway fuel tax but not more than \$250,000 collected under chapter 243 [through the assessment of taxes on the sale of non-highway recreational fuel] shall be [reported] allocated each fiscal year to the [trail and access program] special land and development fund for purposes of the management, maintenance, and development of trails and trail accesses under the jurisdiction of the department of land and natural resources established under section 198D-2. [Until such time as the department of transportation develops a system to calculate the tax revenues generated from non-highway recreational fuel, or until July 1, 1997, whichever is later, 0.3 per cent of all proceeds deposited into the highway fund shall be the amount reported to the trail and access program of the department of land and natural resources.]

SECTION 4. There is appropriated out of the special land and development fund the sum of \$200,000 or so much thereof as may be necessary for fiscal year 1997-1998 for the Na Ala Hele program. The sum appropriated shall be expended by the department of land and natural resources for the purposes of this Act.

SECTION 5. Statutory material to be repealed is bracketed. New statutory material is underscored.

SECTION 6. This Act shall take effect on July 1, 1997.

(Approved June 4, 1997.)

BENJAMIN J. CAYETANO
GOVERNOR OF HAWAII



MICHAEL D. WILSON, CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES

DEPUTIES

GILBERT COLOMA-AGARAK

AQUACULTURE DEVELOPMENT
PROGRAM

AQUATIC RESOURCES
CONSERVATION AND

RESOURCES ENFORCEMENT
CONVEYANCES

FORESTRY AND WILDLIFE
HISTORIC PRESERVATION

DIVISION
LAND DIVISION

STATE PARKS
WATER AND LAND DEVELOPMENT

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
33 SOUTH KING STREET, 6TH FLOOR
HONOLULU, HAWAII 96813

October 17, 1997

LOG NO: 20324 ✓
DOC NO: 9710KM02

Attn: Meredith Kaplan
Pacific Basin Support Office
600 Harrison Street, Suite 600
San Francisco, CA 94107

Re: **Comments Regarding National Park Service Ala Kahakai Trail Study**

Dear Ms. Kaplan:

The Hawai'i Island Burial Council (Council) is a Governor appointed body established in 1990 to determine the appropriate management, protection and treatment of Native Hawaiian burial sites in accordance with Chapter 6E of the Hawai'i Revised Statutes.

At their October 16, 1997 meeting, the Council expressed deep concerns about the establishment and promotion of the shoreline trail throughout Hawai'i Island since it has the potential to directly impact cultural sites including sensitive burial sites. The Council is concerned that increased foot traffic through these areas, although well intentioned, may impact these sensitive and sacred cultural sites.

The Hawai'i Island Burial Council voted in favor of alternative A, take no action on the proposal.

If you have any questions, please contact Kai Markell, Esq., Director of the Burial Sites Program at (808) 587-0009. Thank you for your consideration of these comments.

Aloha,

A handwritten signature in black ink, appearing to read "Don Hibbard".

DON HIBBARD, Administrator
State Historic Preservation Division

c. Puna Lerma, Chair, Hawai'i Island Burial Council

Thank you for your letter.

Stephen K. Yamashiro
Mayor



Donna Fay K. Kiyosaki
Chief Engineer
Jiro A. Sumada
Deputy Chief Engineer

County of Hawaii
DEPARTMENT OF PUBLIC WORKS
25 Aupuni Street, Room 202 • Hilo, Hawaii 96720-4252
(808) 961-8321 • Fax (808) 961-8630

August 6, 1997

Ms. Meredith Kaplan
National Park Service
600 Harrison St., Suite 600
San Francisco, CA. 94107

SUBJECT: ALA KAHAKAI TRAIL SYSTEM

1.

I am writing in support of the referenced trail system. The Wastewater Division has been attempting to implement an effluent reuse program for several years in Kona. As part of this effort, we have been in contact with the People's Advocacy for Trails (PATH) group and the Kona Outdoor Circle to coordinate usage of existing and proposed sewer easements as alignments for future hike & bike trails. It would be our desire to utilize these trails as a backbone for our effluent reuse distribution lines. We would also consider irrigating the alignments as part of a cooperative landscaping effort.

Please keep me informed as to the progress of the proposed trail system. Should you have any comments or questions, please contact the undersigned at 961-8338.

A handwritten signature in cursive script, appearing to read "P. J. Boucher".

Peter J. Boucher, P.E.
Chief, Wastewater Division

Response to County of Hawaii Department of Public Works

1. While the use of sewer easements or other utility corridors for trails is an excellent idea, we emphasize that all action alternatives for the Ala Kahakai would involve identifying and protecting the original ala loa trail fabric and alignment and would most likely be incompatible with complementary location with utility corridors.

Stephen K. Yamashiro
Mayor



Virginia Goldstein
Director

Russell Kokubun
Deputy Director

County of Hawaii

PLANNING DEPARTMENT

25 Aupuni Street, Room 109 • Hilo, Hawaii 96720-4252
(808) 961-8288 • Fax (808) 961-8742

October 31, 1997

Superintendent
Pacific Great Basin Support Office
600 Harrison Street, Suite 600
San Francisco, CA 94107

Ladies and Gentlemen:

Draft National Trail Study and Environmental Impact Statement for the Ala Kahakai

Thank you for allowing our office the opportunity to review and provide comments regarding the draft National Trail Study and Environmental Impact Statement for the Ala Kahakai. We have completed our review and have the following comments to offer for your consideration:

- | | |
|----|--|
| 1. | 1. Page 19, <u>Resource Protection</u> - We take exception with the statement made within the third paragraph that "County development processes have allowed the destruction of some remnants of the prehistoric trail as long as developers provide public access to the shoreline." Such a statement unfairly characterizes our land use processes as irresponsible or insensitive to cultural or historical concerns. The County of Hawaii has closely coordinated many of our land use review processes with the State Department of Land and Natural Resources-Historic Preservation Division (DLNR-HPD). Much of what we require of landowners wishing to develop their properties are based on the specific recommendations by the DLNR-HPD. Our process is not one of sacrificing significant historical/cultural features for the sake of shoreline public access. |
| 2. | 2. Page 26, <u>Alternative A, No Action Alternative</u> - "County planning emphasis would likely continue to be on shoreline access rather than protection of the prehistoric and historic trail." Again, this statement unfairly characterizes our land use review processes. We are curious as to how the National Park Service came to this conclusion. Both shoreline public access and historical/cultural preservation are of equal importance. Our land use policies and regulations clearly reflect this. Our efforts are directed toward finding a balance between these two concerns when a conflict arises; and always in coordination with the DLNR-HPD. |

Response to County of Hawaii Planning Department

1. The statement does not describe policy but describes results of the planning process in the past. In several places on the South Kohala and North Kona coast, original trail fabric was removed to facilitate development. Sometimes, mitigation for this removal was the provision of lateral shoreline access.
2. To better reflect county policy, this sentence is changed in the final study on page 26 to read "County planning would likely continue to balance historical/cultural preservation with the needs of development and shoreline public access."

3. Page 54, *Land Use Regulation* - Contrary to the study, Hawaii's EIS law (Chapter 343, HRS) does not require the preparation of an environmental assessment or environmental impact statement for all development situated within the counties' Special Management Area. The Special Management Area, by and of itself, is not a "trigger" for Chapter 343, HRS compliance.
4. Under *County Land Use Regulations* (Page 54), we need to clarify that the County's subdivision control code (Chapter 23, Hawaii County Code) does not "*regulate the intensity of single-family residential development.*" The subdivision review and approval processes only subdivide (partition) lands and do not have the ability to regulate land use density. Land use is regulated by the State Land Use Commission, through its State Land Use Designations; and the County of Hawaii through its Zoning Code.
5. The study seems to suggest that establishing the Ala Kahakai as a national public trail would ensure the continued protection of resources not only within, but adjacent to the trail. As the study mentions, "*The trail connects hundreds of cultural sites and traditional use areas.*" Respondents to the study have expressed concern regarding the protection of the natural and cultural resources associated with the trail. The study should include a discussion on the anticipated impacts the establishment of the Ala Kahakai as a national public trail would have upon the county's ability to manage and regulate land uses adjacent to the trail and the landowners' ability to develop these lands. If land uses along the entire alignment of the Ala Kahakai are subject to additional Federal review and permits or restrictions, then these permits or restrictions should be disclosed. For example, could the NPS recommend that all lands situated makai (seaward) of the Ala Kahakai be preserved in open space to ensure its visual integrity? Will such recommendations or requirements thereby supersede the land use policies of the state and counties? By virtue of its status as a possible national historic trail, what secondary impacts upon adjacent land uses are anticipated?
4. The Final Environmental Impact Statement should contain as much historical documentation as possible for all segments of the trail. It is important to historically qualify the alignment and/or existence of the Ala Kahakai for each portion of the proposed 175 mile long alignment.
5. 6.

3. Text is changed on page 54 in the final study to reflect these corrections.

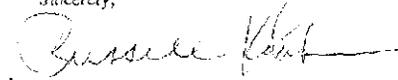
4. Discussion of land use in the draft study related to existing land use policy and regulation at both the state and county level. Nothing in the National Trails System Act or in the proposed alternatives requires changes in these policies and regulations or in current land use. Nothing in the action alternatives is intended to supersede land use policies of the state and county. Land uses along the Ala Kahakai alignment would not be subject to federal review or permits additional to what may exist. As stated on page 72 of the study, "Federal laws would apply only to the trail and not to the adjacent landowner's property." It is possible that the management plan, which would follow trail designation, could recommend that appropriate state or federal lands seaward of the trail be preserved in open space to ensure visual integrity. Such a requirement would not be placed on private landowners as result of trail designation. We have changed the text on page 73 of the final study under "Impacts on Land Use" and the summary table to clarify the anticipated impacts on land use as discussed in the study.

Superintendent
Page 3
October 31, 1997

Thank you for providing our office with the opportunity to comment on the draft study.

Please contact Daryn Arai of this office should you have any questions.

Sincerely,



VIRGINIA GOLDSTEIN
Planning Director

DSA:pak
f:\wp60\czm\C1343\LAlaKa02.dsa

cc: Mayor Stephen K. Yamashiro
West Hawaii Office

4. cont. The text on page 72 acknowledges that landowners may receive public pressure to participate in trail recognition. An example could be pressure to continue a current land use or to preserve archeological or natural resources adjacent to the trail. We cannot estimate either the kind or degree of pressure or the need for landowner response at this time. We conclude any such public comment could occur regardless of the outcome of this study.
5. We have conducted a cultural resources assessment which provides documentation of segments of the trail for which the resources are currently protected or known. The level of documentation is adequate for a feasibility study which analyzes the trail at a conceptual level. Additional cultural resource investigations would be completed during the management plan process under any of the action alternatives.

HAWAII LAND COMPANY

INCORPORATED

John Michael White
President

August 25, 1997

Superintendent of Operations
Pacific Great Basin Support Area
United States Government Offices
600 Harrison Street, Suite No. 600
San Francisco, California 94107

Re: National Trails Study - opposition to national designation of Ala Kahakai

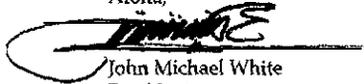
Dear Superintendent:

I am writing to you on behalf of many private land owners who will be affected by your proposal for national designation of Ala Kahakai trail, and many of our interested and concerned members of our local community as well. It is obvious that your intention is good in seeking national designation of this trail, however I must respectfully advise you that such designation will be totally inappropriate and the results will certainly be counterproductive if the proposal is implemented.

Individual land owners are and have been working closely with the county, state and the community in a united effort to preserve the integrity of this historic and valuable resource where appropriate. I urge you to show respect for this sincere and effective local effort by withdrawing your proposal for national designation.

Mahalo for your kokua.

Aloha,



John Michael White
President
JMW:m

cc: President William Clinton
cc: Senator Daniel Akaka, State of Hawaii
cc: Senator Daniel K. Inoue, State of Hawaii
cc: Representative Patsy Mink, State of Hawaii
cc: Representative Neil Abercrombie, State of Hawaii
cc: Governor Benjamin J. Cayetano, State of Hawaii
cc: Mayor Stephen K. Yamashiro, County of Hawaii
cc: Council Chairman James Arakaki, County of Hawaii

KONA
P.O. Box J
Kailua-Kona, HI 96740
808-529-1020 Fax: 1020

CORPORATE OFFICES
225 Queen Street
P.O. Box 10, Honolulu, Hawaii 96810
808-524-6000 Fax: 6010

KOHALA
P.O. Box 10
Kamuela, HI 96743
808-885-2020 Fax: 5050

Thank you for your letter

Kealakekua Development Corporation

August 26, 1997

Superintendent
Pacific Great Basin Support Office
600 Harrison Street, Suite 600
San Francisco, CA 94107

Re: National Trails Study

Dear Superintendent:

We believe that a partnership of County, State and individual lot owners of affected properties are the best way to preserve the integrity of this valuable resource where appropriate.

We oppose the national designation of National Trails in Hawaii. We do not need any additional government control and bureaucracy.

Thank you for your support.

Sincerely yours,



Sachi Noma
General Manager

SN:esm

P.O. Box 945 • Captain Cook, Hawaii USA 96704 • TEL: (808) 323-2212 • FAX: (808) 323-2213

Thank you for your letter.

McCANDLESS HONOLULU

P.O. BOX 497
HONOLULU, HAWAII 96809

1046 NUUANU AVENUE
HONOLULU, HAWAII 96817

TELEPHONES:
(808) 537-2900
(808) 537-2943
FACSIMILE:
(808) 537-2948

September 15, 1997

Superintendent
Pacific Great Basin Support Office
600 Harrison Street Suite 600
San Francisco CA 94107

REFERENCE: Draft National Trails Study EIS for
for Ala Kahakai

Dear Sir:

I feel that National Designation for the segments of this trail is inappropriate. I am a land-owner and operate a cattle ranch in Kona. I oppose national designation because a continuous trail no longer exists because of lava flows, landslides and "developed for other use" areas through which the trail passed. Today, to travel along its segments necessitates long journeys away from it to the present roadways and back down again to oceanside to re-commence passage. This is a major impact on those individual landowners on whose land a small portion of the trail might exist.

The potential problem of trespass is enormous.

A joint effort at the County/State/Landowner would be far better.

Sincerely,
Elizabeth M. Stack
Elizabeth M. Stack

ELIWAH • ELIZABETH M. STACK • KEALIA RANCH • MAKUA LAND COMPANY • ONE NORTH HOTEL

Thank you for your letter

Kona Kohala Resort Association

69-275 Waikoloa Beach Drive, Kohala Coast, Island of Hawaii 96743 • Telephone (808) 885-4915, Facsimile (808) 885-1044, Email: kohracaloha.net

September 22, 1997

U.S. Department of the Interior
National Park Service
Superintendent, Pacific Great Basin Support Office
600 Harrison Street, Suite 600
San Francisco, CA 94107

RE: Position on the Ala Kahakai Environmental Impact Statement

Over the past four years, the Kona Kohala Resort Association (KKRA) has participated in numerous conversations and workshops with the National Park Service about the Ala Kahakai, its purpose and significance. Additionally, individual members of KKRA have also participated in discussions and, more recently, reviewed the draft Ala Kahakai National Trail Study and Environmental Impact Statement.

The Kona Kohala Resort Association favors the "No Action" alternative.

While association members believe the concept of a trail has value, much of the trail route does pass through private lands. Our members actively manage and maintain the Ala Kahakai segments which cross their property, to ensure development activities do not encroach on the trail. We suggest that a better focus for National Park Service resources would be to negotiate with and implement the trail on State lands.

Our membership includes: Mauna Kea Properties, Mauna Lani Resort, Waikoloa Land Company, Hualalai Development, Kona Village Resort, Four Seasons Resort Hualalai, Royal Waikoloan, Hilton Waikoloa Village, Mauna Lani Bay Hotel and Bungalows, The Orchid at Mauna Lani, Hapuna Beach Prince Hotel and Mauna Kea Beach Hotel.

Thank you for your time and the opportunity to participate in this important process.

Sincerely,



Noelani Whittington
Executive Director

cc: The Honorable Daniel Akaka, U.S. Senator
The Honorable Daniel Inouye, U.S. Senator
The Honorable Dominic Yagong, Hawaii County Council
Virginia Goldstein, director, County Planning Department
Michael Wilson, State Department of Land & Natural Resources
Pete L'Orange, Hawaii Leeward Planning Conference
Mami Herkes, Kona Kohala Chamber of Commerce
KKRA Board of Directors

Thank you for your letter



October 6, 1997

Superintendent
Attn: Meredith Kaplan
Pacific Great Basin Support Office
National Park Service
United States Department of the Interior
600 Harrison Street, Suite 600
San Francisco, California 94107-1372

RE: DRAFT NATIONAL TRAIL STUDY (STUDY) AND
ENVIRONMENTAL IMPACT STATEMENT (EIS)
FOR THE ALA KAHAKAI

Dear Sir or Madam:

Waikoloa Land Company and its affiliates are the owners of more than two linear miles of land over which the Ala Kahakai crosses. As such, we have been involved in this process since 1993, attending the various conferences and meetings and submitting written comments. We had asked, in a letter to Na Ala Hele dated December 6, 1993, which was copied to Ms. Meredith Kaplan of the Park Service, to be a consulted party during the EIS process. While we were not consulted during the preparation of the Draft EIS, and were not provided with a copy of the Draft Study/EIS upon its completion, we were able to obtain a copy of the Draft Study and EIS. We have reviewed the document, have attended the public information meeting concerning the document, and offer the attached comments for consideration in preparing the Final EIS.

Please be aware that we have great respect for the National Park Service and the National Trails system. However, we also have serious reservations about the feasibility and desirability of a National Trail in such a remote and culturally sensitive area as the leeward coastline of the Big Island of Hawaii.

1. We do not believe that the federal government and/or its "volunteers" will be able to reconstruct or adequately protect and maintain the trail throughout its length. There are no guarantees that federal funding in the amounts stated as necessary in the Draft Study/EIS (which amounts we believe to be significantly underestimated) will be made available and, more importantly, there are no guarantees that a sufficient number of volunteers will come forward to service the trail.
2. Nearly 50% of the trail is privately owned. We do not feel that the representations made in the Draft Study/EIS adequately address the concerns of the private landowners. There are no guarantees that landowners will be protected from and

150 Waikoloa Beach Drive • Waikoloa, Hawaii 96743 • Phone (808) 885-1000 • Fax (808) 885-8896

Response to Waikoloa

1. Indeed, there are no guarantees. The study informs Congress, the decision maker, of our best estimate of what the trail may cost, but Congress determines the designation and the appropriation. All national trails designated to date have an operations appropriation from Congress, sometimes more and sometimes less than what their feasibility study and comprehensive management plan called for. Again, there can be no guarantee regarding volunteers, but the study does not suggest that only volunteers manage the trail. We direct your attention to the last paragraph of page 27 of the study in which state and local agencies and local land managers are mentioned as trail managers. Also, please note page 71 of the study states that "Trail segments should be promoted for public use only after an entity such as the National Park Service, the state, or a native Hawaiian or local volunteer group is identified to maintain the trail and monitor trail use."
2. About 50 percent of the trail crosses terrain indicated on maps as private property, but we estimate that much less than 50 percent of the trail itself will be privately owned once abstracts of title are completed. As stated on page 71 of the study, if the state owns the trail, then the state rather than the landowner will be liable for trail use as prescribed in existing statutes. If a private landowner owns the trail because the state has somehow given up rights to it, and if that landowner

Superintendent
Pacific Great Basin Support Office
National Park Service
United States Department of the Interior
October 6, 1997
Page Two

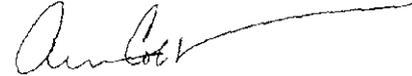
2. defended in lawsuits, that the trail itself will be kept clean and safe, and that there will be no trespassing or littering on or vandalism of private property.
3. The concerns of the native Hawaiians are a major issue. The trail passes near many sensitive cultural and historic sites. Many of these sites are in remote areas, with limited access. Increasing access to the trail will pose a significant danger to these sites.
4. The Ala Kahakai is not a continuous trail. Portions of it have eroded into the ocean. Construction of new, adjacent trails to replace these segments is not possible in areas which have been developed to cliff edges. This condition is not addressed in the Draft Study/EIS.
5. Most portions of the Ala Kahakai within the resorts along the Kohala Coast are already dedicated to public use through the state and county land use entitlement process. Another level of governmental oversight is not warranted, nor desirable.

In summary, we believe the management of the Ala Kahakai as a National Historic Trail is *not* a viable option. Thus, we believe that Alternative A, No Action, should be the alternative selected as the preferred alternative.

We have attached more detailed comments on the content of the Draft Study/EIS. Your consideration of both the above and the attached comments is appreciated. Should you have any questions, or wish clarification of any of our comments, please do not hesitate to contact the undersigned.

Lastly, we would like to be furnished with a copy of the Final Study/EIS when it has been completed.

Sincerely,



Ann Cobb
Planning Coordinator

c: Kohala Coast Resort Association
Ken Melrose

2. cont. chooses to recognize the national trail through a certification agreement, then the owner would be protected by the State of Hawai'i recreational use act which limits landowner liability. In addition, the Statewide Trail and Access statute has been revised to consider agreements to defend and indemnify landowners. See Appendix A. We are advised by the Nā Ala Hele Program that landowners such as the resorts in the Kohala and Kona districts that provide trail access through their properties are currently protected from liability by the state law.

The trail will cross private lands, and as you note, there are no guarantees on the other issues you raise. The study acknowledges landowner concerns and suggests ways to minimize impacts. (Please refer to pages 71-72 of the study.) For your information, one of the few studies on the impacts of trails found that "landowners fears of increased crime and other problems and decreased property values were not supported by this study." (Roger Moore, Alan R. Graefe, Richard J. Gitelson, Elizabeth Porter, The Impacts of Rail-Trails: A Study of the Users and Property Owners from Three Trails. Rivers, Trails, and Conservation Assistance Program, National Park Service, Washington, D.C., February 1992)

3. We agree. These concerns are described or addressed on pages 19, 24, 42-44, and 64-66 of the study.

DRAFT NATIONAL TRAIL STUDY (STUDY) AND
ENVIRONMENTAL IMPACT STATEMENT (EIS)
FOR THE ALA KAHAKAI

Comments by:
Waikoloa Land Company

October 6, 1997

The following are some point-by-point comments on the Draft Study and EIS for the Ala Kahakai:

6. 1. Issues, Resource Protection, page 19. The document states that "Native Hawaiians expressed deep concern for protection of natural and cultural resources . . ." and states further that "[d]esirability . . . would appear to hinge on respect for their culture, on native Hawaiian involvement in management, interpretation, inventory and monitoring, and maintenance, and on adequate funding to manage the trail appropriately." We have been told that a specific plan to address the protection of these important resources would be part of a future management plan. We are concerned that, should the trail be made more accessible, there will not be sufficient manpower (which will be an all-volunteer force) or funding (which is not guaranteed) to ensure the protection of the sensitive and historic sites which occur along its length.
7. 2. Issues, Landownership, page 20. The document lists major areas of concern:
- Liability. Although there is a state law which purports to protect the landowner from liability for recreational use of its property, it does not protect against law suits. In addition, to our knowledge, this law has yet to be tested in court.
8. • Added Bureaucracy. The land use laws in the State of Hawaii are arguably the most stringent and protective of natural, historic and cultural resources. The Ala Kahakai is already protected and, in many developed areas, public access easements have been granted along its length. The designation as a National Historic Trail will add another layer of bureaucracy, and one which we believe to be unnecessary and, perhaps, detrimental to the more sensitive areas of the trail and the coastline which it follows.
9. • Public Perception. As stated above, the trail is already protected. While we are extremely conscious of the need to protect our historic and cultural resources, designation of the Ala Kahakai Kai as a National Historic Trail could, indeed, have a negative impact on development in areas which have been designated for such development, creating an impact which would negatively affect the economy of the State as a whole.

1

4. The potential for a continuous trail is based on the National Trails Day hike by Ē Mau Nā Ala Hele in 1993 which is documented along with trail information from many sources in Appendix F. Particular cases such as you describe would be addressed at the site-specific level during the management plan, if the trail is designated.
5. Appendix G, page G-5 lists those dedications. Participation of those landowners in marking the trail as a national trail under Alternatives B or D would be voluntary. In the case of an already-constructed trail such as you mention, National Park Service involvement under Alternatives B or D generally would be limited to working with the landowner to mark and interpret the trail and offering technical assistance as requested. We have found in other states that landowners with resort or residential developments like to incorporate national trails into their properties because they add value.
6. Comment noted.
7. Please refer to response 2 to this letter. The fact that a law has not been tested in court does not invalidate its protection.
8. Comment noted. Please refer to response 5 to this letter.

10.
 - Vandalism. This is a very real concern for all landowners, from resort developers to single family homeowners. We do not believe that the volunteer labor anticipated to take the lead in the maintenance of the trail will be able to offer the protection necessary to ensure that the rights of the private property owners will be protected from trespassing, littering, vandalism, and theft.
11. 3. Issues, Development and Use, page 20. As pointed out in the Draft Study/DEIS, many portions of the trail are currently virtually inaccessible, with no amenities for available for the public. The Draft Study/DEIS states that these issues would be addressed in a management plan. It is our belief that, for portions of the trail, the issues of safe access and use will not be addressable without having a negative impact on the surrounding areas and the trail itself, e.g., roads cut through previously barren lava flows and trash receptacles and portable toilets in areas of once pristine beauty. In addition, the remoteness of the trail will make the furnishing of water for trail users and the servicing of the trash containers and portable toilets difficult.
12. 4. Alternatives for Management and Use, Alternative B, pages 26 - 28.
a) This Alternative states that the trail "would be a continuous trail on the ground" and that "[c]ontinuity on the ground would occur over time and as feasible." As we reported to the Park Service both at public hearings and through written comments, the trail is not continuous -- portions of it have eroded into the ocean while other portions of it have simply disappeared through non-use. For those portions which have eroded, in some areas development has occurred up to the edges of cliffs, prohibiting realignment of the trail adjacent to its previous location. For those portions which have been lost, we believe that the National Park Service has not adequately considered the time, effort and cost involved in reconstructing the trail "using traditional techniques."
13. b) We note the statement that the trail workshop group does not consider condemnation an appropriate way to obtain land. However, that statement does not appear to preclude the federal government from availing itself of that alternative. We are also uncomfortable with the NPS statement that it will "encourage state and local governments and private entities to obtain cooperative agreements . . ." It is unclear what form such "encouragement" will take.
14. c) Under Alternative B, there are no federal government employees involved in the development, operation, and maintenance of the trail, except in administrative capacities. Rather, everything will be left to "[l]ocal land managers and volunteers," with no guarantees that a sufficient number of volunteers will be available to service the trail, meaning that, ultimately, maintenance and supervision will fall on the landowners if they wish to preserve the integrity of their property. (It should be noted that, under Alternative C, this Draft Study/ EIS concludes that the State government does not have adequate resources/funds to manage the trail.)
15. d) Finally, the statement is made that "facility planning and development" costs "are assumed to be matched by nonfederal sources." Unfortunately, there is no

9. Some portions of the trail are protected today; others may be at risk. In the case of private development, the state may assert its right of ownership of ancient trails whether the trail is designated a national trail or not. Landowners will have to recognize the ancient alignment of the trail as shown in the case discussed in Appendix A page A-30 of the study. National trail designation would require little more than state or county laws which already require that cultural resources be identified and protected. Economic impacts are addressed on page 68 of the study. We anticipate that the trail would have a neutral to positive effect on the economy.

10. Please refer to responses 1 and 2 to this letter.

11. These issues are identified and addressed at a conceptual level on page 67 of the study under "Visual Resources" and pages 68-71 under "Impacts on User Experience." We agree that they are significant issues. If the trail is designated, these issues will be readdressed in more detail in the comprehensive management plan.

15. reference to where the remainder of the required funds would be obtained (see note above about lack of State resources) and there is no guarantee that the required funding would be appropriated, thus shifting the burden to private landowners.

16. 5. Environmental Consequences of the Alternatives, Natural Resources, Anchialine Ponds, Pages 59 and 60. Please note the following quote from the Draft Study/EIS: "Protecting ponds that are easily accessible to trail users is difficult." The study then goes on to discuss the mitigative measures of public education and monitoring of the ponds to remove alien fish species, with our Waikoloa Anchialine Pond Preservation Area ("WAPPA") cited as an example of ponds which do not have an alien fish problem. It should be noted that this pond area has restricted access, as mandated by the U. S. Army Corps of Engineers, and that its management is funded by an endowment provided by Waikoloa. The endowment is for management and research purposes only and does not include the costs of signage, security, and maintenance of the ponds. We are concerned that increased access via the Ala Kahakai could pose a threat to the viability of the ponds. The mitigation measures set forth in the Draft Study/EIS will require funding, which has not been nor may ever be appropriated, in amounts which have not been calculated, but which, considering the costs of management and maintenance of the WAPPA, could cost in hundreds of thousands of dollars annually.

17. 6. Environmental Consequences of the Alternatives, Cultural Resources, Pages 64 and 65. The Waikoloa Beach Resort is home to a variety of archaeological preservation areas, including the Waikoloa Petroglyph Field, the Ke Ahu A Lono ahupua'a shrine (please note, permanent interpretive signage has been installed for this site -- this should be corrected in Appendix E), and the Abrader Quarry. Public access to these areas is currently provided and encouraged. However, this access would increase significantly should the Ala Kahakai evolve as envisioned by the NPS, increasing the potential for damage to those important, cultural sites and the many others located along the trail. As stated in Appendix E, "[c]ultural sites along national trails are especially vulnerable." We believe the cost and effort that would be involved in protecting the sites located along the trail are underestimated in the Draft Study/EIS.

18. 7. Environmental Consequences of the Alternatives, Socioeconomic Environment, Land Ownership, Page 71. We note that the Draft Study/EIS states "[l]andowners could be significantly affected as a result of trail designation . . ." The listed mitigation measures (inclusion of landowners on trail advisory councils, marking of private property, and identification of an entity/group to maintain and monitor trail use) are inadequate to ensure the protection of private property.

19. 8. Appendix G, Table 2, page G-4. We would appreciate the addition of Waikoloa Land Company and its affiliates (Waikoloa Development Co., Waikoloa Land & Cattle Co., Lanpar/HTL Associates, and Atpac (Hawaii) Limited Partnership) to the list of private landowners who own .4 mile or more of land along the Ala Kahakai Route.

12. Please refer to response 4 to this letter. The draft study states that traditional techniques would be used "where appropriate and feasible" (page 26). Feasibility would involve considering time, effort, and cost. In the final study, we have clarified the text to indicate that reconstruction using traditional methods would be anticipated only in specific situations. (Please see page 26.) For instance, we understand that Waikoloa was required by the county to reconstruct a portion of trail in the Waitulua Bay Settlement site because of its cultural significance.

13. We anticipate that if there is legislation authorizing the Ala Kahakai as a national trail, it will include a clause that indicates no land may be acquired by the federal government without the consent of the landowner. Most recent national trail legislation includes such a statement. Except for those segments of trail now included within national park sites, it would not be the intent of the federal government to own the Ala Kahakai. The term "encourage" occurs in the National Trails System Act. In practice, on other national historic trails, encouragement usually consists of the National Park Service responding to a landowner request or following up on a contact initiated by local people.

Response to Waikoloa, cont.

14. Please refer to response 1 to this letter. Landowner participation in a national historic trail is voluntary and requires a certification agreement. The agreement would identify how the trail would be maintained. The landowner could choose to maintain the trail, or another entity could be identified. Resort managers in the Kohala area indicated during the study process that they would want to continue to manage and maintain trail segments through their properties under any alternative. We emphasize that land ownership does not change with trail designation or certification.
15. Use of the word "match" in the draft study was inadvertently misleading. The estimate is based on the assumption that the State Parks Department and county parks would develop facilities on their sites along the Ala Kahakai which would account for a portion of the proposed trailheads. In addition, funds may be raised through grants, in-kind donations, and other means. These sources would qualify as a match. The intent of the description was to indicate that federal funds would be used to develop approximately half of the projected facility need. Footnote 2 on page B-1 of the final study has been changed to better reflect the intent of the estimate.
16. Concern for the anchialine ponds is real, and there is no easy answer to their protection. Public access along the shoreline trail through Waikoloa is already mandated by the County of Hawaii. The action alternatives will most likely result in an increase in use of this trail segment although, as the study notes, the amount of increase cannot be predicted at this time. With more use, the potential for vandalism or introduction of alien fish could increase, but we do not know the level of increase or if it will occur at all. Presumably, people who stray off the trail today to visit the anchialine ponds on Waikoloa property are trespassing, and this would continue to be true under any of the action alternatives. The DEIS suggests many potential measures to minimize negative impacts on anchialine ponds which can be implemented at less cost than your stated cost to Waikoloa. In addition, under Alternatives B and D, the National Trails System Act "in order to maintain good conduct on and along the trails" would allow the development of regulations for trail use on certified trail segments for which violations result in a misdemeanor punishable by a fine or imprisonment or both (Sec. 7[i], page A-11 in the study). Such regulations could encourage trail users to stay on the trail.
17. Appendix E has been corrected. We appreciate your concern and have endeavored to describe the potential impacts to archeological and cultural sites along the trail as accurately as possible. In addition, we addressed measures to minimize impacts to these sites on page 65 of the study. As the study says, we are unable at this time to assess the potential degree of increase in visitors to established portions of the trail. During the management plan preparation, landowners such as you will be involved to help determine how site-specific trail use should be managed and *monitored*.
18. Comment noted.
19. We regret the oversight. Lanpar/HTL Associates is listed, but under the criteria of landowners with 0.4 miles or more, Waikoloa Land and Cattle Company should have been listed with 0.68 miles. We have made the change in Appendix G., Table 2. Your affiliates Waikoloa Development Company and Atpac (Hawaii) Limited Partnership each own 0.30 miles. For this reason, they were not listed by the consultant.



KAMEHAMEHA SCHOOLS BERNICE PAUHI BISHOP ESTATE

October 7, 1997

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Ala Kahakai National Trail Study and Draft Environmental Impact Statement

This is a follow up to our September 3, 1997 testimony on the proposed Ala Kahakai National Trail Study and Environmental Impact Statement. After attending the recent public meetings on the Island of Hawaii, we believe it is important to further clarify our comments and to make specific recommendations to be incorporated into the final report. Our comments focus on the Summary of Impacts section of the report which is the portion of the report most likely to be reviewed as decision making proceeds. However, we are presently reviewing other documents contained in the report, such as an opinion by the State Department of Attorney General dated March 12, 1997, and further legal analysis and comment may be forthcoming.

1.

1. Table 2: Summary of Impacts. Landownership, pg. x

This section does not adequately reflect the impacts of the proposed trail on land ownership and appears to discount concerns raised by many landowners, depicting such concerns as insignificant. We strongly suggest that the following impacts be added under Alternatives B, C and D:

2.

- Landowners should expect an increase in public trespass on land surrounding the trail alignment.
- Additional natural and cultural resources as well as view corridors along the trail may be identified resulting in a reduction in land use options.
- Trail designation may result in increased permitting and regulatory controls over coastal property.
- Trail impacts on landowners will vary significantly depending on variable funding levels for management.
- Anti-growth advocates may use the trail designation as an additional point of leverage to forestall new land use or management initiatives.

2. Table 2: Summary of Impacts. Land Use, pg. x

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Response to Kamehameha Schools Bernice Pauahi Bishop Estate

1. A summary is an overview intended to provide a quick comparison between alternatives. It is not intended to display the entire complexity of each issue. The alternatives and their impacts are fully disclosed in the "Alternatives" and "Environmental Consequences" sections of the study.
2. Please refer to response 1 to this letter; landowner impacts are recognized and fully discussed in the narrative. Some landowners may fear an increase in trespass, but at least one study has shown that these fears are often unfounded (see answer 2 to the letter from Waikoloa). The protected legal status of the natural and cultural resources, including the trail, would exist whether or not the trail is designated a national or state trail, as illustrated by the recent decision regarding the ancient trail on Oceanside 1250 property. Designation will not result in increased permitting and regulatory controls over coastal property.

Ala Kahakai Trail
Page 2

The current draft indicated no land use impacts under any of the four scenarios. We disagree with the current draft. The following should be added under Alternatives B, C and D:

3.

- Trail designation may result in additional land use controls for trail alignment and the cultural and historic resources along the alignment.
- Federal designation may require that any new land use activity that impacts the trail be done in conformance with NEPA and other environmental regulations.

3. Table 2: Summary of Impacts. Add a new section entitled Native Hawaiian Impacts

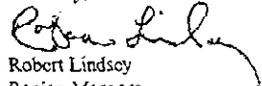
4.

The current draft does not adequately consider the interests of Native Hawaiians. During the public meetings held recently on the Big Island, Native Hawaiian concerns were raised several times and specific issues were addressed. These specific Native Hawaiian issues and concerns are not currently considered anywhere in the summary section of the report. We suggest that the study must do more to determine the impacts on existing Native Hawaiian users of the coastal and cultural resources along the trail and to balance these concerns against the interest of the public at large. We recommend the following impacts be noted and that additional work be done to clarify these impacts with members of the Hawaiian community before the report is finalized

- Increased public use of coastal areas that will result from trail designation and development will increase competition for subsistence resources currently utilized by Native Hawaiians.
- Wahipana, including burials and historic sites, along the trail will receive increased public exposure and require additional Hawaiian stewardship and protection

It is our belief that these comments should be added to the Environmental Impact Statement to more accurately reflect the issues that may arise from a National Trail designation. Thank you for the opportunity to comment.

Sincerely,



Robert Lindsey
Region Manager
Hawaii Island Region

cc: Representative Akaka

3. The summary under "Land Use" in the final EIS has been changed to clarify the intention of the statement "no impacts." No change in state and county land use controls is anticipated or recommended. No additional controls are proposed. State or private land use activities adjacent to the trail would not be affected by the National Environmental Policy Act (NEPA).
4. We appreciate your concern for native Hawaiians. The study discusses issues and impacts to native Hawaiian culture in a number of sections, including resource protection and cultural and natural resources. Please refer to pages 19-20 for a description of issues, pages 42-47 for description of cultural resources, pages 63-66 for impacts to natural and cultural resources, and to pages 28 and 72 for a listing of federal laws which would protect native Hawaiian culture and require consultation with native Hawaiians under Alternatives B and D. Native culture, the ability to practice it, and measures to ensure that sacred sites and resources are protected and available for native practice are fully discussed in the draft and final study. On the other hand, native Hawaiians are a diverse group of people with a wide range of interests, affiliations, and viewpoints for whom representation as a single voice could be a misrepresentation. Therefore, there is no section entitled "Native Hawaiians" and no summary item. Please refer to responses 1 and 2 to the letter from the Office of Hawaiian Affairs and to the changes in the text on page 27 which clarify the intent of Alternative B.



KAMEHAMEHA SCHOOLS BERNICE PAUAI BISHOP ESTATE

September 3, 1997

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Testimony on Ala Kahakai National Trail Study and Draft Environmental Impact Statement (DEIS)

My name is Bob Lindsey, Hawaii Island Region Manager for Kamehameha Schools Bishop Estate (KSBE). We have reviewed the DEIS and Trail Study and wish to offer several comments. It is our general observation that this study ignores many of the issues we have raised over the last several years. We are left with the impression that the study was intended to justify the trail rather than to objectively balance the opportunities with the tough reality issues that such a trail will generate. Our comments are summarized below.

1. There is insufficient data and information to support the underlying concept and significance of an Ala Loa (long trail). While prehistoric trails did connect portions of particular regions, there is no evidence to suggest that these trails played a significant historical role in connecting the entire island on a coastal route. We note that the assertion that the trail was a continuous and significant historical pathway is a basic argument needed to create a national trail. The report fails to provide adequate evidence that such a trail existed or that it ever functioned as an important cultural resource. Rather, the trail as proposed is a mix of prehistoric and more contemporary "historic" routes which, when woven together, represents a clear effort to merge a series of unconnected sites and traditions and cloak them under the guise of "National Significance".
2. Landowners' issues are given very limited coverage in the DEIS and several issues are not well developed. For example, landowner concerns that the trail is only one portion of the land use impacts of a trail designation are inadequately addressed. KSBE commented many times that the expansion

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4. cont. The native Hawaiian concern brought up at the Captain Cook meeting related to the speaker's belief that native Hawaiians had not been involved in preparation of the study. During the study process, the National Park Service met in public and private with native Hawaiians living in all the districts through which the trail is routed. These meetings were summarized and made available to the public through a mailing. All civic clubs in the affected districts were notified at the beginning of the study, sent summaries of meetings, and kept informed of the study process. In addition, well-respected elders and cultural experts were involved in planning and review. If the trail is designated, meetings on a more site-specific level would be held during the management plan process to involve native Hawaiians of a particular area in planning for that area.

Native Hawaiians at the Hilo meetings expressed concern for the trail in Puna and their responsibility for it. These comments are summarized in the introduction to this section.

5. We direct you to pages 6-9 of the study. The information supplied supports the existence and significance of the ala loa.

6. Due to development subsequent to 1779, the trail today would be comprised of the original trail and more recent paths and roads. Contrary to your statement, the Ala Kahakai would reconnect sites and traditions which in prehistory and into the historic period were linked along the ala loa.

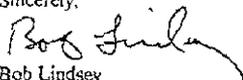
7.		of public use off the edges of the trail concerns us greatly. If the trail moves inland at any point, we anticipate that trail users will divert from the trail and eventually encumber additional private land near the shoreline. Such concerns are treated lightly in the study and are offered only vague references to future management planning.
8.	3.	Another significant property rights concern is related to the protection of view corridors from a designated trail. This further extends the trail's land use impacts and creates a very subjective opportunity for the public and/or trail planners to establish land use constraints on private property that preserve the interest of a few trail users at the land owner's expense.
9.	4.	The summary section of the report is misleading in at least several significant areas. First, Alternative B is described as a discontinuous trail but this same alternative is described in the text as a continuous designation. This difference needs to be clarified. Secondly, the summary of landowner concerns on page "X" does not come close to identifying what land ownership impacts will be. The last statement under Landownership impacts associated with Alternative B reads, "With proper management, adverse impacts not expected to be significant." This statement is indicative of the report's general tone which discounts the issues we have raised and presumes them to be insignificant.
10.	5.	On page 20, the report refers to Kamehameha Schools Bishop Estate's reason for opposing expanded public use of our coastal land is because it will impact our ability to develop our property. This comment is both inaccurate and inappropriate since it presumes that we see all coastal land as property for potential development. That is simply not the case. Our role as a steward of Keali'i Pauahi's land assets is broadly based and requires that we actively manage and protect our resources for future generations of Hawaiian children. Development is only one alternative land use and it is clearly not a priority issue on the vast majority of the land in the study area. Efforts like this to simplify our concerns reflects a basic misunderstanding about the nature of private land ownership and the stewardship responsibilities which accompany that ownership.
		Based on these and other concerns, Kamehameha Schools Bishop Estate is opposed to any Federal or State Trail Designation that impacts our property. We have owned and have managed over 15-miles of shoreline in the study area for more than one hundred years and we intend to continue to manage, protect and preserve our <i>ama</i> , our land in perpetuity.

7. Please refer to response I and 2 to this letter. Landowner concerns are addressed in the draft and final study. We reiterate that trail users diverting from the trail will be trespassing, and private land adjacent to the trail will still be regulated by county and state land use provisions.
8. Please refer to response 2 to the letter from the State of Hawaii Department of Hawaiian Home Lands and to responses to the letter from the County of Hawaii Planning Department.
9. The typographical error is corrected in the final study. Please refer to responses 1-4 to this letter for your other concerns. Land ownership is treated as a significant issue in the text of the study.
10. Your comment is duly noted. Our intent in referring to Kamehameha Schools Bishop Estate (KSBE) was to validate the issue. No comment on KSBE stewardship was intended.

Ala Kahakai Trail
Page 3

Thank you for the opportunity to comment

Sincerely,


Bob Lindsey
Hawaii Island Manager

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 WIMBERLY, ALUSON, TONG & GOG

October 13, 1997

Ms. Meredith Kaplan
 Ala Kahakai Trail Team Coordinator
 National Park Service
 600 Harrison Street, Suite 600
 San Francisco, CA 94107.1372

SUBJECT: *National Trail* Designation of the Ala Kahakai

Dear Ms. Kaplan:

1. The **Board** of Directors of Hawaii Leeward Planning Conference, at its **Directors' Meeting** August 26, 1997 (enclosed is a list of our directors) **reaffirmed** its **position** that National designation of the Ala Kahakai Trail **is inappropriate**. (Please refer to enclosed letter dated June 10, 1994.)

The Board believes that a partnership of State, County, and individual land owners of the affected properties is the best way to preserve the integrity of this valuable resource where preservation appears appropriate. We therefore support Alternative A in the EIS.

Some of the issues that did not receive enough attention are as follows:

- 2. **Cost:** The cost estimate for the establishments of the trails is way too low. In talking to ranchers who do this sort of work I estimate that the 25 worst miles which will require hand-clearing will cost over 5200,000.
- 3. **Less Protection:** The trail will open up areas that have minimal access at present, and as such could lead to desecration of burial sites and the taking of artifacts which have a high commercial value, unfortunately.

HAWAII LEEWARD PLANNING CONFERENCE
 P.O. BOX 635 - KAILUA-KONA, HAWAII 96745-0635

Response to Hawaii Leeward Planning Conference

1. We did not receive the enclosures.
2. The cost estimate includes only the anticipated federal costs and does not include other sources of funds, including volunteer services. The numbers are a best estimate at this conceptual level. Figures will most likely change with the more site-specific analysis in the management plan if the trail is designated. The cost for trail restoration/construction has been changed in the final study to include identification and \$100,000 has been added to cover potential metes and bounds surveys that may be required. Please refer to page B-1.
3. The study recognizes the potential significant impacts that might occur if new areas of trail are promoted to the public. We direct your attention to pages 64-66 of the draft and final study. Impacts would be addressed at a more detailed level in the management plan if the trail is designated.

Ala Kahakai Trail
October 13, 1997
Page 2

4.

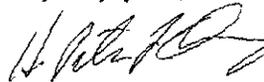
• Added Bureaucracy: Federal involvement will add an unnecessary Federal presence in a state that has comprehensive land use laws.
5.

• **Liability:** While we have a state law which protects land owners from liability, it does not protect them from lawsuits, and the cost of defending oneself can be considerable.
6.

• Trash and Vandalism: This problem is faced by all private property owners as public access increases. The potential for major problems in a trail of this length could be overwhelming. It is unfortunate that a relatively small percentage of the public is irresponsible.

We have appreciated the opportunity to review the EIS and hope that you concur with us that Alternative A is the most appropriate.

Very truly yours,



H. Peter Lorange
President

HPL/ba

4. Please refer to responses to the letter from the County of Hawaii Planning Department. Federal laws would apply to existing federal lands and to certified segments of the trail. State and county land use regulations would continue to apply to adjacent lands and to any uncertified trail segments.
5. Please refer to response 2 to the letter from Waikoloa.
6. Please refer to response 2 to the letter from Waikoloa.

CARLSMITH BALL WICHMAN CASE & ICHIKI

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OUR REFERENCE NO. 037143-2

October 15, 1997

Superintendent
Pacific Great Basin Support Office
National Park Service
600 Harrison Street, Suite 600
San Francisco, CA 94107
Attention: Meredith Kaplan

Re: Draft National Trail Study and Environmental Impact Statement (EIS) for the Ala Kahakai

Dear Ladies and Gentlemen:

This office represents Chalon International of Hawaii, Inc., a multi-faceted land holding company which presently controls approximately 19,000 acres of land in the North Kohala District of the Island of Hawaii. According to the data provided in the draft study, approximately 2.51 acres will be directly impacted by the proposed designation of this trail system.

1. My clients have several major concerns with the draft document, the most significant of which is the photographic and descriptive reference to the Mahukona railroad right-of-way as part of the Ala Kahakai. In light of the following evidence, we fail to see the direct connection between this privately owned railroad right-of-way and the Ala Kahakai for several reasons.

2. First, Chalon's archaeological surveys for the property identify remnants of what may be the Ala Kahakai (Site #13570) along the southern boundary of the property where it begins to go inland until it disappears. This location also coincides with Ross Cordy's description in Appendix D (Remnants of the Prehistoric Ala Loa Along the Ala Kahakai Route), wherein he states 'In Kamoā and Hihū Ahapua'a (near

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Response to Carlsmith Ball Wichman Case and Ichiki

1. The photograph of the railroad right-of-way used on a divider page was taken by Ē Mau Nā Ala Hele members on National Trails Day, 1993. The same photograph was used in a newsletter regarding the Ala Kahakai sent to Chalon International of Hawaii, Inc. among about 350 others in September 1996. We apologize for not determining the location of the photograph before using it. We have replaced it in the final document. The only text reference we find in the study is on page F-1, the first entry, which says "Chalon International of Hawaii, Inc. has development plans for North Kohala from 'Upolu Point to Māhukona which include the Ala Kahakai and the railroad." This Statement does not say that the Ala Kahakai is the railroad alignment, and we believe the statement is true.
2. We have conferred with Dr. Cordy who agrees that the railroad is not coincident with the ala loa in the Mahukona area; however, he states that north and south of Mahukona the trail comes toward the shore.

2. today's Mahukona and Lapakahi State Historical Park), the trail is set inland about 1,000 feet or more (several hundred meters)" (emphasis added). We have enclosed an attachment from the archeological survey by PHRI (February, 1993) identified as Figure 5 wherein the relationship between the trail (green) and the railroad (orange) can easily be determined.

With respect to the Ala Kahakai or Ala Loa in North Kohala, Mr. Cordy's complete report notes the following at page I I:

3. "Once Pololu Valley was passed, gradual slopes with gardens and houses again were encountered in North Kohala. In the Pololu to Kapa'au area, the slopes are broken by small, steep, 100-foot deep stream gulches. Historical records indicate the Ala Loa was set back from the sea - up to a mile in places. This route approximates today's highway. The footpath throughout this area was on soils, and very little remains." (emphasis added)

We note that this paragraph precedes the opening paragraph referenced in Appendix D above, and thus, it provides a completely different context as to where the Ala Kahakai was likely situated in the Mahukona area. As can easily be seen from the attachment, the remnants of the Ala Kahakai do appear to bear mauka in a direction coinciding with the present Akoni Pule Highway.

4. Second, construction of the 19.78 mile section of railroad between Niulii and Mahukona by the Hawaiian Railroad Company commenced in 1881 and was finished in 1883. Operations at the port of Mahukona continued until the beginning of World War II when the facilities were closed and railroad service was discontinued in 1945. The port facilities closed for good in 1955. Since the railroad was never operated as public facility, it does not, and cannot fall within the purview of the Highways Act of 1892.

Furthermore, in a series of Quiet Title Actions commencing in the early 1980's, title was vested to Chalon's predecessors and not to the State of Hawaii. These three cases, Kehena Beach, Inc. v. Hannigan, et al., Civil No. 5469 (April, 1981) Kohala Corporation v. Callish, Civil No. 5467 (June, 1989), and Chalon v. Magoon et al., Civil No. 89-289 (July, 1990) generally depict pedestrian footpaths/trails in favor of the State from the highway to the shoreline (Hannigan, et al.) or along the shoreline

3. The Pololu to Kapa'au area was not included in the summary of Mr. Cordy's report because that area is not within the study corridor. Trail sections outside the identified study corridor were omitted to reduce reader confusion.

4. Comments noted.

Superintendent
October 15, 1997
Page 3

4. Kohala Corporation v. Callish, Civil No. 5467 (June, 1989), and Chalon v. Magoon et al., Civil No. 89-289 (July, 1990) generally depict pedestrian footpaths/trails in favor of the State from the highway to the shoreline (Hannigan et al.) or along the shoreline (Callish and Magoon et al.). Temporary "floating" easements along the old railroad right-of-way were also retained by the State subject to future relocation in the event the landowner exercises its right to improve, subdivide or develop the property.

It is conclusive that the Mahukona railroad right-of-way and the Ala Kahakai cannot be one and the same, either pre-historically or historically.

5. We feel that Chalon's example illustrates the specific concerns relative to lands that would be impacted because of inaccurate pre-historical assumptions as to where the Ala Kahakai was situated. Regretfully, we find insufficient evidence in the present draft to conclude that one trail - the Ala Loa or Ala Kahakai - encircled the entire island, and recommend that the complete 1994-95 report by Mr. Cordy be included as Appendix D rather than the abridged, excerpt section that is presently in the draft. Mr. Cordy's report will clarify that the actual situation was far more complex, and it offers several cautions - that it is not yet clear how much of the trail remains (archaeological survey is needed in several areas), and that because multiple trails are sometimes present, decisions need to be made on which route to follow in these areas.

This basic assumption in the draft impact statement needs much more verification before any of the proposed alternatives are considered. Until then, serious consideration of any kind of national designation would be very premature.

Very truly yours,

CARLSMITH BALL WICHMAN
CASE & ICHIKI


Steven S.C. Lim

SSL:jny
Attachments
xc w/enclosures: Chalon International of Hawaii, Inc.

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5. The study acknowledges that archeological survey is needed (refer to pages 28 and B-1) and decisions will need to be made on the exact alignment. We suggest that you take up with Dr. Cordy the issue of whether a prehistoric trail encircled the island. His report provided the National Park Service with sufficient evidence on which to base our conclusions.

WILLIAM L. MOORE PLANNING

159 HALAI STREET
HILO, HAWAII 96720
(808) 935-0311/Fax (808) 934-0162

October 16, 1997

Superintendent, Pacific Great Basin Support Office
National Park Service
600 Harrison Street, Suite 600
San Francisco, California 94170

Attention: Meredith Kaplan
Via Facsimile (415) 744-4043

Subject: Ala Kahakai, "Trail by the Sea", Hawaii County, Hawaii
Draft National Trail Study and Environmental Impact Statement

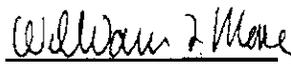
Dear Ms. Kaplan:

Thank you for the opportunity to review the Draft National Trail Study Environmental Impact Statement (Report) for the Ala Kahakai. I represent one of the landowners potentially impacted by this project along the Kohala coastline between Mahukona and Kawaihae. More specifically, Mahola Inc. owns approximately 1,000 acres of land along this coastline, including a number of shoreline parcels.

1. The primary concern that we have is that the Report fails to clearly establish the existence of trail through this portion of the proposed corridor. According to the Trail Segment Description (Appendix F), there is no clear identification of a trail through this area. In fact, the recommendation is to utilize a dirt road as the path. Furthermore, there is no discussion of ownership of the road or its relationship to historic/prehistoric trails along this coastline.

We would appreciate being kept informed of the status of the Report and the establishment of the Ala Kahakai.

Sincerely,



William L. Moore

cc: Robert Miyasato, Mahola, Inc.

Response to William L. Moore Planning

1. Establishing the trail location with certainty would require a search of records of title and thorough on-site reconnaissance which are beyond the scope of this study. Dr. Cordy's report, along with information from others such as Deborah Chang, Clyde Sproat, and William Akau, indicates that the *ala loa* existed between Mahukona and Kawaihae. Remnants of the trail are still visible, but much of it is overgrown with kiawe, and therefore, a dirt road is used in its stead. The potential trail location and ownership would be established during the management plan process under the action alternatives.

KA'U AGRIBUSINESS CO., INC.

P. O. BOX 130
PAHALA, HAWAII 96777-0130
(808) 928-9012
(808) 928-8434 (FAX)

October 16, 1997

Superintendent
Pacific Gray Basin Support Office
National Park Service
600 Harrison Street, Suite 600
San Francisco, CA 94107

Attention: Meredith Kaplan

Re: Ala Kahakai National Trail Study and Environmental Impact Statement

Dear Ms. Kaplan:

1. On page G4 the report states that Ka'u Agribusiness Co., Inc. owns 9.57 miles and Ka'u Sugar Company owns 1.23 miles. Ka'u Sugar Company is the former name of Ka'u Agribusiness Co., Inc. The two companies are the same entity.

2. We are concerned with a number of issues and statements in the report. For instance, on page 71, the report states 'For all alternatives, if the state OWNS the trail, then private landowner liability would not be an issue. If a private landowner OWNS the trail, Hawaii State law provides liability protection. (See Appendix A for Legislation.)' These two statements are misleading. Regardless of who owns the trail, private landowner liability is and will be a major issue. Hikers will not stay on the trail. They will go off the trail to get a better view, to sit down and rest, to have a picnic, to look at features, etc. The trail is **not very** wide and to assume that people will stay on the trail and never leave it is foolish.

On Table II Summary of Impacts, under Alternative B, as well as on page 71, it is stated that State law protects landowners from liability for trail use. On page 20, the text states 'Liability-They fear that public use of a trail over their lands could

Response to Ka'u Agribusiness Co., Inc

1. The listing is changed on page G-4 to indicate that the Ka'u Agribusiness Co., Inc. owns 10.70 miles of trail.
2. Please refer to response 2 to Waikoloa.

Superintendent
Pacific Gray Basin Support Office
October 16, 1997
Page 2

2. open them to the expense of fighting liability suits even though state law protects them from liability for recreational use of their lands." The statements that state law protects the landowner are misleading. Chapter 520 with regard to liability does offer some protection, but it is certainly not complete protection from liability. In addition, it offers no protection for the landowner from being sued.

3. At present, Ka'u Agribusiness permits individuals and groups onto its property through a permit system for fishing, hunting, hiking, biking, etc. With a permit system, we can control who goes on the property and monitor their activities. If there is littering, or vandalism, or the use of firearms in areas that are prohibited, etc. we can refuse to permit those individuals access in the future. Consequently people monitor themselves so they don't lose this privilege. A permit system also offers some additional protection because we have provisions for indemnity and assumption of the risk included as two of the conditions for people using our land. With a National Trail System going through our land, we would not be able to require users to sign a permit. If access to the trail is difficult, there will be pressure by users for us to open up various points of access.

5. On Table II Summary of Impacts, the text states, "With proper management adverse impacts not expected to be significant." What is proper management? Neither the state nor the park service will have rangers out patrolling the trail. We believe adverse impacts will be significant. We know there will be littering, vandalism, trespassing, lawsuits, etc.

6. One issue that should be addressed more extensively in the report is how designation of the trail will interfere with proposed and current uses of the land. How will designation of the trail affect the landowners use of the land to pasture cattle and horses or develop a macadamia nut orchard? Who will pay the extra expenses involved for fencing, signs, etc.? How will designation affect the state's plans to build a spaceport at Palima Point, or a private landowner's plans to build a sawmill, or a small airport!

3. Permits are a useful means of regulating use. Limitations on trail use are possible for national historic trails as indicated on page 65 of the draft and final study where it states that culturally sensitive areas may require a native Hawaiian guide or trained docent to permit public use. Segments of the trail which might require limitations on use would be identified during the management plan process and the appropriate level of restriction described. You would have an opportunity to participate in this process.
4. The DEE acknowledges that landowners may receive public pressure to participate in the trail, although the degree and kind of pressure cannot be determined at this time (page 72). Access to the trail would be carefully considered during the management plan process under the action alternatives, and affected landowners would be involved in determining appropriate points of access. Access to specific trail segments would only be provided after the management plan and required studies are completed. The cost estimate for Alternatives B anticipates access points at approximate five mile intervals, but in practice, this distance would vary with site conditions.
5. Comment noted. The comprehensive management plan, which will provide opportunities for public involvement, would define "proper management."

Superintendent
Pacific Gray Basin Support Office
October 16, 1997
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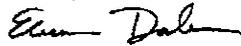
7. We believe designation will increase opposition to a landowner's use of his land. There will be pressure on every landowner to leave the land in its natural State so as to be compatible with the use of the trail.

For all of the above reasons Ka'u Agribusiness is in favor of Alternative A — No Action.

Please phone me if you have any questions.

Thank you. Aloha!

Sincerely,



Eben Dale

ED:nr

cc: Willie K. Tallett
Jerry Sato

6. Please refer to responses to the letters from the State of Hawaii Department of Hawaiian Home Lands and the County of Hawaii Planning Department.

7. Comment noted

OCEANSIDE

1250

October 16, 1997

Superintendent, Pacific Great Basin Support Office
National Park Service
600 Harrison Street, Suite 600
San Francisco, California 94170

Attention: Meredith Kaplan
VIA FACSIMILE (415) 744-4043

Re: Ala Kahakai, "Trail by the Sea", Hawaii County, Hawaii
Draft National Trail Study and Environmental Impact Statement

Dear Ms. Kaplan:

Thank you for this opportunity to respond to the *Draft National Trail Study and Environmental Impact Statement* ("Report") for the Ala Kahakai (also known as the "Trail by the Sea") on the Big Island of Hawaii. As property owners in the lands of Maihi, Kuamoo, Kawamui, Honuaino, Kanaeue, Halekii, Keekee, Iikahi, Kanakau, Kalokalu, Onouli and Keopuka, which are located between Keahou and Kaawaloa along a large portion of the proposed trail route, Palika Ranch, 1250 Oceanside Partners, Captain Cook 660, Inc. and the Richards Trust have an inherent interest in the protection and use of historic and cultural resources on its property. While we believe that these resources can serve important contemporary functions for interpretive education and recreational purposes, we believe it is critical that adequate protection be given to these resources through proper management and sensitive interpretative regimes to maintain these resources' significance, veneration and integrity.

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It is for these reasons and for the reasons stated below that we believe that the Report is wholly inadequate and fails to comply with the requirements of the National Trails System Act ("NTSA"), the National Environmental Protection Act ("NEPA"), and the National Historic Preservation Act ("NHPA"). Our specific concerns are outlined in greater detail below:

- 1. The Report Fails to Establish the Existence of an Ala Loa called "Ala Kahakai"

1.

According to the NTSA, the Ala Kahakai is an "ancient Hawaiian trail on the Island of Hawaii extending from the northern tip of the Island of Hawaii approximately 175 miles along the western and southern coasts to the northern boundary of Hawaii Volcanoes National Park." 16 U.S.C. § 1244. The Report fails to establish by way of documentary or oral evidence how the proposed routes or trails

Responses to Oceanside 1250

- 1. The study documents the existence of the ancient *alaloa* and its modifications over time. Please refer to page 6 for discussion of the trail name, and pages 6-9, 42-47, Appendices D, E, and F for discussion of the trail's existence and cultural value.

1. mentioned in the Report constitute the Ala Kahakai (which means "Trail by the Sea").
2. Rather, the Report starts from the premise that there is a historical trail (even where there is a lack of evidence supporting such a conclusion) and that the trail follows a particular alignment as suggested in the Report that runs mauka (i.e., towards the mountains, perpendicular to the sea). We believe that the National Park Service's "creation" of a continuous trail by linking together separate and distinct trails or creating trails where there are none is contrary to the spirit and the intent of the NTSA to preserve truly significant and historical trails. Further, it is contrary to the Hawaiian name itself since this newly created alignment for the Ala Kahakai does not run "by the sea."
- 3.

2. Assuming that there is an Ala Loa called "Ala Kahakai", the Report Fails to Identify the Proper Alignment of the Trail

One of the criteria for qualifying a route as an historic trail requires that the designated trail accurately follow an historic route, but may deviate somewhat on occasion of necessity to avoid difficult routing through subsequent development or provide some route variation offering a more pleasurable experience. NTSA, 16 U.S.C. § 1244(b)(11). In the present case, the Ala Kahakai does not meet this requirement for three (3) reasons.

4. First, the Report fails to provide detailed information showing the proposed location of the Ala Kahakai. In fact, the map provided in the Report is so general that any highway or road on the Island of Hawaii could be considered as the Ala Kahakai.
5. Second, as a result of the vague description of the proposed route of the Ala Kahakai, it is impossible to determine whether or not the proposed route accurately follows the historic route or deviates in areas.
6. Third, in the event that the proposed route does deviate (it is impossible to assess based upon the vague description whether or not a deviation has occurred), the Report fails to explain whether the deviation is necessary to "avoid difficult routing through subsequent development" or provides a "more pleasurable experience." The trail should emphasize the historic nature of an ancient trail by the sea and not simply provide a trail for public access. If the Ala Kahakai is meant to

2. The premise was the trail description provided in the legislation that authorized preparation of the study. The trail does not run perpendicular to the sea, but roughly parallel to it.
3. The study confirms the significance of the *ala loa* or Ala Kahakai (pages 13-16). The trail is not a newly created alignment. Designation of the trail would lead to identification and protection of the ancient alignment. Alternatives Band C would involve making a continuous trail by linking intact prehistoric and historic remnants with later trails and roads along the *ala loa* route as necessary.
4. Feasibility studies are conceptual and represent a general level of planning. The conceptual map and the text, which describes specific known and protected trail segments, demonstrate the potential to identify the entire alignment. The management plan and studies which follow it would contain site-specific analysis.
5. No major deviations are recommended in the study precisely because designation of the trail would be based on the historic nature of the ancient trail. The action alternatives would intend to identify and protect as much of the prehistoric and

6. follow the ancient around-the-island shoreline footpath, then it would be appropriate to locate the new trail next to the shoreline following the prehistoric footpath of the native Hawaiians rather than following trails that were developed in the late 1800's by white settlers that were designed to bypass the shore and abandoned communities and to accommodate post-contact modes of travel by horse and carts. As such, we oppose any deviations from the shoreline trail without any explanation for the deviation or a discussion of alternatives. As this is an express criteria of the NTSA, it is imperative that the Report explain the reasons for the deviation if the proposed route cannot accurately follow the historic route of the Ala Kahakai.

Indeed, there already exist many instances where public access along and to the shoreline over existing trails has been dedicated by right-of-way, by easement or by mandate of land use approvals. It would make sense to utilize these existing and planned routes for the proposed "trail by the sea," or Ala Kahakai. Utilizing these routes would offer a more pleasurable recreational and educational experience, and also fulfill the requirements of the County of Hawaii ordinance that requires provisions for pedestrian public access to the shoreline.

7. For example, with respect to the Oceanside property, the County of Hawaii has required us, in three separate ordinances and permits, to create a perpetual easement for public access and recreation uses to and along the shoreline, and to convey this easement to the public or the County. This will encompass over 100 acres of land area and over two miles along the shoreline. To ensure proper protection of resources in this area, these same ordinances and permits require us to create a comprehensive public access plan, archaeological mitigation plan and archaeological interpretation plan before this area is opened to the public. Since there is a similar intent and purpose for the proposed Ala Kahakai and these access areas, it would make sense to locate the proposed Ala Kahakai in this shoreline area.

3. The Report Fails to Adequately Discuss the Plans and Costs for Maintaining and Developing the Trail

8. An evaluation of a trail for possible inclusion as a national trail requires that a discussion be included regarding the plans and costs for developing and maintaining the trail. NTSA, 16 U.S.C. 1244(b)(6). Such a discussion is lacking in the Report. For example, the Report fails to explain why more mauka segments of

5. cont. historic alignment and fabric as possible. Generally, only in cases where the trail had been lost due to natural or human causes would other trail segments be used to link the prehistoric and historic segments. These instances would be identified specifically in the management plan.
6. No alternative recommends location of a new trail; all are concerned with the prehistoric and historic footpath of the native Hawaiians. Any deviations and alternatives would be discussed during the management process.
7. Among other options, use of dedicated rights-of-way may be required to complete a continuous trail in areas where the prehistoric trail alignment has been lost to development and land use approvals have required lateral shoreline trails. However, this would not be a preferred scenario. Trail designation would emphasize protection of the original trail alignment and remnants rather than public access to and along the shoreline for recreation uses. If verified archeological investigations show that the *ala loa* was aligned along the Oceanside property shoreline, and if you preserve, protect, and interpret the *ala loa*, then it may be appropriate to mark and interpret it as the Ala Kahakai under any of the action alternatives. This issue could be addressed in the comprehensive management plan and certification processes.

8.

the trail are preferred over shoreline alternatives. There are cases where public access has been already dedicated by right-of-way or by easement along and to the shoreline over ancient trails or is mandated by county and state laws. In such instances, it would make sense to utilize these existing and planned routes, which are located along the shoreline, as a route for the Ala Kahakai. In addition, using these shoreline trails as the alignment for the Ala Kahakai (i) would alleviate the need to condemn private properties, (ii) cause less inconvenience to private landowners, (iii) contribute greater to the recreational and educational experiences of hikers, and (iv) would comport with the meaning of the Hawaiian term "Ala Kahakai".

9.

Furthermore, while the study indicates that numerous work items including management plans, resource inventories and protection plans, along with separate support activities such as direct technical assistance, trail monitoring and resource interpretation would be required, there is no guarantee that federal, non-federal, state or county funds can be made available. Without some assurance that funds would be specifically earmarked for these activities, designation, by itself, would not provide adequate protection from unregulated public use of this valuable resource. The Report must address issues of funding in more detail and identify potential federal, state, county and private sources for funding. It is not enough for the study to simply assume that funding would be granted. In addition, the economic impacts upon individual landowners resulting from the implementation of management plans should also be considered and fully discussed in the Report.

10.

4. The Report Fails to Adequately Discuss the Current Status of Land Ownership and the Current and Potential Use Along the Designated Route

11.

The Report's treatment of the current status of land ownership and the current and potential use along the designated route can be characterized as insufficient and inconsistent at best. Specifically, the Report fails to fully identify the land owners adjacent to the trail, landowners of the trail, and discuss the current and potential uses along the designated route. Rather, the Report merely summarizes (without support documentation) the amount of lands in private, state and federal ownership. This discussion is inadequate. In addition to the summary, we strongly recommend that the Report identify the landowners and current and potential uses along the designated route by route segments so that reviewers of the Report can fully

8. We do not know what *mauka* segments you mean. Please refer to responses 5, 6, and 7, to this letter. No private properties would be condemned to achieve the Ala Kahakai under any of the alternatives.
9. Please refer to response 1 to the letter from Waikoloa. Designation, itself, does not provide protection, but it provides the tools for protection, chief among them being a management plan. The plan would address unregulated public use, which occurs now. Among other things, the study is required to inform Congress of potential federal funds needed to implement the trail. Appendix B provides a summary.
10. Please refer to response 2 to the letter from Waikoloa
11. We direct your attention to Appendix G, which includes a land ownership report. All landowners identified received the draft EIS. No federal land acquisition is proposed or anticipated in any of the alternatives. Development and implementation are discussed in the draft EIS.

11.  assess the costs of land acquisition, development and implementation of the proposed action, as well as the accompanying impacts.

5. The Report Fails to Adequately Consider and Discuss the Impacts of the Proposed Designation

Federal law requires that all federal agencies must consider the environmental effects of and any alternatives to all proposals for major federal actions that significantly affect the quality of human environment. The standard for review by a reviewing court to determine the adequacy of an environmental impact statement ("EIS") is whether the agency has taken a "hard look" at the issues. In other words, the court will inquire as to whether an agency has given a fair and adequate consideration of the relevant evidence. *Citizens to Preserve Overton Park, Inc. v. Volpe*, 401 U.S. 402 (1971). If this has been done, a reviewing court will not set aside an agency's decision absent a finding that such a decision was "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." *Marsh v. Oregon Natural Resources Council*, 490 U.S. 360, 375-376 (1989). In the present case, the Report is inadequate as it fails to demonstrate that the National Park Service has taken a "hard look" at the issues. Specifically, the Report fails to adequately discuss the impacts of the proposed designation. Examples of the Report's failure to discuss the impacts that will result from the proposed action are provided below:

a. The Summary of Impacts is Fragmentary

12.  The Summary of Impacts contained in Table 2 is fragmentary in identifying specific impacts. The table should clearly disclose those adverse impacts, significant or insignificant, primary or secondary, that are discussed in other parts of the document. For example, in comparing each impact topic in the Summary with the discussions of these topics in "The Affected Environment", the Summary does not contain all of the pertinent information from the later chapter, and therefore the Summary, by omitting this key information, is *deceiving*. As many readers will only review the Summary, a revised Summary of Impacts should be prepared to include all of the potential adverse impacts. Also, many of the impacts that have been specified to one trail alternative will probably occur with the other alternatives.

12. The Summary is just that. It provides an overview of the contents of the document in which the detailed analysis is made. Also, refer to response 1 to the letter from Kamehameha Schools Berrice Pauahi Bishop Estate.

b. The Discussion on Impacts to Cultural Resources is Wholly Inadequate and Fails to Meet Statutory Requirements

13. The Report seems to also serve as a Cultural Assessment in that it attempts to assess the impact of the undertaking on cultural resources and assesses the significance of the trail. However, the Report fails to comply with the minimum requirements of the NHPA by failing to take into account the effects of the agency's undertaking on properties included in or eligible for the National Register of Historic Places. 36 C.F.R. § 800.1 (1996). As part of the NHPA process, federal agencies must make a reasonable and good faith effort to identify historic properties in the area that may be affected by the undertaking and gather sufficient information to evaluate the eligibility of these properties for the National Register. See, *Pueblo of Sandia v. United States*, 50 F.3d 856, 859 (10th Cir. 1995). "Determining what constitutes a reasonable effort to identify traditional cultural properties depends in part on the likelihood that such properties may be present." *Id.* at 861, citing *National Bulletin 38* at Page 5.
14. As stated in the Report, there are numerous archaeological remains to be found nearby and adjacent to the trail. As federal designation of the Ala Kahakai as a historic trail could have significant impacts, it would only seem proper to document and describe all of these important sites, as well as all remnants of the trail to fulfill the mandates of the NHPA and to give adequate consideration to the impacts to the environment as required by the NEPA.
15. Furthermore, without assessing the potential traditional cultural properties against the NHPA significance criteria and assessing the likely impacts of the project (i.e., no effect versus adverse effect), any decision of the agency would be deficient and fail to consider all of the significant effects resulting from the proposed action.
16. Finally, the Report fails to fully discuss and consider the comments of native Hawaiians and native Hawaiian organizations regarding the impact that the proposed trail will have on cultural and natural resources along the trail. These comments include the impact that increased use of the Ala Kahakai trail will have on the availability of cultural and natural resources that are located adjacent to the trail and the sensitivity that visitors on the trail will have in those areas where

13. Compliance with the National Historic Preservation Act (NHPA) is phased. Impacts to cultural resources are identified and evaluated in the draft EIS at a level appropriate for a feasibility study and comply with NHPA requirements for consideration of cultural resources at the earliest project planning stages. If the trail is designated under either Alternative B or D (the federal designations), further in-depth cultural resource studies would be undertaken. Please refer to pages 64-66. Although compliance with NHPA is mentioned elsewhere in the document, reference to it has been added to this section in the final EIS.
14. As stated in the study, only known and protected sites are discussed in order to document the cultural significance of the trail without posing potential threats to unprotected resources. Archeological remains including remnants of the prehistoric and historic trail would be documented and studied on a site-specific basis during the management plan process and implementation for the action alternatives.
15. The treatment of traditional cultural properties is discussed in the draft and final EIS (page 65).

16. native Hawaiians practice their traditions. Prior to making any decision regarding whether or not to proceed with national recognition of the trail, greater discussion is required to determine how to avoid or mitigate the negative effects resulting from increased utilization of the trail.

c. The Report Fails to Address Impacts Resulting from the Commercial Use of the Trail

17. It is inevitable that many businesses will utilize the trail for commercial purposes. Yet, the Report does not address several issues of public concern including the potential adverse effects resulting from commercial use of the trail. See Report at Page 20. These are valid and relevant concerns shared by trail users, native Hawaiians and landowners. As such, the Report must do more to address those adverse impacts and include significance evaluations and potential mitigation measures for this important area.

d. The National Park Service has not Substantiated its Claims That There Will Be No Significant Impacts on Land Use from the Proposed Action

18. The discussion of impacts in the Report indicates that there will be "no impacts" to land ownership and land use in any of the four (4) alternatives. We find this conclusion to be astounding considering that a 175-mile trail will involve hundreds of acres of land and would pass through dozens of private and public land holdings. In addition, if a lengthy list of federal regulations would apply to the national historic trail, including but not limited to the NHPA and NEPA, then there will undoubtedly be severe impacts to land use that will significantly limit a landowner's ability to use their lands or to make it more expensive to develop.

e. The Impacts to Natural Resources Adjacent to the Proposed Route Have Been Ignored

19. The unique natural environment along the proposed trail route requires that the National Park Service consider the impacts as well as the significant long-term impact that the proposed action will have on natural resources. For example, the Report fails to identify the importance of maintaining the integrity of the

16. Please refer to response 4 to the letter from Kamehameha Schools Bernice Pauahi Bishop Estate. All comments received during scoping and preparing the draft study were considered. Impacts to cultural and natural resources and native Hawaiian traditional practices are discussed on pages 63-66 of the draft and final EIS.
17. The study acknowledges that commercial use of the trail may occur and is a concern of some people. This issue would be addressed in the management plan at a site-specific level. In remote and sensitive areas, resource protection may take the form of native Hawaiian or docent-led tours, permits, or other means which could limit the potential impacts of commercial use.
18. For land use, please refer to response 2 to the letter from the State of Hawaii Department of Hawaiian Home Lands, response 4 to the letter from the County of Hawaii Planning Department, and responses 2 and 3 to the letter from Kamehameha Schools Bernice Pauahi Bishop Estate. Land ownership would not change with trail designation. Please refer to response I to the letter from the State of Hawaii Department of Hawaiian Home Lands. As discussed in the study, some impacts to land ownership may be positive.

Superintendent, National Park Service
October 16, 1997
Page Eight

9.

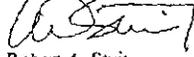
anchialine ponds that may be adjacent to the proposed trail route. These anchialine ponds not only serve as a unique ecosystem in that it is one of the few environments in which opae'ula can survive, but the ponds also serve an important role in the traditional and customary practices of native Hawaiians. To merely state that there may be a significant impact to anchialine ponds and the opae'ula from the increased use of trails and the overuse of the ponds is ignoring the real threat that increased use of this trail will have on the natural and cultural resources.

10.

Based upon the foregoing, we request that the National Park Service reconsider its proposal to list the "Ala Kahakai", as it is proposed in the Report, as a national historic trail.

Sincerely,

1250 OCEANSIDE PARTNERS
CAPTAIN COOK 660



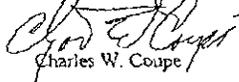
Robert A. Stuit

PALIKA RANCH



William J. Paris, Jr.

RICHARDS TRUST



Charles W. Coupe

cc: Senator Daniel K. Akaka
Senator Daniel K. Inoye

19. The study discusses at length impacts to anchialine ponds. We direct your *attention to pages 59-62*.
20. The National Park Service does not "list" trails. Only Congress can designate a national trail. The draft study did find the trail to be significant and feasible, and the final study recommends Alternative B as the environmentally preferred alternative.

CADES SCHUTTE FLEMING & WRIGHT
ATTORNEYS AT LAW

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LILA C. C. PEARSON
EDMUND H. HIGASHI
KIMBERLY O'NEILL JACKSON
C. FREDERICK SCHUTTE
(1921-1995)

October 17, 1997

WRITER'S DIRECT DIAL NUMBER

National Park Service
500 Harrison Street, Suite 500
San Francisco, California 94107

ATTENTION: MEREDITH KAPLAN

Re: Draft National Trail Study Environmental Impact
Statement--Ala Kahakai "Trail by the Sea"
May 1977, Hawaii County, Hawaii

Dear Ms. Kaplan:

This office represents Doris and Earl Bakken who are full-time residents of Kiholo Bay, North Kona, Hawaii. The proposed Ala Kahakai would run immediately adjacent to their home.

The Bakkens support the proposed Ala Kahakai. They both have a strong personal commitment to North Hawaii and to assisting North Hawaii to develop as a health and wellness center for the world. The Bakkens believe that the Ala Kahakai can foster health in the broader concept by combining physical activity with historical, cultural and environmental awareness. Both Doris and Earl Bakken walk the trails of Kiholo on a daily basis as part of their wellness regimes. They support the careful, thoughtful development of this resource.

1. The Bakkens are concerned that appropriate attention be given to developing environmentally appropriate restroom and camping facilities along the proposed trail. If the trail is to be identified as a national or state historic trail, there must be adequate funding in place, or appropriate agreements made for private development, so that bathroom and camping facilities can be developed before the trail is "opened." Without proper facilities there is a substantial risk of creating unsafe, unsanitary conditions and/or interfering with the reasonable property rights and privacy expectations of people who live along the trail.

Responses to Cades Schutte Fleming & Wright

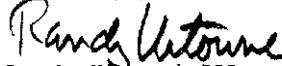
1. Comment noted. The cost estimate (Appendix B) anticipates the need for rest rooms

National Park Service
October 17, 1997
Page 2

2. Secondly, there must be clearly defined, adequately staffed and financed enforcement authority. There are substantial risks to environmental, historical and cultural resources along the coast if the public is invited into remote and sensitive areas without sufficient enforcement. The Bakkens hope that a real effort would be made to have the enforcement officers be friendly and to focus on education and environmental awareness as well as enforcing the law and rules.
3. Third, the Bakkens are concerned that the interpretive material be thoughtfully and carefully designed and developed. Signs should blend into the natural environment and provide helpful, educational information. It is important to retain the uncluttered beauty of the Kaha lands of North Kona.
4. Finally, the Bakkens would like a further opportunity to comment once a specific preferred alternative has been identified and articulated. It would be a better practice for the preferred alternative to be selected before the Draft EIS is published as citizen comments could then be more directed and focused.

You may call me at (808) 329-5811 if you have questions or require additional information.

Very truly yours,



Roy A. Vitousek III
for
CADES SCHUTTE FLEMING & WRIGHT

RAV/bah

2. Enforcement would be addressed in the management plan. The study does not include cost estimates for enforcement per se, but includes a staff person to help train trail monitors and stewards. In remote and sensitive areas, resource protection may take the form of native Hawaiian or docent-led tours, permits, or other means.
3. Comment noted.
4. The study and final EIS will be available for review for thirty days after the notice of availability is published in the Federal Register. The notice would be published after the studies are distributed. The Bakkens will receive a copy of the final study and will be able to comment at that time.

PLAN TO PROTECT KONA



74-5602-A Alapa Street
Suite 725
Kailua-Kona, HI 96740
(808) 329-4770

October 5, 1997

Superintendent, Pacific Great Basin Support Office
National Park Service
600 Harrison Street, Suite 600
San Francisco, CA 94107

ATTN: Meredith Kaplan

**RE: Draft National Trail Study, Environmental Impact Statement,
ALA KAHAKAI**

Plan To Protect is a Kona-based non-profit organization formed to promote sustainable, comprehensive community planning for the Island of Hawaii.

Regarding the criteria listed on page A-5 of the Draft Environmental Impact Statement, plan To Protect believes there is no doubt that the Ala Kahakai qualifies for designation as a National Historic Trail, so we will not address that subject further.

Although many people have an understanding of the Ala Kahakai's place in Hawaiian history, the trail lacks a consistent, contemporary identity as a living, cultural and public recreational resource. Therefore, we believe the Ala Kahakai could benefit from being designated as a National Historic Trail in a number of ways. First, it could help elevate the status of the trail in the minds of people in and outside of Hawaii. This could lead to increased protection of the trail. Second, the designation could speed along efforts to identify missing sections of the trail, have sections surveyed and, where appropriate, conveyed to the State. Third, the status as a National Historic Trail could provide a vehicle for the acquisition of funding for the trail. Fourth, it could provide a vehicle for facilitation for all interested parties to develop a comprehensive plan for the trail to include the concerns of adjacent property owners, and protection of areas of environmental, cultural or historical significance.

We will make a few observations regarding Alternatives A, B and C.

We believe that Alternative A should not be considered. Plan To Protect has had several years of "hands on" experience in an effort to have a mere six mile stretch of trail in South Kona recognized, restored and maintained. Operating on a section by section basis to determine trail widths, buffers and management plans result in an enormous waste of energy and resources when the whole process must begin anew a few miles down the road! We watch the occurrence of adverse impacts to sections of the trail. Some of the support for Alternative A comes from those who fear that the National Historic designation will result in overuse and abuse of the trail by the public. It can not be denied that increased public use could have impacts upon the trail. But under the "No Action Alternative", people will continue to use the trail anyway, but with much less understanding of its significance, therefore abuse would be much more likely. Education fosters respect. In addition, even in sections which are not currently accessible to the public, erosion, growth of vegetation and tree roots, along with other forms of natural deterioration, are currently damaging remaining trail fragments.

We will not address Alternative D, since it will not provide a comprehensive plan for the entire alignment.

1. We have a number of observations regarding Alternative B and C. Regarding language found in the Draft Environmental Impact Statement to the effect that Alternative B, "would provide Federal Funds to administer the trail" raised some questions. During a public hearing held by a representative of the National Park Service regarding the Draft E.I.S., it was mentioned that being designated as a National Historic Trail does not guarantee that the trail will receive federal funding. We would like someone to clarify this question of funding more directly. It seems clear that without funds accompanying the official designation of the Ala Kahakai as a National Historic Trail, Alternative B carries with it no substantial advantage over Alternative C. Do all the other trails designated as National Historic Trails receive Federal Funds beyond money needed for land acquisition? If so, how much money, for what purposes?

2. There are many people in Hawaii who, to some degree or another, feel the Hawaiian Islands are Sovereign. As a result, we feel the question as to whether the Ala Kahakai should become included as a National Historic Trail has special significance. In light of this, maybe it would be appropriate to redefine Alternative B or consider an Alternative E. Alternative E would provide the Ala Kahakai with the advantages of being recognized, both in and out of Hawaii as an extremely significant historical, cultural and public recreation resource. But, within Alternative E, the National Park Service would function primarily as facilitators, working through the Hawaii State Trail program, Na Ala Hele, to make certain a comprehensive, long term plan for the Ala Kahakai is implemented. The National Park Service could also provide technical assistance. Funds could go directly to Na Ala Hele, earmarked for the Ala Kahakai. Na Ala Hele could serve as the managers of the program. Na Ala Hele could also work with community groups who wish to provide volunteer assistance for the trail. Na Ala Hele already has the framework for an 'Adopt -A-Trail Program'. Since the Ala Kahakai is largely owned by the State of Hawaii, and the Island already has the Na Ala Hele Trail program in place, which includes staff and a Community Advisory Council, we believe they are in an established position to provide for the overall administration of the Ala Kahakai. We believe the reason that Na Ala Hele has not yet developed a comprehensive restoration, maintenance and cultural management plan for the entire trail results from the Programs' severally limited resources of all kinds. So, if these resources were acquired, the State Trail Program has laid the ground work to move ahead. The National Trail designation could also provide a currently vital but missing link between Na Ala Hele and the State of Hawaii Historic Preservation Division. At this time, the two departments, both within the State Department of Land and Natural Resources, seem to lack a common vision regarding the future of the Ala Kahakai.

3. Regarding trail width, as addressed on page 72 of the Draft EIS, we believe it would be more practical to establish a standard width to define the public right-of-way, rather than sections of "varying width depending on the width of the 'ancient trail'." For example, a six-mile section of trail located in South Kona was conveyed to the State of Hawaii in fee simple this year. Within this six miles, some historic remain5 were in excellent condition, delineating both sides of the trail. But other sections had been totally obliterating due to a number of factors, including chain dragging that was done in the 1950's in an effort to clear the land for cattle ranching purposes. But, nonetheless, a uniform ten-foot, fee simple right-of-way was claimed for the entire six miles by the State of Hawaii. Although still in the process of being

1. Please refer to response 1 to Waikoloa. In the federal fiscal year 1997, the 13 national trails administered by the National Park Service received a range of operations funding from \$25,000 for the Natchez Trace National Historic Trail to \$645,000 for the Appalachian National Scenic Trail. The Natchez Trace is managed as part of a national park, so the operations funds do not cover salaries and benefits. But for the other trails, the funds go for salaries, benefits, and travel, interpretive materials, signs and markers, partner support, and other needs. For the Appalachian Trail, about half of the operations funds go to the Appalachian Trail Conference (ATC) which helps the National Park Service manage the trail; but these federal funds are only about 15 percent of the ATC budget. Generally, each of the national trails is supported by a strong and sufficient non-profit organization to whom the federal partner provides only seed money.
2. Alternative B has within it a strong emphasis on federal-state cooperation. Please note page 27 states "...the best management scenario would provide state and local agencies a major role." Working with the state would involve the National Park Service working with and through the Na Ala Hele Program. Your suggested Alternative E, which might be called "National Historic Trail, State Administered," is basically Alternative C, State Historic Trail with national recognition and

3.

completed, we understand that the Historic Preservation Division will establish a uniform width for a buffer on either side of the trail, as part of the management plan. In cases where landowners or adjacent landowners wish to assume responsibility for trail management, these landowners must enter in to a M.O.A. similar to the kind required of community organizations. This should include time-tables for trail restoration and public access and a cancelation clause for nonperformance.

This concludes our comments regarding the current Draft Ala Kahakai National Trail Study and Environmental Impact Statement. We have included a copy of Plan To Protect's application to adopt a six mile section of trail as part of the Na Ala Hele "Adopt-A-Trail" Program.

Please feel free to contact us, if you have any questions regarding our position.

Thank you very much for providing us with this opportunity to participate.

Sincerely Yours,



Nancy Pisciocchio
President

2. cont. a federal funding source. This arrangement would not be consistent with the National Trails System Act, which clearly establishes "the appropriate Secretary," in this case the secretary of the interior, and "the agency most likely to administer such trail," in this case the National Park Service, as trail administrators. We are unaware of a model that would provide the basis for proposing an alternative with a state-managed trail that has national recognition and long-term federal funding for operations. For these reasons, we did not consider this type of management as an alternative.
3. Noted; this level of detail is addressed in the comprehensive management plan. For trail segments which cross private property, it might be a good idea to establish a consistent trail and buffer width. On federal and state lands it may be appropriate to provide wider buffers than possible on private land. If the Nā Ala Hele Program and the State Historic Preservation Division agree on these widths on the Oceanside 1250 site, their conclusions may be appropriate to incorporate into the management plan for the national or state trail.

ADOPT-A-TRAIL AGREEMENT

MEMORANDUM OF AGREEMENT
BETWEEN

E MAU NA ALA HELE, PLAN TO PROTECT and the KONA HAWAIIAN CIVIC CLUB

AND THE
STATE OF HAWAII BOARD OF LAND AND NATURAL RESOURCES
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF FORESTRY AND WILDLIFE
NA ALA HELE TRAILS AND ACCESS PROGRAM
FOR

THE OLD GOVERNMENT ROAD, BETWEEN KEAHOHU AND KAAWALO A PALI

This Memorandum of Agreement, made and entered into on this _____ day of _____, 1997 by and between the non-profit organizations E MAU NA ALA HELE, PLAN TO PROTECT and the KONA HAWAIIAN CIVIC CLUB, hereinafter referred to as the "ORGANIZATIONS" and the State of Hawaii, Department of Land and Natural Resources, by its Board of Land and Natural Resources hereinafter referred to as "DLNR".

WITNESSETH

WHEREAS, pursuant statutes, the Na Ala Hele Trails and Access Program, hereinafter referred to as "NA ALA HELE" within the Department of Land and Natural Resources, Division of Forestry and Wildlife is charged with the responsibility to plan, develop, acquire land or rights for public use of land, construct, and engage in coordination activities to implement the statewide trail and access program; and

WHEREAS, the subject trail is the approximately six mile section of the OLD GOVERNMENT ROAD, (a.k.a. ALA NUI AUPUNI, ALA KAHAKAI) which begins at the terminus of Ali'i Drive and ends at its junction with the Kaawaloa Pali Jeep Road is a State-owned public right-of-way; and

WHEREAS, the State of Hawaii, through the DLNR, has jurisdiction and management over the OLD GOVERNMENT ROAD and any ancillary connector trails located between Keaouhu and Kaawaloa and are under the management of DLNR; and

WHEREAS, the Organizations wish to assist DLNR in restoring and maintaining this section of the OLD GOVERNMENT ROAD through the Na Ala Hele Adopt-A-Trail program; and

WHEREAS, this section of the OLD GOVERNMENT ROAD may serve as a pilot project for future cooperative management projects between the Organizations, other community groups and DLNR on other trails suitable for public use; and

WHEREAS, implementation of this agreement would be of mutual benefit to both parties;

NOW THEREFORE, the parties agree as follows:

E MAU NA ALA HELE, PLAN TO PROTECT and the KONA HAWAIIAN CIVIC CLUB will:

Attachment with Letter from Plan to Protect Kona

1. Adopt this section of the OLD GOVERNMENT ROAD for a minimum of two years;
2. Assist DLNR in the creation of a Historic/Cultural Resource Management Plan for the OLD GOVERNMENT ROAD;
3. Assist DLNR in the development of a Restoration and Preservation Plan for the OLD GOVERNMENT ROAD;
4. Hold harmless the State of Hawaii, its officers, agents, representatives, successors, assigns and adjacent land owners, from any and all suits or actions of every nature and kind which may be brought for or in account of any injury, death or damage arising from activities performed by the Organizations under this agreement;
5. Require its volunteers to execute a Release and Waiver Agreement for Individual Voluntary Services, releasing the State of Hawaii from liability arising out of the performance of activities by the Organizations under this Agreement; and
6. Assist in informing the public about use of the OLD GOVERNMENT ROAD.

E MAU NA ALA HELE and PLAN TO PROTECT will:

7. Perform regular scheduled maintenance of the OLD GOVERNMENT ROAD (three times) per year including but not limited to the following activities:
 - (a) Clear vegetation along the OLD GOVERNMENT ROAD to a width of twelve feet (six feet on either side of the center line of the trail surface), approximately eight vertical feet above;
 - (b) Restore trail sections as needed to preserve the trail bed;
 - (c) Remove as necessary fallen or hanging tree limbs, roots, rocks (not part of the trail), rubbish (litter, refuse or garbage generated from use of the trail) and any other debris interfering with safe foot travel along the OLD GOVERNMENT ROAD;
 - (d) Inspect the trail bed and, with prior permission of adjacent land owners, the surrounding area (20 feet from centerline) for rubbish, disrepair, hazards or vandalism; and
 - (e) Repair portions of the trail corridor that may become damaged through use;
 8. Be responsible for providing their own maintenance tools, equipment and supplies, with additional assistance by DLNR;
 9. Submit written reports to DLNR describing the numbers of volunteers assisting in the activities performed during each scheduled maintenance;
- DLNR will:
10. Assist in the training of the Organizations' volunteer leaders for the restoration and maintenance tasks described herein;
 11. Assist by providing specialized tools when necessary for trail maintenance activities;
 12. Provide appropriate plants for enrichment planting of the trail corridor;
 13. Periodically inspect the trail and make necessary recommendations for maintenance;

14. Provide material for informational signs to be installed as determined necessary by all parties.

THE PARTIES FURTHER AGREE THAT:

15. The OLD GOVERNMENT ROAD is a Public trail;

16. This document does not constitute an agreement for the exclusive use of facilities or ancillary resources by the Organizations and does not authorize exclusive use of this section of the OLD GOVERNMENT ROAD;

17. Either party may terminate this Memorandum of Agreement, without cause, by providing ninety (90) days written notice to the other, except as otherwise provided herein;

18. If DLNR determines that the Organizations are not meeting their obligations under this Agreement, DLNR may terminate this Agreement upon thirty (30) days written notice;

19. DLNR recognizes the Organizations as the adopting organizations for this section of the OLD GOVERNMENT ROAD and the Organizations accept the responsibility for maintaining and managing this section of the OLD GOVERNMENT ROAD beginning _____, 1997 and ending _____, 1999;

20. All notices, bills, demands, payments, accounting or other communications that any party desires or is required to give under the provisions of this Agreement shall be given in writing and shall be deemed to have been given if hand delivered, sent by facsimile, or if mailed by United States mail, prepaid to the party or parties at the address noted below or other address as a party may designate in writing from time to time, provided, however, that any and all notices under Section 17 or Section 18, shall be delivered by Certified Mail:

Organizations: (address, phone and fax #)

E MAU NA ALA HELE
P.O. Box 6384
Kamuela, HI 96743
PHONE/FAX: 329-9692

THE KONA HAWAIIAN CIVIC CLUB
P.O. Box 4098
Kailua-Kona, HI 96745
PHONE/FAX: 324-0109

PLAN TO PROTECT
74-5602-A Alapa Street, Suite 725
Kailua-Kona, HI 96740
PHONE: 329-4770 FAX: 322-3118

Department of Land and Natural Resources: (address, phone and fax #)

Na Ala Hele Program
Division of Forestry and Wildlife
Department of Land and Natural Resources
P.O. Box 4849
Hilo, HI 96720
PHONE: 933-4221 FAX: 933-4495

21. SEVERABILITY. If any section of this Agreement is found to be invalid, that invalidity may be removed or revised without voiding the remaining terms of this Agreement.

KONA CONSERVATION GROUP
October 5, 1997

Superintendent, Pacific Great Basin Support Office
National Park Service
600 Harrison Street, Suite 600
San Francisco, CA 94107

ATTENTION: MEREDJITH KAPLAN

The Kona Conservation Group supports the strongest efforts to preserve and protect the Ala Kahakai. It embodies so much history and culture and readily lends itself to a deeper understanding and appreciation of important events and cultural practices. How much more meaningful it is for a person to walk the trail and learn of important events that took place right there (e.g., at the Kuamo'o Battlefield) and to learn of cultural practices of the native Hawaiians by studying artifacts along the trail (e.g., salt pans, fishponds).

So much of the history and culture of the Hawaiians occurred near the shoreline, so naturally this is where most of the artifacts and other culturally significant features are located, and, unfortunately, this area is also where there is the most pressure for development such as hotels, golf courses, and subdivisions, which all tend to want to carve out a portion of the land for their exclusive use, sometimes even "rerouting a historic trail."

In terms of what is in the best interest of the public, we believe that, of the alternatives given, B and C seem to offer the most protection while A and D do not and should therefore not be given further consideration.

Between Alternatives B and C, there are strong and weak points in both. Since the State government already has the Ma Ala Hele program, it might seem logical to let it be the lead agency (Alt. C). However, the National Park Service may be able to provide much expertise and other help such as funding which the State may lack (Alt. B).

We defer to the views of the groups and individuals here in Hawai'i who have worked on this project so far in the public interest - E Mau Ma Ala Hele, the Kona Hawaiian Civic Club, and Plan to Protect Kona.

At this time, we believe that a "hybrid" of Alternative B and C may be the best way to go, and we will lend our support to the efforts that bring this very worthwhile project to reality.

Thank you for the opportunity to comment on this report.

Sincerely,

Lois M. Tyler
Lois M. Tyler
Vice President
P.O. Box 1001
Captain Cook, HI 96704
Phone 808-328-2594

Thank you for your letter.

10.10.97

National Park Service
Superintendent
Pacific Great Basin Support Office

Dear Mr. Superintendent:

Our OAHANA and home school students thank you, for the trail study copy. We have discussed this proposal and document, as well as visiting various portions of the trail.

Please add our support, as well as that of our friends and families, to the firm establishment of the ALA KAHAKAI (Trail by the Sea) into the National Trails System: ie alternative B.

Thank you for your letter.

(2)

The recent Hawaii Supreme Court ruling in the PAI decision should also be carefully studied, that the proper synthesis of Federal Law and sovereign rights be maintained

Aloha.

Daniel Morimoto

DANIEL MORIMOTO /
KAIA ONANA HOME SCHOOL
CO-ORDINATOR

POB 2769

KAMUELA, HI. 96743-2769

(808-885-8830)



E MAU
NA ALA HELE
P.O. BOX 8384
KAMUELA, HAWAII 96743

October 14, 1997

Superintendent
Attention: Meredith Kaplan
Pacific Great Basin Support Office
600 Harrison Street, Suite 600
San Francisco, CA 94107

Dear Superintendent:

We are writing to support the Ala Kahakai Trail on the island of Hawaii as a continuous National Historic Trail, managed by the National Park Service (Alternative B). We have actively supported ancient and historic trails on the island of Hawai'i since 1979, and now believe that there is a momentous opportunity here to develop, connect, interpret, and preserve this trail through National Park management. As you know, this year we have been hiking a six to eight mile segment of the trail each weekend, often with informative local historians accompanying us; our combined sum of knowledge of this trail is large and growing.

Numerous discussions among members of the Board of E Mau Na Ala Hele, and among our members and others who have participated in the planning and actualization of the current "Year on the Ala Kahakai" project reveals a strong consensus. We in E Mau Na Ala Hele believe that designating this trail as a continuous National Historic Trail will help preserve and protect the trail both as a physical structure and as a structure which at every step eloquently expresses the temporal history of Hawai'i. If the National Park Service does assume oversight of this trail, we strongly desire to involve as much local planning, management, and protection as possible by the island community residents and by our county and state government with the federal government serving in a consultative and supportive role.

Thank you for all the effort you have put into the excellent and informative Draft Ala Kahakai National Trail Study and EIS. We hope that this work comes to fruition so that the improved Ala Kahakai Trail will become accessible to many Americans.

Sincerely,

Hugh Montgomery, President

Thank you for your letter.

14 October 1997

United States Department of the Interior
NATIONAL PARK SERVICE

To: Superintendent, Pacific Great Basin Support Office
600 Harrison Street, suite 600
San Francisco, California 94107

From: Bernard Kelikoa
President, KA 'OHANA O KA LAE
P.O. Box 271
Ma'alaea, Hawaii 96772

Re: Comment on Draft National Trail Study and
Environmental Impact Statement (EIS) for the ALA KAHAKAI

Dear Superintendent:

We do not need any of the four proposed alternatives presented in the draft ALA KAHAKAI National Trail Study and Environmental Impact Statement.

All four alternatives are inappropriate regarding native Hawaiian rights:

The coastal area since ancient time known as being part of the ALA KAHAKAI must fall under jurisdiction of the native Hawaiian tenant living in that particular portion of ahupua'a.

Mahalo for your time and consideration.

Sincerely,


Bernard Kelikoa
President

Thank you for your letter.



MOKU · LOA · GROUP

SIERRA CLUB · HAWAII CHAPTER

October 1997

Superintendent, Pacific Great Basin
National Park Service
600 Harrison Street, Suite 600
San Francisco, CA 94107

Dear National Park Service,

The Sierra Club supports the designation of the Ala Kahakai as a continuous National Historic Trail. {Option B}

The Ala Kahakai is unique and exemplifies the history and culture of an island people who developed a highly organized foot trail system for ground travel. This island cultural feature would be a distinctive addition to the current National Historic Trails. Its appeal and interest is international.

The Federal designation would provide recognition and protection currently not available at the state level. The Federal protection of historic sites is much more stringent than Hawaii State preservation regulations. This is especially important for archeological sites located along the trail in areas undeveloped since they were vacated. Whether managed by the Federal government, the state government, contracted to a private organization, or a combination of two or three of these agencies, the Federal designation will insure that the management is comprehensive and addresses all the issues of concern.

In making this recommendation many comments and concerns were addressed. We recognize that the proposal to designate the trail is the first step in the process; there are concerns that will need to be addressed or mitigated later in the development of a management plan. Issues such as overuse, environmental impacts, inventories, access versus limited access, and protection of archeological sites are all topics to be addressed in the management plan. These issues are not reasons to deny or delay designation. We are confident that the management and implementation plan(s) can address and respond to concerns expressed by residents and landowners during the recent hearings.

We urge that the Ala Kahakai be recognized and designated as a National Historic Trail.

Sincerely,

Sierra Club, Moku Loa Group

P.O. BOX 1137 · HILO, HAWAII · 96721

Thank you for your letter.

HUI LIHIKAI

CITIZENS FOR PROTECTION OF THE
NORTH KOHALA COASTLINE
P.O. BOX 76, HAWI HAWAII 96719 PH/FAX 889-5553

September 29, 1997

U.S. Department of the Interior
National Park Service
Pacific West Field Area
600 Harrison Street, Suite 600
San Francisco, CA 94107-1372

To: Meredith Kaplan

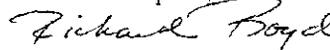
RE: Ala Kahakai

Our group represents about 400 families, mostly in North Kohala and South Kohala. After consulting a portion of our membership thru a phone poll, our steering committee feels Alternative B would best represent the interests of our organization and frankly whomever the eventual trail users may be. We feel that the National Park Service would have the resources and the will (free of local politics) to carry thru with this project.

It has long been the dream of some of our members that a trail exist for all the public from Pololu to Hawai'i Volcano National Park. I have personally hiked from the Volcano to South Point and Kawaihae to Pololu. Someday I would like to complete the South Point to Kawaihae segment. Please note that our support is in no small part due to the idea of how the trail would be managed on the ground by local groups.

Mahalo for considering our choice of Alternative B.

E malama pono,



Richard Boyd Co-Chair
Hui Lihikai

Thank you for your letter



August 4, 1997

Superintendent
Pacific Great Basin Support Office
600 Harrison Street, Suite 600
San Francisco, California 94107

Ladies and Gentlemen:

Subject: Draft National Trail Study and Environmental Impact Statement for the
Ala Kahakai

Francis S. Oda, AIA, AICP
Norman G.F. Hong, AIA
Sheryl B. Sealing, AIA, ASID
Masashi Yoda, AIA
Roy E. Nishi, AIA, CSI
James J. Nishimura, AIA
Richard E. Perrinore, AIA
Stephen H. Yuen, AIA

Paul P. Chorazy, AIA
Dean H. Riattori, AIA
Norma J. Scan, AIA
Stephan F. Calk, CPA
George J. Atta, AICP
Jethro H. Overton, AICP
Linda L. Chung, AIA
Ronald L. Proctor
Kathryn A. Tsukano
Row A. Inouye
Mary J. O'Leary

1.

The draft report is well written. I would like to point out some minor typos and make a few additional comments.

On page 39: The section on MLCDs it should be noted that in the planning of the Mahai'ula segment of the Kona Coast State Park an MFMA (Marine Fisheries Management Area) or an MLCD is being considered for protected status. This has the support of the task force that is working with the State on the park planning. The concept has been recommended by the group but the specifics have not and that is why it is not yet clear whether the recommendation will be an MFMA or an MLCD. Both protect marine resources with slightly different regulatory mechanisms and procedures.

Page 40: serices should be spelled sericea.

Page 41: Donkeys (*Equus asinus*) should be added to the list of introduced mammals. Donkeys have a special place in the lore of Kona. Some families like the Kaelemakules were associated with raising donkey when these animal was used frequently in the district for various domestic purposes. Additionally, their braying has given them a specific nickname to oldtimers. They are called Kona nightingales to people who remember them in the old days when they were plentiful both in domestic captivity or running wild. Today there are only a few wild groups noted especially in the areas around Kaupulehu where a herd of 35 animals has been reported.

2.

In the discussion on endangered species we should add discussion about endangered waterbirds that frequent the smaller anchialine ponds and major wetlands along the coast such as *Opae'ula*, *Kaloko* and *Aimakapa*. These species are the Hawaiian stilt or *aeo* (*Himantopus mexicanus knudseni*) and the Hawaiian coot or *alae keo keo* (*Fulica alai*), and the Hawaiian duck or *koloa* (*Anas wyvilliana*). In these dry coastal wetlands these habitats are critical to these birds.

3.

Page 49: The list of parks mentions the Kona Coast State Park. This park has now been renamed Kekaha Kai State Park. Any reference to this park should now use this new name.

page 50: The population of the island is missing a digit. I think it should read 137,000 rather than 37,000.

Group 70 International, Inc. • Architecture • Planning • Interior Design • Environmental Services
925 Bethel Street, Fifth Floor • Honolulu, Hawaii 96813 • 4107 • Phone (808) 523-5866 • FAX (808) 523-5874

Response to George Atta, Group 70

1. Changes made. **Thank** you for the additional information on the donkeys
2. These species are listed in Appendix C as on the federal endangered species list. The habitat for these species is discussed on page 39.
3. Changes made

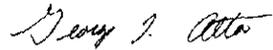
4.

Two general comments I would like to add is the importance of place names and natural features as part of culture and history. Hawaiian culture has the concept of wahi pana or sacred places which may or may not have any altered physical features on it. However, the place may have significant cultural and spiritual significance. Additionally, natural features like cinder cones may function as symbol and systemic items. Puu Kuili in Awake'e has been called a regional ahu or marker used for navigation and directional instruction as well as a sacred place. The place name means memorized temple prayer. The periodic change in water color of Mahaiula Bay has been associated with a menstrating goddess and a stone barely under water offshore. These associations and many like it are closely tied to the culture that is associated with old Hawaii.

The second general comment is the fact that we are talking about the Ala Kahakai. The very name signifies the importance of the ocean to the trail. Fishing shrines, offshore fishing koa (gathering places for specific species such as akule), coastal settlements along kipuka like oases along the trail, the scarcity and preciousness of sandy shorelines along this lava coast and the relationship of coastal marine resources and the trade between ocean and mountain communities in the uplands. The abundance of coastal fishponds like Paaiea and Kiholo which were lost to lava flows in 1801 and 1859, and those that have been abandoned such as Kaloko and Aimagapa attest to their importance to the precontact society. A few ponds such as those at Kaupulehu and Anaehe'omalu were cultivated till more recent times. The Ala Kahakai connects all of these coastal ponds and settlements. Mauka - makai (mountains to the sea) trails also intersect the Ala Kahakai in each ahupua'a; facilitating the trade, commerce and social cohesion with communities in the higher elevations. The whole association to the ocean and network with upper elevation communities is tied together by the Ala Kahakai. I think some additional language should be inserted to clarify this aspect of the trail.

The report is informative and well written. A national historic trail seems to be the appropriate designation.

Sincerely,



George I. Attz, AICP

4. You have expressed important ideas which are captured less pointedly and descriptively in the study. The importance of place names and natural features is mentioned in the discussion of traditional cultural properties on page 44. The importance of the shoreline and ocean is included geology (pages 35-36) and marine resources (pages 39-40). The point about the role of the around the island *ala loa*, of which the Ala Kahakai is an example, in the network of trade, commerce, and social cohesion is made on page 6 of the draft and final. Your general comments provide a framework for some aspects of interpretation which would be developed later if the trail becomes authorized.

Superintendent, Pacific Support Office
National Park Service
800 Garrison Street, Suite 600
San Francisco, CA 94107

Sep 9, 1997

RE: Draft Study and EIS, Ala Kahakai (Hawaii)

I would like to offer the following comments in regard to the subject document, which has been circulated for discussion. I have grouped my comments by subject.

Alternatives: I believe you have done an excellent job in the selection, discussion, and disposition of alternatives. I am in agreement with your rejection of certain alternatives, and for the very reasons you have cited. (Note that you have made typographical errors in Tables I and II at the beginning of the document, in the titleing of the alternatives.)

Significance: You rightly spoke to the issue of the great cultural significance of the trail and those sites in its vicinity. There is no where else in the state where such historical richness can be found, in my opinion. And the trail serves well as a unifying thread. It is not appropriate that this trail be viewed primarily as a scenic trail.

1.

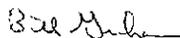
Proposed Management and Use: I recognize that it is not the intention of this document to formulate a management plan. However, more attention to fleshing out the future situation that is envisioned would help Congress in its deliberations. For example, what might be the prevailing situation of the physical trail, its management and use, 50 years from now?

Consultations: You have selected a most appropriate group of organizations and individuals for the background work for your study.

2.

Factual Data: I did find one questionable datum in Table 7, on page 51. Your 1994 attendance figure for Lapakahi State Park appears very inflated to me. I am a frequent visitor to this park.

Overall I believe that to secure National Trail status for the Ala Kahakai system would be a very worthy undertaking. One is seldom certain when looking into the future, but I suspect that this trail system will really grow in value and importance over the coming years.



Bill Graham
P.O. Box 155
Hawi, HI 96719

Response to Bill Graham

1. The vision for the trail described on page 23-24, which describes conditions that should exist ten or 15 years in the future, is intended to help Congress understand the conditions which would need to be achieved to make trail designation desirable. This vision could well be appropriate 50 years in the future, too.
2. The source is quoted correctly.

Jerry Y. Shimoda
P.O. Box 52
Volcano, HI 96785
Sept. 29, 1997

Superintendent
Pacific West Basin Support Office
600 Harrison Street, Suite 600
San Francisco, CA 94107
Attention: Meredith Kaplan

Dear Meredith,

My comments on the draft for Ala Kahakai National Trail Study and Environmental Impact Statement are as follows:

1. Summary, 3rd paragraph, page V, line 11-- I believe the word should be "monarchical" and not "monarchial."
2. My other comment concerns the "alternatives." I would have an alternative E where the State of Hawaii would go into a written agreement, after national historic trail (continuous) designation for the National Park Service to administer the trail on federal lands, and the State administers those portions of the trail on their lands and on privately owned lands or jointly with the State or private lands. From what I remember the private landowners are willing to donate or sell their sections of the trail if protection of their adjacent lands can be assured. Taking in Alternative E, I would be in favor of Alternative B, with a stronger State participation. The National Park, State Parks and County Parks work very well together on the Big Island.

Hope all's well. Have been very active in the first year of retirement helping NPS with training, as a volunteer.

aloha,
Jerry Y. Shimoda

Response to Jerry Y. Shimoda

1. Correction made
2. Alternative B allows for the arrangement you describe through the certification process which requires a written agreement between the National Park Service and the land owner, such as the state, to incorporate their segment of the trail into the national trail. The draft study states that "the best management scenario would provide state and local agencies a major role" (page 27). During the management plan process, a strong role for the state in managing its lands could be defined even though the National Park Service would have overall coordination and administration. To succeed, national trails require just the kind of cooperation you describe.

Russell A. Apple, Ph.D.
Fax (808) 967-7278 Voice (808) 967-7375
Post Office Box 47 - Hawaii National Park, HI 96718

30 September 1997

*Centred P. 27-28
Return Record Request*

Superintendent
Pacific Great Basin Support Office
600 Harrison Street, Suite 600
San Francisco, California 94107

Subject: Written comments on the *Draft National Trail Study and Environmental Impact Statement (EIS) for the Ala Kahakai*.

Specifically addressing the ancient Makahiki route through Kona and Kohala.

Recent limited historical research appears to indicate that the annual tax-collection circuit, a part of the four-month *long Makahiki* of ancient Hawaii, was an inland and not a coastal circuit. Excerpts from 15 sworn testimonies before the Kingdom of Hawaii's Boundary Commission ca. 1873 in Kona locate 12 and perhaps 14 altars in Kona where the collection ceremonies took place, along the "mauka government road." The "mauka government road" of ca. 1873 lies under or nearby to the present inland road known as the Mamalahoa, or "Belt Road," and the modern state highway numbers are identified for each listing.

1.

Since the collection circuit around the island of Hawai'i went clockwise, I list the 14 in Makahiki order. References prefaced with A or B followed by page numbers are from the Boundary Commission Books, Hawaii, volumes A and B. Numbers 7 and 8 are the arguable entries, but easily can refer to locations along the "mauka Government road." Each probable altar was located on the applicable USGS quad. Then, to be mailable, in a standard envelope, each is marked on a xerox copy of the Kona or Ka'u maps, pages 26 and 28, of *Atlas of Hawaii*, 2nd ed. Department of Geography, University of Hawaii, University of Hawaii Press, Honolulu, 1983. The one listing for the route in Kohala, no. 15, has a different source and is marked on the Kohala-Hamākua map, *Atlas* page 24.

2.

Response to Russell A. Apple, Ph.D

1. According to Ross Cordy, the State Archeologist on whose work much of the cultural resource information in the study is based, historical and oral historical evidence, such as Malo, indicate that the coastal trail was used in part for tax collection during the *makahiki* season. He believes it is possible that in the extreme part of South Kona the tax collection route was more *mauka*, having also seen the Boundary Commission Records; but he recommends more research on the South Kona Area. Similarly, for the other Boundary Commission Records you cite, he urges some caution having used those records for many years. The upland records note piles of stones, *iwi 'āina*, *aku*, and other markers at *ahupua'a* borders on the upland trail in Kona. He believes one must be cautious in concluding that these are shrines. Even if they are shrines, the connection to tax-collection would still need to be made. He encourages further research on these features along the Kona Upland Trail.
2. Please note: although Mr. Apple included maps with this letter, we were unable to reprint the maps in a readable format. The maps are on file and available for review in the National Park Service Pacific Great Basin Support Office in San Francisco.

Note (1): the frequently used Hawaiian word *mauka* in the testimonies of the witnesses below means inland, upland, toward the mountains, in contrast to *makai*, a word not found in the testimonies quoted below, which means on the seaside, toward the sea, in the direction of the sea.

Note (2): An *ahupua'a* in Hawaiian usually refers to one of the some 600 land divisions in the Island of Hawai'i—frequently a long narrow strip of land extending from high on the mountain side into the ocean: but *ahupua'a* can also refer to the generic *Makahiki* altar from which the land division takes its name. The land division *ahupua'a* have survived into modern times. Many of the altars have not, but each altar apparently had an individual name, with many duplicates. Each land *ahupua'a* has an individual name. There are no standard land *ahupua'a* sizes or shapes. Boundaries of the unequally wide *ahupua'a* may be said to be almost perpendicular to the general line of the coastline. Thus a road, or trail, that parallels the coast cuts across many *ahupua'a* boundaries.

Note (3) During each hearing, a reporter transcribed in longhand testimonies in the Hawaiian language from witnesses who were usually born and raised in or near the boundaries being determined and who were considered in each community to be a boundary expert. Later the testimonies were translated into English. But the "English" used was Island patois and included many frequently used Hawaiian words, such as *mauka* and *makai*. Diacritical marks for Hawaiian words have only come into use recently.

Note (4): An *ahu* in testimony refers to the pile of rocks which was the altar: *pohaku* means rock or rocks.

There follows data on the probable *Makahiki* altars in the Kona district with excerpts from the testimonies: the last entry is for the Kohala district with its source stated.

1. Altar Name: kaukahapu; boundary marker between the *ahupua'a* of ALIKA and KIPAHOEHOE; Miliolii quad: route 11: B322-323.
Testimony: "ahu at mauka Govt. road: used to be an ahu kaupuaa in time of Kamehameha I."

Apple to Pacific Great Basin Support Office NPS, re *Ala Kahakai*, 30 Sept. '97, page 3

2. Altar name: Keahupuaa; boundary marker between ahupua'a KAAPUNA and KIPAHOEHOE; Kauluoa Pt. quad: route 11; B199-200-201.

Testimony: "pile of stones at Government road." (Called ahupuaa on p. B201).

3. Altar name: Poalua; boundary marker between ahupua'a OLELOMOANA 1 and OLELOMOANA; Kauluoa Pt. quad; route 11: B204.

Testimony: "abu puua at the government road."

4. Altar name: ahupuaa; boundary marker between ahupua'a KEALIA and KAULEOLI; Honaunau quad: route 11: A273.

Testimony: "a place at the mauka Government road."

5. Altar name: ahupuaa and/or keahupuaa; boundary marker between ahupua'a HONAUNAU and KEOKEA; Honaunau quad: route 11; A282, A295.

Testimonies: (A282) "a pile of stones on the mauka Government road"
(A295) "large pile of stones...at mauka Govt. road."

6. Altar name: Ahupuaa; boundary marker between ahupua'a HONAUNAU and KEFI; Honaunau quad: route 11; A279-280-281.

Testimony: (279) "a large pile of rocks"

(280) "a pile of stones"

(281) "at the mauka Government Road"

7. Altar name: Kanekeiikapu; boundary marker between ahupua'a KEAUKOU 1 and KEAUKOU 2; Kealakekua quad: route 11; A262, A.267 and A319.

Testimony indicates the marker was here but knocked down when road was built (or rebuilt). There was only one local government road at time of testimony (Aug. 5, 1873) This is one arguable altar Location.

8. Altar name: Kanihinihula; boundary marker(s) between ahupua'a KAHALUJ and KEAHOHU 1: Kealakekua quad; route 180: A318, A322. Testimony: "two ahu pohaku at the Government road." The meaning of two rock piles is unclear, but again there was only one local Government road in 1873. This is the second arguable altar location.

9. Altar Name: ahu pohaku; boundary marker between ahupua'a KAUMALUMALU and PAHOEHOE: Kealakekua quad; route 180; A324. Testimony: "mauka along iwi aina [probably a ridge of earth or stones running along the boundary to mark it] to an ahu pohaku at the mauka Government road"

10. Altar name: Keahupuaa; boundary marker between ahupua'a PUAU and AUHAUKEAE; Kailua quad; route 180; A376. Testimony: "mauka to Keahupuaa...at mauka Government road"

11. Altar name: Keahupuaa; boundary marker between ahupua'a LANIHAU and KEAHUOLU; Kailua quad; route 180; A350. Testimony: "to Keahupuaa at the Government Road"

12. Altar name: Keahupuaa and/or Kalaeoniuaa; boundary marker between ahupua'a KEAHUOLU and KEALAKEHE; Kailua quad; route 180; A356, A 358. Testimonies: (A356) "at Government road an ahu called Kalaeoniuaa" (A358) "'Keahupuaa at the Govt. road"

13. Altar name: Ahupuaa; boundary marker between ahupua'a HONOKOHU and KEALAKEHE; Kailua quad; route 180; A365. Testimony: "thence to a place called Ahupuaa a puupohaku [hill of rocks] at the Government road"

14. Altar name: Keahupuaa; boundary marker between ahupua'a HALEOHIU and HAMANAMANA: Kailua quad: route 190: B266.
Testimony: "thence to Keahupuaa at the mauka road"

Note: It is believed there were more *Makahiki* altars in Kona than were listed in the boundary hearings books A and B. Unless some other source is found, these 14 may be only ones located. I consider this historical research limited because the boundary books have only been searched for altar information in the district of Kona—altar information, if any, in the other five district boundary hearings remains to be discovered.

15. District of KOHALA. The source: Forlander Collection of Hawaiian Antiquities and Folk Lore: Memoirs of the Bernice Pauahi Bishop Museum of Polynesian Ethnology and Natural History, Third Series, Part 1, Bishop Museum Press, Honolulu, 1917. Vol. 6, pp.202,,204--

The temple at Hikapoloa (Hawi quad, route 270) was where the *Makahiki* gods were preserved on coming up from Mo'okini temple, the two gods, wooden and feather, were set up at Hikapola...

"The feather god goes mountainward along the cliffs...Merrymaking, pride demonstrations and going to Hinakahua [in Kapa'au, where the chiefs lived-central location in Kohala, fair climate and with a noted boxing field where people thronged] were the occupations of the day. The *Makahiki* god led the procession. the people behind making merry, boxing along, till they reached Hinakahua."

The point of 15 is that this was a mauka activity, well inland from 'Upolu Point, the starting point of the study trail, the *Ala Kahakai*.

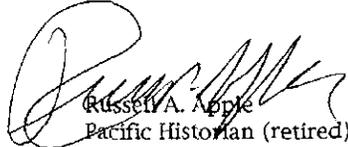
Apple to Pacific Great Basin Support Office NPS, re *Ala Kahakai*, 30 Sept. '97, page 6

I find no references that ancient tax collection or recreational activities connected with the *Makahiki* were on a *makai* trail.

3.

With this information at hand, the National Park Service should exercise caution in claiming *that the ancient Makahiki tax collection route was along the study trail.*

3 map attachments


Russell A. Apple
Pacific Historian (retired)
National Park Service

cc: Kepā Maly
Ross Cordy
with attachments

3. If the trail is designated a national historic trail, the National Park Service would certainly review the trail route and its uses during the management plan process.

Deborah L. Chang
P.O. Box 3226
Līhū'e, HI 96766-6226
October 14, 1997

Superintendent
Pacific Great Basin Support Office
National Park Service
600 Harrison St., Suite 600
San Francisco, CA 94107
Attn: Meredith Kaplan

To whom this concerns:

SUBJECT: Comments on the Draft Ala Kahakai National Trail Study and
Environmental Impact Statement

Thank you for your effective, concise presentation of the many complex issues involved in the proposed Ala Kahakai Trail! I am convinced that Alternative B: Ala Kahakai National Historic Trail (Continuous) offers the best opportunity to properly develop and manage this very special, nationally significant, and culturally important historic Hawaiian trail. Before commenting further on the study, I feel it is important to describe some of my background experience on Hawaiian trails of the Big Island.

A. Background

I was born and raised on the Big Island, and use of traditional pathways was essential to my family's hunting and fishing lifestyle. That upbringing is the foundation for my long standing interest and commitment to trail preservation.

In 1979 I helped to establish the 501(c)(3) organization, now known as "E Mau Nā Ala Hele." I served as its president until 1988, working extensively with community groups, individuals, landowners, and government officials in the process of advocating for the perpetuation of historic Hawaiian trails and the protection of unique natural and historic sites adjacent to the trails. In 1981 on behalf of the non-profit, I personally (and naively) nominated the 175-mile trail section that is now the subject of your study for inclusion in the National Trails System and was advised by the Heritage Conservation and Recreation Service that there were no federal funds for the proposal. It was naive to attempt such a nomination without support from someone in Washington D.C., as we now have in the Honorable Senator Akaka (Mahalo ā nui, Senator!). While coordinating Hawai'i's statewide trails and access program, "Nā Ala Hele" (from 1988 to early 1991), I assisted the implementation of the 35-mile Ala Kahakai demonstration trail.

These experiences have helped me to become aware of the many considerations when developing trails for public use in the context of the Big Island community.

B. Frequently Heard Concerns

Through the years, certain concerns continue to be expressed regarding the opening of Hawaiian historic trails to more public use. Among these are:

1. "We don't want federal interference and control over that which can be handled locally."

This argument brings to mind the lost opportunity of 'Ōpae'ula (a.k.a. Kapo'ikai) Pond in Makalawena which interested the federal government in the early 1970s as a potential wildlife refuge for endangered Hawaiian waterbirds. The federal proposal was vigorously opposed on the basis that protection of the wildlife could be done just as well locally. Nothing was done subsequently to protect or manage the area beyond simply

relying on the area's remoteness to provide sufficient refuge.

Federal assistance in a 175-mile Ala Kahakai National Historic Trail System is an opportunity we cannot afford to lose. It's difficult to put much credence on Alternative C: Ala Kahakai State Historic Trail when the State of Hawai'i has been taking drastic steps to cope with severe budget shortfalls for the past several years with no fiscal relief in sight. Tax revenues continue to decline; tourism is "flat;" government downsizing and freezing of employment positions make it highly unlikely that the state would be able to properly staff and implement a project of this magnitude. As it is, the state's Nā Ala Hele program is still not fully staffed, 9 years after its establishment.

2. "Destruction, looting, and desecration of sensitive historic sites will occur or accelerate with trail opening."

There are no guarantees that further destruction, looting and desecration will not occur with or without a national trail. People have been "harvesting" Hawaiian artifacts for many generations. Some of these people are Hawaiians, who manage to rationalize that "it's better that I'm the one taking these things, because I will take proper care of them." A well-managed Ala Kahakai National Historic Trail System would offer more protection than has existed in the last 20+ years. The isolation of certain historic areas helps, although it is easier to loot such sites, undetected. How long can we rely on these areas remaining isolated? Doing nothing is not a long-term solution. A national trail system would provide public education, and a heightened monitoring and official presence that would make it more difficult to loot or vandalize sites undetected.

3. "Damage to sensitive natural areas will occur with trail opening."

Again, there are no guarantees that further damage will not occur with or without a national trail. As pointed out in the study, sensitive natural areas have been and currently are being damaged. It is extremely frustrating to observe steady degradation under the Alternative A: No Action Alternative. Dr. Brock's observations regarding the percentages of anchialine ponds containing destructive, non-native fish increasing from about 15% in 1970 to nearly 95% in 1990 dramatically illustrate the results of doing nothing to regulate, monitor, or manage these special natural assets. A properly implemented Ala Kahakai National Historic Trail offers hope that environmental degradation can be slowed or stopped through public education and a heightened monitoring and official presence.

4. "Liability laws do not protect landowners from the legal costs of having to defend themselves if they are sued by trail users."

It seems that nothing short of an absolute guarantee will silence landowner liability concerns. Trail advocates and the Nā Ala Hele program have worked hard in recent years to legislatively address such concerns. These efforts have resulted in "Agreements to defend and indemnify" (HRS §198D-7.5) and "Liability of owner limited" (HRS §520-4). Together these laws afford substantial (but not absolute) protection of the private landowner who acts responsibly and whose land includes a trail being used recreationally by the public.

C. Regarding Alternative D: Ala Kahakai National Historic Trail (Discontinuous)

1. Under this alternative, only "intact remnants" of the prehistoric or historic trail would be protected. Who will determine what constitutes "intact?" How would intact segments of only a few feet or yards in length be treated? What about trail repair and restoration opportunities for partially intact trails?

Alternative D would be quite similar to the status quo where certain historic trail segments are preserved in isolation of their larger historic and cultural meaning and context. Also traditional pathways can be extinguished under Alternative D, because they have not survived "intact" the ravages of 100+ years of tropical weather, storm surf, hooved animals,

Response to Deborah L. Chang

- I. Your questions address a level of detail that would be considered in the comprehensive management plan process for Alternative D. Most other national historic trails do exist as a series of "high potential route segments" (see the National Trails System Act, page A-16 of the study for definition) linked together by an auto route. Each management plan identifies the number, location, and treatment of the high potential segments.

etc. A series of disjointed trail segments would significantly diminish the national significance of the trail experience. The depth and quality of the historic and cultural experience would be a fraction of Alternative B, and one has to question the logic of choosing this alternative over Alternative B when the estimated costs of both alternatives are so similar.

D. Regarding Trail Relocation

Under the present system, trail relocation requests are fairly common when developments are proposed, even for "intact" trail segments. Many arguments are used to persuade governmental agencies to permit trail relocation, such as "the trail may be intact but it is so short that it leads from nowhere to nowhere," or "the present trail location is too far from the ocean where people really want to go, so why not move the trail to a more attractive, practical location?" or "the trail (which is clearly shown on historic maps) is no longer evident on the ground and therefore has no archaeological significance. Why not move it to a more convenient location?" What would be the National Historic Trail System's approach to trail relocation?

2.

F. Regarding Incorporation of Historic Trails into Developments

When historic trails are incorporated into developments, guidelines need to be established to promote an appropriate result. Existing developments have attempted this challenge with varying degrees of success. One important consideration is the need for adequate buffers so that the trail and trail user are not drastically "out of place" in the developed surroundings.

F. Regarding Public Rights to Use the Historic Trails

Whatever alternative is chosen, the State of Hawai'i has several laws and court decisions supporting the people's right to use traditional paths, i.e., Highways Act of 1892 (HRS §264-1), the Hawai'i Supreme Court decision: PASH vs. Hawai'i County Planning Commission, and Defense to Trespass (HRS §708-816). Increasingly people will become informed and exercise their access rights with or without a national trail system. It would be better if people were educated about the responsibilities that accompany those rights - responsibilities to respect historic sites and private property, and how to minimize their impact on the natural environment. Alternative B offers the greatest opportunity to educate people about respectful use of traditional pathways.

G. Regarding "Limits of Acceptable Change" (LAC)

Mentioned on page 70 in the draft EIS, I want to clarify that Nā Ala Hele's application of the principles of LAC varies with each island specialist's interpretation and judgement.

In summary, the unique and nationally significant ala loa and its adjacent natural and historic sites have suffered under the "no action alternative." Continuing the status quo, while less threatening to private landowners and some preservationists, means that the trail and adjacent sites will be appropriately protected sometimes and sometimes not. Many years of experience with Hawaiian trail preservation have shown me that good quality trail preservation under the present system, requires persistent and consistent advocacy by someone. If that someone (government or non-government) is not vigilant, the dominoes fall where they may. A national historic trail system under Alternative B would help to achieve consistently respectful handling of this national treasure.

Thank you for this opportunity to comment on the draft EIS.

He mahalo ā nui loa iā 'oukou,



2. The chief goal of all three action alternatives would be to preserve in place all intact segments of the *ala loa*. These would be linked as necessary with later trails or reconstructed as feasible, always following as closely as possible the historic trail alignment which may be determined from maps, connections between intact segments established on site, or other means. Also, please refer to response 5 to the letter from Oceanside 1250.

GORDON K. LESLIE
 82-6012 Manini Beach Road
 Captain Cook, Hawaii 96704
 (808) 936-1479

October 17, 1997

Superintendent, Pacific Great Basin Support Office
 National Park Service
 600 Harrison Street, Suite 600
 San Francisco, California 94170

Attention: Meredith Kaplan
 Via Facsimile (415) 744-4043

**Re: Ala Kahakai, "Trail by the Sea", County of Hawaii, Hawaii
 Draft National Trail Study and Environmental Impact Statement**

Dear Ms. Kaplan:

We have not completed a full review of the Draft EIS, however we would like to address some concerns by the response due date.

Environmental impacts statements are prepared as a tool for collecting information. This Draft EIS contains much valuable information, but it falls far short of what is necessary for individuals or agencies to make a fair decision. I trust that all of our concerns will be mediated through the due process and the Final EIS.

1. As you may recall from the public meeting at Yano Hall here in Kona, approximately 1/3 of the thirty or so people in attendance were native Hawaiians, with strong Hawaiian concerns. It is too bad that there was not enough public notice, as there are a substantial number of native Hawaiians in Kona that are very concerned about this issue, and deserve a chance to be included in the mediation process. Perhaps another meeting in Kona with your presence might be a good start. I will help in facilitating public notice and participation.

Though we shared some of our concerns with you, there are some that we want you to focus on immediately.

2. 1) Names and Places
 There are three major ancient trail systems that circle the Island of Hawaii:
- a. The Mana Trail

Response to Gordon K. Leslie

- I. We would not presume to guess how many native Hawaiians attended the meeting, but we recall that only two, persons who spoke identified themselves with a native Hawaiian perspective, you and Curtis Tyler. Notice of the meetings was made in the local newspapers, in a letter included in each draft study, and duly noted in the Federal Register. Copies of the draft were sent to local libraries. Also, please refer to response 4 to the letter from Kamehameha Schools Bernice Pauahi Bishop Estate. Your offer of help may be used during the management plan process if any of the action alternatives are selected by Congress.
2. No one with whom we have checked knows of a Mana Trail. If you could send more information on this, we would appreciate it. According to Ross Cordy, the Mamalahoa Trail today typically refers to several straight roads, and the term *ala aupuni* commonly appears in the records beginning in the 1830s-1850s and most probably refers to the *ala loa*. Please refer to response 2 to the letter from Deborah Chang.

GORDON K. LESLIE
82-6012 Manini Beach Road
Captain Cook, Hawaii 96704
(808) 936-1479

- b. The Mamalahoa Trail
- c. The Ala Loa Trail

2. ↑

From these trails, in various *ahupuaa* are mauka-makai trails that provided access to the sea and the mountain under very strict *konaiki* rules. From these mauka-makai trails and parts of the ala loa trails, and paralleling the shoreline, are trails which are proposed as the Ala Kahakai or "trail by the sea". Other than this shoreline trail, no other alignment should be called "Ala Kahakai", such as the ala ahupuni, old government road, etc. To include any trail that is not part of a true ala kahakai into this program would be tampering with our *kapu* system and that is not *pono*.

2) Trail Preservation

Attached is some correspondence and news articles that describe the scope of our problems in preserving our trails. There are several trail advocacy groups here in Hawaii and most are very sincere and want to do the right thing, and are waiting for good solid direction. Yet in some instances, there in a small group of people that are leading them that are insensitive to our concerns, as the founder of Plan to Protect, C.J. Villa, readily admits. Furthermore, the State's own trail specialist consider's our stance ridiculous, and Mr. Villa believes that opening of these trails for public use should supersede cultural concerns that native Hawaiians have.

Thank you for this opportunity to respond to the proposal. If there is anything I can do to help you in Kona, please feel free to call on me.

Sincerely,


Gordon K. Leslie

- cc: Senator D. Akaka
 Senator D. Inoye
 Representative P. Mink
 Representative N. Abercrombie
 M. Buck
 D. Hibbard

VIRGINIA B. MACDONALD
ARCHITECT & PLANNER
American Institute of Architects

Comments on the Draft National
Trail Study and Environmental
Impact Statement for the Ala Kahakai.

To: Superintendent, Pacific Great Basin Support Office

From: Virginia Brooks Macdonald, Author of the Hawai'i State Na
Ala Hele and Ala Kahakai (Public Access) Legislation.

1. This whole idea was suggested in March, 1973, when I wrote the State Legislation, Na Ala Hele (Trails for walking). The difference is that at that time a **demonstration** trail, to be called Ala Kahakai (Trail by the sea), was proposed as a first implementation of future trail segments, possibly statewide.
2. There never was a historic trail called Ala Kahakai, I only thought up the name in 1972. The only Ala Loa (Long Trail) that ever existed, to my knowledge, was a straight, curbed horse trail that was constructed from Kiholo to Puako in the mid 1800s. When you see a **straight** trail parallel to the shore you can just bet that it is a white man's trail after "discovery" of Hawai'i, not a native Hawai'ian trail.
3. Most Hawai'ian trails, often constructed of basaltic walking stones, ran between the shore and the upper production areas for food, fiber and feathers. These **mauka makai** trails **within** a land division connected the working areas. At the Makahiki time when taxes (of food, fiber and feathers) were collected, the offerings were laid on or by a land boundary of piled rocks, called an ahupua'a. Boundary Commission hearings in the late 1800s show that these collection points were where the materials were produced, in the uplands (mauke), not along the shore.
4. Hawaiians did not go walking for recreation. They normally stayed **within** their home ahupuaa (land division). Only the chiefs traveled, usually by canoe. Thus, there was no need or reason for

BOX 47
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Response to Virginia B. Macdonald

1. Please refer to page 5 of the study which summarizes your work.
2. Please refer to page 6 regarding the Ala Kahakai name and to pages 6-9 for the existence of the ala ion.
3. Please note the text and photographic evidence of a trail parallel to the shoreline, especially the divider page titled "Significance Evaluation" which shows a trail segment paved with pāhoehoe.
4. Please refer to response 1 to the letter from Russell A. Apple.
5. Again, please refer to pages 6-9 of the draft and final study.

5. a continuous trail around the island. That concept has just been made up to try to develop a justification for a historic trail. But, it is talking history, Western style.

It is today's people, Caucasians and Hawaiians alike, who want to utilize the shoreline in today's way. There is history, lots of it, to be discovered, protected, and interpreted. Today, we do not have to stay within an ahupuaa, we are free to walk from one land district to another, and along the way there are major **luakini heiau**: Mo'okini, **Pu'ukohola**, and the complex of sites at **Pu'uhonua "O Honaunau, Wahaula** still exists **but has** been covered by **recent lava** flows.

There are also many historic relics, ahupua'a, mauka-makai trail remnants, remains of agricultural walls, remains of ancient working fish ponds, smaller religious platforms, wells, springs, house walls, endemic plants and marine life. There is **history** all over the place, some already destroyed, some waiting to be identified, some already protected by the Federal government, as at Pu'ukohola, Honaunau, and Kotoko.

So, we do not have to **invent an untrue history**, such as a continuous beach trail. What we DO need is to remember that "Old Hawaii" was different. The old boundaries were Mauka-makai, not parallel with the sea. Except for chiefs and tax collectors travel was within an ahupua'a. Hawaiians went mauka/makai, it is us hades who want to run around in circles.

The next consideration is **safety**. Safety for trail users and safety for the **historic** sites and relics along the way. **You** can't bring people **onto a trail** and **then** dump them with no water **and** no way to **get out**, in the middle of a recent **lava** flow as presently suggested.

6. Some parts of the shoreline of the Island of Hawai'i are walkable. Other areas, with rugged cliffs, recent lava flows, or dangerously rough areas of a'a, are just not safe. If an area is identified as a public trail questions of safety must be considered. Perhaps the Ala Kaha Kai (The name invented in 1973) ought to be made up of trail segments, Hawaiian style, not a 1990's concept of a continuous trail highway. Segments would really be more historic

7. As well as a safe walking area, there is a need for access and egress, for the possibility of rescue, and for such practical needs

6. The issues of the health and safety of trail users are raised on page 20 and specifically addressed on pages 69-70 of the study.
7. Trail facility development is addressed in the cost estimate (Appendix B) and impacts are addressed under "Visual Resources" on page 67.

7. as fresh water and rest rooms. This is why, in my work for the State of Hawai'i I wrote the following.

The basic concept underlying the Ala Kahakai proposal is that facilities which are functionally related should be administratively related as well. The concept involves the use of public rights-of-way across private land to connect existing and planned facilities, such as parks, into a coordinated administrative unit. Policies must be developed for administering such a linear system, coordinating the activities of several agencies. National, State and County Facilities can serve as Service Nodules. The trails between these nodules, unencumbered with buildings and man-made facilities, can provide a wide range of recreational and vocational needs for historians, anthropologists, fishermen, snorkelers, hikers, campers, swimmers, photographers and those who just want to sit and appreciate.

CONCLUSION: THE PROPOSAL FOR A NATIONAL TRAIL IS A GOOD ONE. IT IS NEEDED IN ORDER TO COORDINATE NATIONAL, STATE AND COUNTY EFFORTS BUT DO IT HONESTLY, SAFELY, AND WITHOUT MAKING UP HISTORY.

Virginia Roberts
10/5/97

August 4, 1997

Meredith Kaplan
National Parks Service
600 Harrison St., Suite 600
San Francisco, CA 94107

Re: The Ala Kahakai trail system.

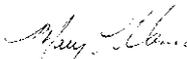
Dear Ms. Kaplan:

Please let this letter serve as my statement of support for the Ala Kahakai trail system on the Big Island of Hawaii. It is my sincerest belief that this trail system will benefit all the people of Hawaii and future visitors to the islands. Hawaii is seriously lacking in trail systems due to over development of the coast line and land privatization in certain areas. The coast line of Hawaii is one of the most splendid and unique places on this planet. The creation of still young volcanoes, surrounded by an ocean teeming with marine life, it is stunningly beautiful. To be experienced is to gain respect and appreciation for the value of the land, the ocean, and the people who make their home here. It must be preserved and protected. To help do this, people need access to this trail. A signed, maintained and published trail will encourage the kama'aina and visitor alike to make use of this trail for hiking, natural history study, family outings, school field outings, etc. People, especially those with families, shy away from visiting natural areas if they don't know there is signed, mapped access. Getting people out to these areas helps preserve these areas and benefits the communities. Unfortunately, I feel many people won't protect something they have not experienced. Hawaii's economy is still struggling and the tourist business continues to decline. Visitors need a reason to come other than hotels and expensive resorts. More and more people are returning to the quiet solitude and grandeur of the land for recreation.

The big island enjoys sparse population and the communities are family oriented and relatively low key. I don't expect you'll get many written responses on this trail designation. However, I do believe this designation will eventually become a priceless gift to future generations and will be recognized as such whether or not the trail is ever heavily used.

I have personally hiked many areas of this island and am hiking with E Mau Na Ala Hele when I can. The beauty and uniqueness of this island cannot be overstated. Their mission, in conjunction with the Sierra Club and the Kona Hiking Club, is meritorious and should be supported to every extent possible.

Thank you for your consideration.



Mary L. Osborne
P O. Box 4481
Kailua-Kona, HI 96745

Thank you for your letter

Laura Ululani Kamoku
78-6725 Makolea St., 43J
Kailua-Kona, HI 96745
Phone: (808)322-0903

October 5, 1997

Meredith Kaplan
US Dept. of Interior
National Park Service
600 Harrison St., Ste. 600
San Francisco, CA 94107

Re: Draft National Trail Study, EIS - Ala Kahakai Trail

Dear Ms. Kaplan:

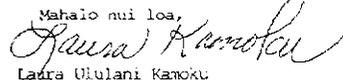
The ancient sites of Hawaii, our cultural treasures, and as such are invaluable to all people of all ethnic backgrounds of all times. They provide spiritual inspiration as well as irreplaceable knowledge. The archaeological resource of all the Hawaiian islands need to be protected against natural destructive forces as well as careless individuals and groups seeking short term gain. Since the Antiquities Act of 1906, numerous federal laws have been passed by the U.S. Congress to help protect and conserve the ancient sites located on public lands and reservations throughout America. The National Historic Preservation Act of 1966 is a particularly effective piece of legislation. Many sites have been listed on the National and State Registers in order to secure official recognition of their significance as historic places, and to aid in preservation. But oddly enough, actual protection is not guaranteed these sites unless they fall within special county zoned districts, or state conservation areas.

None of the federal laws, nor similar state laws, can protect all sites, especially those on private property where land owners may knowingly or unknowingly destroy important contextual evidence as well as valuable artifacts. Hawaii state law requires site survey of both public and private lands slated for development, but because the developer hires the archaeologist, a conflict of interest may arise, even if only in theory. Therefore, even with the survey reviews provided by State Historic Preservation, resources, weak links in the preservation process can occur.

As a native Hawaiian, a place tells me who I am, and who my extended family is. A place gives me my history of my clan and the history of my people. I am able to look at a place and tie in human events that affect me and my loved ones. It gives me a feeling of stability and belonging to my family, those living and dead.

The Ala Kahakai, in history, has stated that the use of the trail by King Kamehameha I, should be protected under the National Park Service, as a prehistoric site. All historic sites have important values, and to spend time in voicing my opinion, it is worth it to all generations after me.

Thank you for your time in reading my letter and God bless all involved.

Mahalo nui loa,

Laura Ululani Kamoku

Thank you for your letter.

134 Ualahua St.
Hilo, HI 96720
October 17, 1997

Meredith Kaplan
Superintendent, Pacific Great Basin
National Park Service
600 Harrison Street, Suite 600
San Francisco, CA 94107

Dear Meredith and National Park Service staff,

The Ala Kahakai is a wonderful example of the old Hawaiian trail systems and should be maintained and preserved as a continuous National Historic Trail for people to appreciate today, tomorrow and forever into the future.

I have personally walked over two thirds of the trail since moving to the Big Island in 1975. I have experienced the "chicken-skin" feeling of walking on water-worn stones that have been in place over 500 years ago, knowing that thousands of feet have walked on the same paths since they were created. I have enjoyed the breath-taking scenic views, the delightful experiences of finding refreshing brackish pools, identifying rare coastal native plants, and learning about the natural and cultural history of each bay, point, village, fishing shrine and heiau along the way. I have also seen the destruction that comes with uneducated misuse, as well as the willful destruction of commercial development. An example of the latter is the bulldozer damage at Pohue Bay. Federal designation of the trail is an important and necessary step in the process of protection and education.

As an environmental activist for many years, a member of the Na Ala Hele Trail Advisory Council, as well as a state employee, I must acknowledge that our State government is in no position to provide the management, resources or enforcement necessary to insure that the trail is protected. Federal historic sites protection is needed for the rich archeological sites and remnants located along the route of the Ala Kahakai.

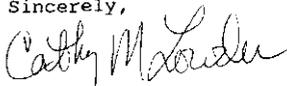
At the public hearings, many issues were raised by representatives of landowners such as the desire to limit or control access and how to prevent trespassing off designated trail areas. Other issues were raised by representatives of Hawaiian interest groups regarding the lack of complete archeological inventories, potential damage to sites, and the need for protection and limiting access to particularly sensitive sites. These are issues that should be addressed in the management and implementation phase. They are not reasons to put off or delay the designation of the trail. And these issues will only get worse if the trail system is ignored and not treated as a valuable cultural resource.

Thank you for your letter.

The designation of the trail as a Federal National Historic Trail will provide the leadership and vision to tackle the tough issues that need to be addressed. Once designated, the process that the management plans will go through, involving local governments (state and county), land owners, residents, organized interests groups and other interested persons will need the clear vision, neutrality and long term goals of a National Historic Trail System to work through the road blocks of the 'special interest' advocates. Unfortunately I don't believe that state and local governments are able to successfully work for long term solutions without outside intervention, due to special interest pressures.

The Ala Kahakai is nationally significant and meets the criteria to be a National Historic Trail. As a major step for protection and to insure the development of a comprehensive recreational use plan, I urge that the Ala Kahakai be designated as a continuous National Historic Trail with the NPS providing implementation leadership [option B]. As a person who has walked miles and miles of the trail, I hope that the trail will be in place two hundred years from now for people to enjoy. Lets schedule a hike for trails' day 2197.

Sincerely,



Cathy M. Lowder

October 8, 1997
P.O. Box 4411
Kailua-Kona, Hawai'i, 96745

National Park Service
600 Harrison Street, Suite 600
San Francisco, California, 94107

Dear Ms. Kaplan:

Please help us to provide the decision-making team with the evidence necessary to support the designation of the "Ala Kahakai" as a National Historic Trail. I am enclosing photographs of various sections of the trail taken during hikes I participated in.

This summer, I joined a number of interested local residents in hiking the seaside trail. The trail has great historical significance as well as areas of great beauty. Due to the landscape of this lava-swept island, many of these areas are accessible only by trail.

Past and recent development has continued to threaten access to these areas by the general public. We should have learned our lesson from seeing what has happened in areas like Florida, where much of the seashore is privately controlled so that vast areas are inaccessible. A National Trail designation will help to alleviate the need for continuing litigation to determine who is able to simply bulldoze this cultural treasure.

Please help us to do what is right in this matter.

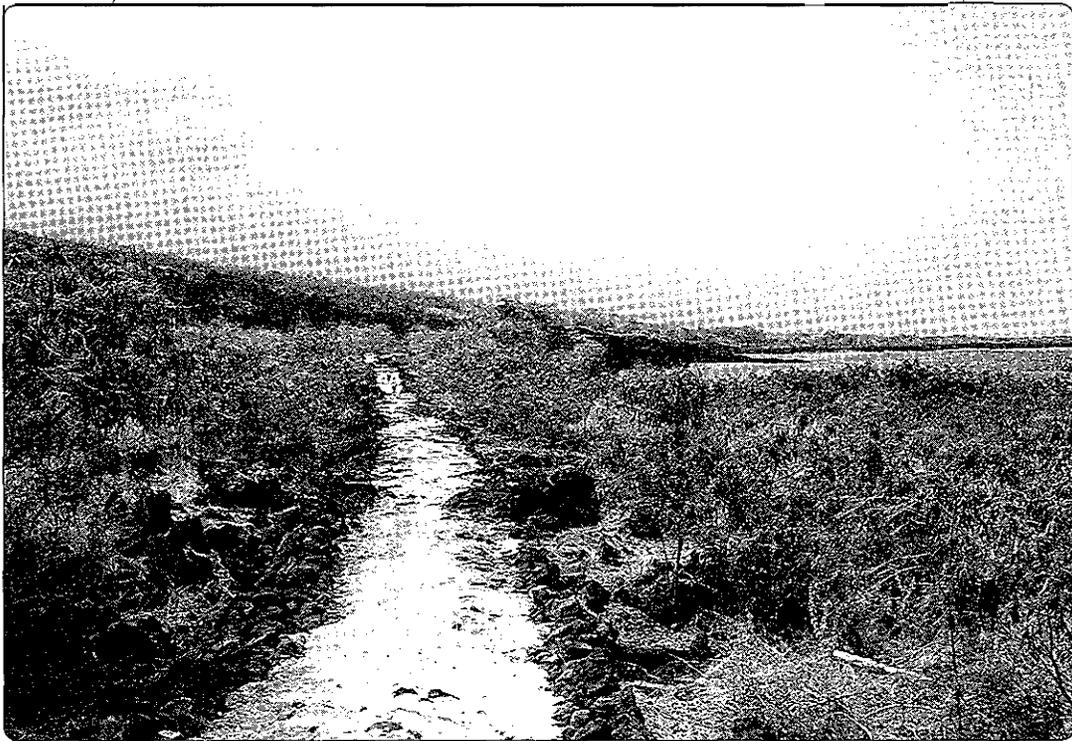
Yours truly,


Carol B. Anton


Ashley Feis
Amanda Dejeu
Emily Bryan
Nelson Hottig
Sara Jackson
Malia Hamilton

Thank you for your letter,

APPENDICES



*Straight 1800s trail at Pu'uhonua o Hōnaunau
National Historical Park*

**APPENDIX A:
PERTINENT LEGISLATION**

SELECTED PORTIONS OF THE NATIONAL TRAILS SYSTEM ACT..... A-2

— • —

PUBLIC LAW 102-461..... A-17

— • —

STATEMENT OF THE HONORABLE DANIEL K. AKAKA..... A-18

— • —

CHAPTER 520 LANDOWNERS LIABILITY..... A-21

— • —

AMENDMENT TO CHAPTER 520..... A-23

— • —

CHAPTER 198D HAWAII STATEWIDE TRAIL AND ACCESS SYSTEM..... A-25

— • —

AMENDMENT TO CHAPTER 198D..... A-28

— • —

CORRESPONDENCE FROM THE DEPUTY ATTORNEY GENERAL..... A-30
TO THE CHAIRPERSON OF THE BOARD OF NATURAL RESOURCES
REGARDING KONA COAST STATE PARK: OWNERSHIP/PUBLIC RIGHTS
TO USE THE ALA KAHAKAI AND RELATED TRAILS AT MAKALAWENA,
NORTH KONA, HAWAII

**SELECTED PORTIONS OF THE
NATIONAL TRAILS SYSTEM ACT**

Public Law 90-543

(16 U.S.C. 1241 et seq.)

as amended through P.L. 104-333, November 12, 1996

AN ACT

To establish a national trails system, and for other purposes

Be it enacted by the Senate and House of Representatives of the
United States of America in Congress assembled,

SHORT TITLE

SECTION 1. This Act may be cited as the "National Trails System Act"

STATEMENT OF POLICY

SEC. 2. (a) In order to provide for the ever-increasing outdoor recreation needs of an expanding population and in order to promote the preservation of, public access to, travel within, and enjoyment and appreciation of the open-air, outdoor areas and historic resources of the Nation, trails should be established (i) primarily, near the urban areas of the Nation, and (ii) secondarily, within scenic areas and along historic travel routes of the Nation which are often more remotely located.

(b) The purpose of this Act is to provide the means for attaining these objectives by instituting a national system of recreation, scenic and historic trails, by designating the Appalachian Trail and the Pacific Crest Trail as the initial components of that system, and by prescribing the methods by which, and standards according to which, additional components may be added to the system.

(c) The Congress recognizes the valuable contributions that volunteers and private, nonprofit trail groups have made to the development and maintenance of the Nation's trails. In recognition of these contributions, it is further the purpose of this Act to encourage and assist volunteer citizen involvement in the planning, development, maintenance, and management, where appropriate, of trails.

NATIONAL TRAILS SYSTEM

SEC. 3. (a) The national system of trails shall be composed of the following:

(1) National recreation trails, established as provided in section 4 of this Act, which will provide a variety of outdoor recreation uses in or reasonably accessible to urban areas.

(2) National scenic trails, established as provided in section 5 of this Act, which will be extended trails so located as to provide for maximum outdoor recreation potential and for the conservation and enjoyment of the nationally significant scenic, historic, natural, or cultural qualities of the areas through which such trails may pass. National scenic trails

may be located so as to represent desert, marsh, grassland, mountain, canyon, river, forest, and other areas, as well as landforms which exhibit significant characteristics of the physiographic regions of the Nation.

(3) National historic trails, established as provided in section 5 of this Act, which will be extended trails which follow as closely as possible and practicable the original trails or routes of travel of national historic significance. Designation of such trails or routes shall be continuous, but the established or developed trail, and the acquisition thereof, need not be continuous onsite. National historic trails shall have as their purpose the identification and protection of the historic route and its historic remnants and artifacts for public use and enjoyment. Only those selected land and water based components of a historic trail which are on federally owned lands and which meet the national historic trail criteria established in this Act are included as Federal protection components of a national historic trail. The appropriate Secretary may certify other lands as protected segments of an historic trail upon application from State or local governmental agencies or private interests involved if such segments meet the national historic trail criteria established in this Act and such criteria supplementary thereto as the appropriate Secretary may prescribe, and are administered by such agencies or interests without expense to the United States.

(4) Connecting or side trails, established as provided in section 6 of this Act, which will provide additional points of public access to national recreation, national scenic or national historic trails or which will provide connections between such trails.

The Secretary of the Interior and the Secretary of Agriculture, in consultation with appropriate governmental agencies and public and private organizations, shall establish a uniform marker for the national trails system.

(b) For purposes of this section, the term 'extended trails' means trails or trail segments which total at least one hundred miles in length, except that historic trails of less than one hundred miles may be designated as extended trails. While it is desirable that extended trails be continuous, studies of such trails may conclude that it is feasible to propose one or more trail segments which, in the aggregate, constitute at least one hundred miles in length.

(c) On October 1, 1982, and at the beginning of each odd numbered fiscal year thereafter, the Secretary of the Interior shall submit to the Speaker of the United States House of Representatives and to the President of the United States Senate, an initial and revised (respectively) National Trails System plan. Such comprehensive plan shall indicate the scope and extent of a completed nationwide system of trails, to include (1) desirable nationally significant scenic and historic components which are considered necessary to complete a comprehensive national system, and (2) other trails which would balance out a complete and comprehensive nationwide system of trails. Such plan, and the periodic revisions thereto, shall be prepared in full consultation with the Secretary of Agriculture, the Governors of the various States, and the trails community.

NATIONAL RECREATION TRAILS

[information on national recreation trails has been deleted]

NATIONAL SCENIC AND NATIONAL HISTORIC TRAILS

SEC. 5. (a) National scenic and national historic trails shall be authorized and designated only by Act of Congress. There are hereby established the following National Scenic and National Historic Trails: [a listing of 19 trails has been deleted]

(b) The Secretary of the Interior, through the agency most likely to administer such trail, and the Secretary of Agriculture where lands administered by him are involved, shall make such additional studies as are herein or may hereafter be authorized by the Congress for the purpose of determining the feasibility and desirability of designating other trails as national scenic or national historic trails. Such studies shall be made in consultation with the heads of other Federal agencies administering lands through which such additional proposed trails would pass and in cooperation with interested interstate, State, and local governmental agencies, public and private organizations, and landowners and land users concerned. The feasibility of designating a trail shall be determined on the basis of an evaluation of whether or not it is physically possible to develop a trail along a route being studied, and whether the development of a trail would be financially feasible. The studies listed in subsection (c) of this section shall be completed and submitted to the Congress, with recommendations as to the suitability of trail designation, not later than three complete fiscal years from the date of enactment of their addition to this subsection, or from the date of enactment of this sentence, whichever is later. Such studies, when submitted, shall be printed as a House or Senate document, and shall include, but not be limited to:

- (1) the proposed route of such trail (including maps and illustrations);
- (2) the areas adjacent to such trails, to be utilized for scenic, historic, natural, cultural, or developmental, purposes;
- (3) the characteristics which, in the judgment of the appropriate Secretary, make the proposed trail worthy of designation as a national scenic or national historic trail; and in the case of national historic trails the report shall include the recommendation of the Secretary of the Interior's National Park System Advisory Board as to the national historic significance based on the criteria developed under the Historic Sites Act of 1935 (40 Stat. 666; 16 U.S.C. 461);
- (4) the current status of land ownership and current and potential use along the designated route;
- (5) the estimated cost of acquisition of lands or interest in lands, if any;
- (6) the plans for developing and maintaining the trail and the cost thereof;
- (7) the proposed Federal administering agency (which, in the case of a national scenic trail wholly or substantially within a national forest, shall be the Department of Agriculture);
- (8) the extent to which a State or its political subdivisions and public and private organizations might reasonably be expected to participate in acquiring the necessary lands and in the administration thereof;
- (9) the relative uses of the lands involved, including: the number of anticipated visitor-days for the entire length of, as well as for segments of, such trail; the number of months which such trail, or segments thereof, will be open for recreation purposes; the economic and social benefits which might accrue from alternate land uses; and the estimated man-years of civilian employment and expenditures expected for the purposes of maintenance, supervision, and regulation of such trail;

(10) the anticipated impact of public outdoor recreation use on the preservation of a proposed national historic trail and its related historic and archeological features and settings, including the measures proposed to ensure evaluation and preservation of the values that contribute to their national historic significance; and

(11) To qualify for designation as a national historic trail, a trail must meet all three of the following criteria:

(A) It must be a trail or route established by historic use and must be historically significant as a result of that use. The route need not currently exist as a discernible trail to qualify, but its location must be sufficiently known to permit evaluation of public recreation and historical interest potential. A designated trail should generally accurately follow the historic route, but may deviate somewhat on occasion of necessity to avoid difficult routing through subsequent development, or to provide some route variations offering a more pleasurable recreational experience. Such deviations shall be so noted on site. Trail segments no longer possible to travel by trail due to subsequent development as motorized transportation routes may be designated and marked onsite as segments which link to the historic trail.

(B) It must be of national significance with respect to any of several broad facets of American history, such as trade and commerce, exploration, migration and settlement, or military campaigns. To qualify as nationally significant, historic use of the trail must have had a far reaching effect on broad patterns of American culture. Trails significant in the history of native Americans may be included.

(C) It must have significant potential for public recreational use or historical interest based on historic interpretation and appreciation. The potential for such use is generally greater along roadless segments developed as historic trails and at historic sites associated with the trail. The presence of recreation potential not related to historic appreciation is not sufficient justification for designation under this category.

(c) The following routes shall be studied in accordance with the objectives outlined in subsection (b) of this section.

[a list of 34 trails has been deleted]

(35) Ala Kahakai Trail in the State of Hawaii, an ancient Hawaiian trail on the Island of Hawaii extending from the northern tip of the Island of Hawaii approximately 175 miles along the western and southern coasts to the northern boundary of Hawaii Volcanoes National Park.

[the names of two trails have been deleted]

(d) The Secretary charged with the administration of each respective trail shall, within one year of the date of the addition of any national scenic or national historic trail to the system, and within sixty days of the enactment of this sentence for the Appalachian and Pacific Crest National Scenic Trails, establish an advisory council for each such trail, each of which councils shall expire ten years from the date of its establishment, except that the Advisory Council established for the Iditarod Historic Trail shall expire twenty years from the date of its establishment. If the appropriate Secretary is unable to establish such an advisory council because of the lack of adequate public interest, the Secretary shall so advise the appropriate committees of the Congress. The appropriate Secretary shall

consult with such council from time to time with respect to matters relating to the trail, including the selection of rights-of-way, standards for the erection and maintenance of markers along the trail, and the administration of the trail. The members of each advisory council, which shall not exceed thirty-five in number, shall serve for a term of two years and without compensation as such, but the Secretary may pay, upon vouchers signed by the chairman of the council, the expenses reasonably incurred by the council and its members in carrying out their responsibilities under this section. Members of each council shall be appointed by the appropriate Secretary as follows:

(1) the head of each Federal department or independent agency administering lands through which the trail route passes, or his designee;

(2) a member appointed to represent each State through which the trail passes, and such appointments shall be made from recommendations of the Governors of such states;

(3) one or more members appointed to represent private organizations, including corporate and individual landowners and land users, which in the opinion of the Secretary, have an established and recognized interest in the trail, and such appointments shall be made from recommendations of the heads of such organizations: Provided, That the Appalachian Trail Conference shall be represented by a sufficient number of persons to represent the various sections of the country through which the Appalachian Trail passes; and

(4) the Secretary shall designate one member to be chairman and shall fill vacancies in the same manner as the original appointment.

(e) Within two complete fiscal years of the date of enactment of legislation designating a national scenic trail, except for the Continental Divide National Scenic Trail and the North Country National Scenic Trail, as part of the system, and within two complete fiscal years of the date of enactment of this subsection for the Pacific Crest and Appalachian Trails, the responsible Secretary shall, after full consultation with affected Federal land managing agencies, the Governors of the affected States, the relevant advisory council established pursuant to section 5(d), and the Appalachian Trail Conference in the case of the Appalachian Trail, submit to the Committee on Interior and Insular Affairs of the House of Representatives and the Committee on Energy and Natural Resources of the Senate, a comprehensive plan for the acquisition, management, development, and use of the trail, including but not limited to, the following items:

(1) specific objectives and practices to be observed in the management of the trail, including the identification of all significant natural, historical, and cultural resources to be preserved (along with high potential historic sites and high potential route segments in the case of national historic trails), details of anticipated cooperative agreements to be consummated with other entities, and an identified carrying capacity of the trail and a plan for its implementation;

(2) an acquisition or protection plan, by fiscal year, for all lands to be acquired by fee title or lesser interest, along with detailed explanation of anticipated necessary cooperative agreements for any lands not to be acquired; and

(3) general and site-specific development plans including anticipated costs,

(f) Within two complete fiscal years of the date of enactment of legislation designating a national historic trail or the Continental Divide National Scenic Trail or the North Country National Scenic Trail as part of the system, the responsible Secretary shall, after

full consultation with affected Federal land managing agencies, the Governors of the affected States, and the relevant Advisory Council established pursuant to section 5(d) of this Act, submit to the Committee on Interior and Insular Affairs of the House of Representatives and the Committee on Energy and Natural Resources of the Senate, a comprehensive plan for the management, and use of the trail, including but not limited to, the following items:

(1) specific objectives and practices to be observed in the management of the trail, including the identification of all significant natural, historical, and cultural resources to be preserved, details of any anticipated cooperative agreements to be consummated with State and local government agencies or private interests, and for national scenic or national historic trails an identified carrying capacity of the trail and a plan for its implementation;

(2) the process to be followed by the appropriate Secretary to implement the marking requirements established in section 7(c) of this Act;

(3) a protection plan for any high potential historic sites or high potential route segments; and

(4) general and site-specific development plans, including anticipated costs.

CONNECTING AND SIDE TRAILS

[information on connecting and side trails has been deleted]

ADMINISTRATION AND DEVELOPMENT

SEC. 7. (a)(1)(A) The Secretary charged with the overall administration of a trail pursuant to section 5(a) shall, in administering and managing the trail, consult with the heads of all other affected State and Federal agencies. Nothing contained in this Act shall be deemed to transfer among Federal agencies any management responsibilities established under any other law for federally administered lands which are components of the National Trails System. Any transfer of management responsibilities may be carried out between the Secretary of the Interior and the Secretary of Agriculture only as provided under subparagraph (B).

(B) The Secretary charged with the overall administration of any trail pursuant to section 5(a) may transfer management of any specified trail segment of such trail to the other appropriate Secretary pursuant to a joint memorandum of agreement containing such terms and conditions as the Secretaries consider most appropriate to accomplish the purposes of this Act. During any period in which management responsibilities for any trail segment are transferred under such an agreement, the management of any such segment shall be subject to the laws, rules, and regulations of the Secretary provided with the management authority under the agreement except to such extent as the agreement may otherwise expressly provide.

(2) Pursuant to section 5(a), the appropriate Secretary shall select the rights-of-way for national scenic and national historic trails and shall publish notice thereof of the availability of appropriate maps or descriptions in the Federal Register; Provided, That in selecting the rights-of-way full consideration shall be given to minimizing the

adverse effects upon the adjacent landowner or user and his operation. Development and management of each segment of the National Trails System shall be designed to harmonize with and complement any established multiple-use plans for the specific area in order to insure continued maximum benefits from the land. The location and width of such rights-of-way across Federal lands under the jurisdiction of another Federal agency shall be by agreement between the head of that agency and the appropriate Secretary. In selecting rights-of-way for trail purposes, the Secretary shall obtain the advice and assistance of the States, local governments, private organizations, and landowners and land users concerned.

(b) After publication of notice of the availability of appropriate maps or descriptions in the Federal Register, the Secretary charged with the administration of a national scenic or national historic trail may relocate segments of a national scenic or national historic trail right-of-way, with the concurrence of the head of the Federal agency having jurisdiction over the lands involved, upon a determination that: (i) Such a relocation is necessary to preserve the purposes for which the trail was established, or (ii) the relocation is necessary to promote a sound land management program in accordance with established multiple-use principles: Provided, That a substantial relocation of the rights-of-way for such trail shall be by Act of Congress.

(c) National scenic or national historic trails may contain campsites, shelters, and related-public-use facilities. Other uses along the trail, which will not substantially interfere with the nature and purposes of the trail, may be permitted by the Secretary charged with the administration of the trail. Reasonable efforts shall be made to provide sufficient access opportunities to such trails and, to the extent practicable, efforts be made to avoid activities incompatible with the purposes for which such trails were established. The use of motorized vehicles by the general public along any national scenic trail shall be prohibited and nothing in this Act shall be construed as authorizing the use of motorized vehicles within the natural and historical areas of the national park system, the national wildlife refuge system, the national wilderness preservation system where they are presently prohibited or on other Federal lands where trails are designated as being closed to such use by the appropriate Secretary: Provided, That the Secretary charged with the administration of such trail shall establish regulations which shall authorize the use of motorized vehicles when, in his judgment, such vehicles are necessary to meet emergencies or to enable adjacent landowners or land users to have reasonable access to their lands or timber rights: Provided further, That private lands included in the national recreation, national scenic, or national historic trails by cooperative agreement of a landowner shall not preclude such owner from using motorized vehicles on or across such trails or adjacent lands from time to time in accordance with regulations to be established by the appropriate Secretary. Where a national historic trail follows existing public roads, developed rights-of-way or waterways, and similar features of man's nonhistorically related development, approximating the original location of a historic route, such segments may be marked to facilitate retracement of the historic route, and where a national historic trail parallels an existing public road, such road may be marked to commemorate the historic route. Other uses along the historic trails and the Continental Divide National Scenic Trail, which will not substantially interfere with the nature and purposes of the trail, and which, at the time of designation, are allowed by administrative regulations, including the use of motorized vehicles, shall be permitted by the Secretary charged with administration of the trail. The Secretary of the Interior and the Secretary of Agriculture, in

consultation with appropriate governmental agencies and public and private organizations, shall establish a uniform marker, including thereon an appropriate and distinctive symbol for each national recreation, national scenic, and national historic trail. Where the trails cross lands administered by Federal agencies such markers shall be erected at appropriate points along the trails and maintained by the Federal agency administering the trail in accordance with standards established by the appropriate Secretary and where the trails cross non-Federal lands, in accordance with written cooperative agreements, the appropriate Secretary shall provide such uniform markers to cooperating agencies and shall require such agencies to erect and maintain them in accordance with the standards established. The appropriate Secretary may also provide for trail interpretation sites, which shall be located at historic sites along the route of any national scenic or national historic trail, in order to present information to the public about the trail, at the lowest possible cost, with emphasis on the portion of the trail passing through the State in which the site is located. Wherever possible, the sites shall be maintained by a State agency under a cooperative agreement between the appropriate Secretary and the State agency.

(d) Within the exterior boundaries of areas under their administration that are included in the right-of-way selected for a national recreation, national scenic, or national historic trail, the heads of Federal agencies may use lands for trail purposes and may acquire lands or interests in lands by written cooperative agreement, donation, purchase with donated or appropriated funds or exchange.

(e) Where the lands included in a national scenic or national historic trail right-of-way are outside of the exterior boundaries of federally administered areas, the Secretary charged with the administration of such trail shall encourage the States or local governments involved (1) to enter into written cooperative agreements with landowners, private organizations, and individuals to provide the necessary trail right-of-way, or (2) to acquire such lands or interests therein to be utilized as segments of the national scenic or national historic trail: Provided, That if the State or local governments fail to enter into such written cooperative agreements or to acquire such lands or interests therein after notice of the selection of the right-of-way is published, the appropriate Secretary, may (i) enter into such agreements with landowners, States, local governments, private organizations, and individuals for the use of lands for trail purposes, or (ii) acquire private lands or interests therein by donation, purchase with donated or appropriated funds or exchange in accordance with the provisions of subsection (f) of this section: Provided further, That the appropriate Secretary may acquire lands or interests therein from local governments or governmental corporations with the consent of such entities. The lands involved in such rights-of-way should be acquired in fee, if other methods of public control are not sufficient to assure their use for the purpose for which they are acquired: Provided, That if the Secretary charged with the administration of such trail permanently relocates the right-of-way and disposes of all title or interest in the land, the original owner, or his heirs or assigns, shall be offered, by notice given at the former owner's last known address, the right of first refusal at the fair market price.

(f)(1) The Secretary of the Interior, in the exercise of his exchange authority, may accept title to any non-Federal property within the right-of-way and in exchange therefor he may convey to the grantor of such property any federally owned property under his jurisdiction which is located in the State wherein such property is located and which he classifies as suitable for exchange or other disposal. The values of the properties so

exchanged either shall be approximately equal, or if they are not approximately equal the values shall be equalized by the payment of cash to the grantor or to the Secretary as the circumstances require. The Secretary of Agriculture, in the exercise of his exchange authority, may utilize authorities and procedures available to him in connection with exchanges of national forest lands.

(2) In acquiring lands or interests therein for a National Scenic or Historic Trail, the appropriate Secretary may, with consent of a landowner, acquire whole tracts notwithstanding that parts of such tracts may lie outside the area of trail acquisition. In furtherance of the purposes of this act, lands so acquired outside the area of trail acquisition may be exchanged for any non-Federal lands or interests therein within the trail right-of-way, or disposed of in accordance with such procedures or regulations as the appropriate Secretary shall prescribe, including: (i) provisions for conveyance of such acquired lands or interests therein at not less than fair market value to the highest bidder, and (ii) provisions for allowing the last owners of record a right to purchase said acquired lands or interests therein upon payment or agreement to pay an amount equal to the highest bid price. For lands designated for exchange or disposal, the appropriate Secretary may convey these lands with any reservations or covenants deemed desirable to further the purposes of this Act. The proceeds from any disposal shall be credited to the appropriation bearing the costs of land acquisition for the affected trail.

(g) The appropriate Secretary may utilize condemnation proceedings without the consent of the owner to acquire private lands or interests, therein pursuant to this section only in cases where, in his judgment, all reasonable efforts to acquire such lands or interest therein by negotiation have failed, and in such cases he shall acquire only such title as, in his judgment, is reasonably necessary to provide passage across such lands: Provided, That condemnation proceedings may not be utilized to acquire fee title or lesser interests to more than an average of one hundred and twenty-five acres per mile. Money appropriated for Federal purposes from the land and water conservation fund shall, without prejudice to appropriations from other sources, be available to Federal departments for the acquisition of lands or interests in lands for the purposes of this Act. For national historic trails, direct Federal acquisition for trail purposes shall be limited to those areas indicated by the study report or by the comprehensive plan as high potential route segments or high potential historic sites. Except for designated protected components of the trail, no land or site located along a designated national historic trail or along the Continental Divide National Scenic Trail shall be subject to the provisions of section 4(f) of the Department of Transportation Act (49 U.S.C. 1653(f)) unless such land or site is deemed to be of historical significance under appropriate historical site criteria such as those for the National Register of Historic Places.

(h)(1) The Secretary charged with the administration of a national recreation, national scenic, or national historic trail shall provide for the development and maintenance of such trails within federally administered areas and shall cooperate with and encourage the States to operate, develop, and maintain portions of such trails which are located outside the boundaries of federally administered areas. When deemed to be in the public interest, such Secretary may enter written cooperative agreements with the States or their political subdivisions, landowners, private organizations, or individuals to operate, develop, and maintain any portion of such a trail either within or outside a federally administered area. Such agreements may include provisions for limited financial

assistance to encourage participation in the acquisition, protection, operation, development, or maintenance of such trails, provisions providing volunteer in the park or volunteer in the forest status (in accordance with the Volunteers in the Parks Act of 1969 and the Volunteers in the Forests Act of 1972) to individuals, private organizations, or landowners participating in such activities, or provisions of both types. The appropriate Secretary shall also initiate consultations with affected States and their political subdivisions to encourage-

(A) the development and implementation by such entities of appropriate measures to protect private landowners from trespass resulting from trail use and from unreasonable personal liability and property damage caused by trail use, and

(B) the development and implementation by such entities of provisions for land practices, compatible with the purposes of this Act, for property within or adjacent to trail rights-of-way. After consulting with States and their political subdivisions under the preceding sentence, the Secretary may provide assistance to such entities under appropriate cooperative agreements in the manner provided by this subsection.

(2) Whenever the Secretary of the Interior makes any conveyance of land under any of the public land laws, he may reserve a right-of-way for trails to the extent he deems necessary to carry out the purposes of this Act.

(i) The appropriate Secretary, with the concurrence of the heads of any other Federal agencies administering lands through which a national recreation, national scenic, or national historic trail passes, and after consultation with the States, local governments, and organizations concerned, may issue regulations, which may be revised from time to time, governing the use, protection, management, development, and administration of trails of the national trails system. In order to maintain good conduct on and along the trails located within federally administered areas and to provide for the proper government and protection of such trails, the Secretary of the Interior and the Secretary of Agriculture shall prescribe and publish such uniform regulations as they deem necessary and any person who violates such regulations shall be guilty of a misdemeanor, and may be punished by a fine of not more \$500, or by imprisonment not exceeding six months, or by both such fine and imprisonment. The Secretary responsible for the administration of any segment of any component of the National Trails System (as determined in a manner consistent with subsection (a)(1) of this section) may also utilize authorities related to units of the national park system or the national forest system, as the case may be, in carrying out his administrative responsibilities for such component.

(j) Potential trail uses allowed on designated components of the national trails system may include, but are not limited to, the following: bicycling, cross-country skiing, day hiking, equestrian activities, jogging or similar fitness activities, trail biking, overnight and long-distance backpacking, snowmobiling, and surface water and underwater activities. Vehicles which may be permitted on certain trails may include, but need not be limited to, motorcycles, bicycles, four-wheel drive or all-terrain off-road vehicles. In addition, trail access for handicapped individuals may be provided. The provisions of this subsection shall not supersede any other provisions of this Act or other Federal laws, or any state or local laws.

(k) For the conservation purpose of preserving or enhancing the recreational, scenic, natural, or historical values of components of the national trails system, and

environs thereof as determined by the appropriate Secretary, landowners are authorized to donate or otherwise convey qualified real property interests to qualified organizations consistent with section 170(h)(3) of the Internal Revenue Code of 1954, including, but not limited to, right-of-way, open space, scenic, or conservation easements, without regard to any limitation on the nature of the estate or interest otherwise transferable within the jurisdiction where the land is located. The conveyance of any such interest in land in accordance with this subsection shall be deemed to further a Federal conservation policy and yield a significant public benefit for purposes of section 6 of Public Law 96-541.

STATE AND METROPOLITAN AREA TRAILS

[information on state and metropolitan area trails is deleted]

RIGHTS-OF-WAY AND OTHER PROPERTIES

SEC. 9. (a) The Secretary of the Interior or the Secretary of Agriculture as the case may be, may grant easements and rights-of-way upon, over, under, across, or along any component of the national trails system in accordance with the laws applicable to the national park system and the national forest system, respectively: **Provided**, That any conditions contained in such easements and rights-of-way shall be related to the policy and purposes of this Act.

(b) The Department of Defense, the Department of Transportation, the Interstate Commerce Commission, the Federal Communications Commission, the Federal Power Commission, and other Federal agencies having jurisdiction or control over or information concerning the use, abandonment, or disposition of roadways, utility rights-of-way, or other properties which may be suitable for the purpose of improving or expanding the national trails system shall cooperate with the Secretary of the Interior and the Secretary of Agriculture in order to assure, to the extent practicable, that any such properties having values suitable for trail purposes may be made available for such use.

(c) Commencing upon the date of enactment of this subsection, any and all right, title, interest, and estate of the United States in all rights-of-way of the type described in the Act of March 8, 1922 (43 U.S.C. 912), shall remain in the United States upon the abandonment or forfeiture of such rights-of-way, or portions thereof, except to the extent that any such right-of-way, or portion thereof, is embraced within a public highway no later than one year after a determination of abandonment or forfeiture, as provided under such Act.

(d)(1) All rights-of-way, or portions thereof, retained by the United States pursuant to subsection (c) which are located within the boundaries of a conservation system unit or a National Forest shall be added to and incorporated within such unit or National Forest and managed in accordance with applicable provisions of law, including this Act.

(2) All such retained rights-of-way, or portions thereof, which are located outside the boundaries of a conservation system unit or a National Forest but adjacent to or contiguous with any portion of the public lands shall be managed pursuant to the Federal Land Policy and Management Act of 1976 and other applicable law, including this section.

(3) All such retained rights-of-way, or portions thereof, which are located outside

the boundaries of a conservation system unit or National Forest which the Secretary of the Interior determines suitable for use as a public recreational trail or other recreational purposes shall be managed by the Secretary for such uses, as well as for such other uses as the Secretary determines to be appropriate pursuant to applicable laws, as long as such uses do not preclude trail use.

(e)(1) The Secretary of the Interior is authorized where appropriate to release and quitclaim to a unit of government or to another entity meeting the requirements of this subsection any and all right, title, and interest in the surface estate of any portion of any right-of-way to the extent any such right, title, and interest was retained by the United States pursuant to subsection (c), if such portion is not located within the boundaries of any conservation system unit or National Forest. Such release and quitclaim shall be made only in response to an application therefor by a unit of State or local government or another entity which the Secretary of the Interior determines to be legally and financially qualified to manage the relevant portion for public recreational purposes. Upon receipt of such an application, the Secretary shall publish a notice concerning such application in a newspaper of general circulation in the area where the relevant portion is located. Such release and quitclaim shall be on the following conditions:

(A) If such unit or entity attempts to sell, convey, or otherwise transfer such right, title, or interest or attempts to permit the use of any part of such portion for any purpose incompatible with its use for public recreation, then any and all right, title, and interest released and quitclaimed by the Secretary pursuant to this subsection shall revert to the United States.

(B) Such unit or entity shall assume full responsibility and hold the United States harmless for any legal liability which might arise with respect to the transfer, possession, use, release, or quitclaim of such right-of-way.

(C) Notwithstanding any other provision of law, the United States shall be under no duty to inspect such portion prior to such release and quitclaim, and shall incur no legal liability with respect to any hazard or any unsafe condition existing on such portion at the time of such release and quitclaim.

(2) The Secretary is authorized to sell any portion of a right-of-way retained by the United States pursuant to subsection (c) located outside the boundaries of a conservation system unit or National Forest if any such portion is-

(A) not adjacent to or contiguous with any portion of the public lands; or

(B) determined by the Secretary, pursuant to the disposal criteria established by section 203 of the Federal Land Policy and Management Act of 1976, to be suitable for sale.

Prior to conducting any such sale, the Secretary shall take appropriate steps to afford a unit of State or local government or any other entity an opportunity to seek to obtain such portion pursuant to paragraph (1) of this subsection.

(3) All proceeds from sales of such retained rights of way shall be deposited into the Treasury of the United States and credited to the Land and Water Conservation Fund as provided in section 2 of the Land and Water Conservation Fund Act of 1965.

(4) The Secretary of the Interior shall annually report to the Congress the total proceeds from sales under paragraph (2) during the preceding fiscal year. Such report shall be included in the President's annual budget submitted to the Congress.

(f) As used in this section-

(1) The term "conservation system unit" has the same meaning given such term in the Alaska National Interest Lands Conservation Act (Public Law 96-487; 94 Stat. 2371 et seq.), except that such term shall also include units outside Alaska.

(2) The term "public lands" has the same meaning given such term in the Federal Land Policy and Management Act of 1976.

AUTHORIZATION OF APPROPRIATIONS

SEC. 10. (a)(1) There are hereby authorized to be appropriated for the acquisition of lands or interests in lands not more than \$5,000,000 for the Appalachian National Scenic Trail and not more than \$500,000 for the Pacific Crest National Scenic Trail. From the appropriations authorized for fiscal year 1979 and succeeding fiscal years pursuant to the Land and Water Conservation Fund Act (78 Stat. 897), as amended, not more than the following amounts may be expended for the acquisition of lands and interests in lands authorized to be acquired pursuant to the provisions of this Act: for the Appalachian National Scenic Trail, not to exceed \$30,000,000 for fiscal year 1979, \$30,000,000 for fiscal year 1980, and \$30,000,000 for fiscal year 1981, except that the difference between the foregoing amounts and the actual appropriations in any one fiscal year shall be available for appropriation in subsequent fiscal years.

(2) It is the express intent of the Congress that the Secretary should substantially complete the land acquisition program necessary to insure the protection of the Appalachian Trail within three complete fiscal years following the date of enactment of this sentence. Until the entire acquisition program is completed, he shall transmit in writing at the close of each fiscal year the following information to the Committee on Energy and Natural Resources of the Senate and the Committee on Interior and Insular Affairs of the House of Representatives:

(A) the amount of land acquired during the fiscal year and the amount expended therefor;

(B) the estimated amount of land remaining to be acquired; and

(C) the amount of land planned for acquisition in the ensuing fiscal year and the estimated cost thereof.

(b) For the purposes of Public Law 95-42 (91 Stat. 211), the lands and interests therein acquired pursuant to this section shall be deemed to qualify for funding under the provisions of section 1, clause 2, of said Act.

(c)(1) There is hereby authorized to be appropriated such sums as may be necessary to implement the provisions of this Act relating to the trails designated by paragraphs 5(a)(3), (4), (5), (6), (7), (8), (9) and (10): Provided, That no such funds are authorized to be appropriated prior to October 1, 1978: And provided further, That notwithstanding any other provisions of this Act or any other provisions of law, no funds may be expended by Federal agencies for the acquisition of lands or interests in lands outside the exterior boundaries of existing Federal areas for the Continental Divide National Scenic Trail, the North Country National Scenic Trail, The Ice Age National Scenic Trail, the Oregon National Historic Trail, the Mormon Pioneer National Historic Trail, the Lewis and Clark National Historic Trail, and the Iditarod National Historic Trail, except that

funds may be expended for the acquisition of lands or interests therein for the purpose of providing for one trail interpretation site, as described in section 7(c), along with such trail in each State crossed by the trail.

(2) Except as otherwise provided in this Act, there is authorized to be appropriated such sums as may be necessary to implement the provisions of this Act relating to the trails designated by section 5(a). Not more than \$500,000 may be appropriated for the purposes of acquisition of land and interests therein for the trail designated by section 5(a)(12) of this Act, and not more than \$2,000,000 may be appropriated for the purposes of the development of such trail. The administering agency for the trail shall encourage volunteer trail groups to participate in the development of the trail.

VOLUNTEER TRAILS ASSISTANCE

SEC. 11. (a)(1) In addition to the cooperative agreement and other authorities contained in this Act, the Secretary of the Interior, the Secretary of Agriculture, and the head of any Federal agency administering Federal lands, are authorized to encourage volunteers and volunteer organizations to plan, develop, maintain, and manage, where appropriate, trails throughout the Nation.

(2) Wherever appropriate in furtherance of the purposes of this Act, the Secretaries are authorized and encouraged to utilize the Volunteers in the Parks Act of 1969, the Volunteers in the Forests Act of 1972, and section 6 of the Land and Water Conservation Fund Act of 1965 (relating to the development of Statewide Comprehensive Outdoor Recreation Plans).

(b) Each Secretary or the head of any Federal land managing agency, may assist volunteers and volunteer organizations in planning, developing, maintaining, and managing trails. Volunteer work may include, but need not be limited to-

(1) planning, developing, maintaining, or managing (A) trails which are components of the national trails system, or (B) trails which, if so developed and maintained, could qualify for designation as components of the national trails system; or

(2) operating programs to organize and supervise volunteer trail building efforts with respect to the trails referred to in paragraph (1), conducting trail-related research projects, or providing education and training to volunteers on methods of trails planning, construction, and maintenance.

(c) The appropriate Secretary or the head of any Federal land managing agency may utilize and make available Federal facilities, equipment, tools, and technical assistance to volunteers and volunteer organizations, subject to such limitations and restrictions as the appropriate Secretary or the head of any Federal land managing agency deems necessary or desirable.

SEC. 12. As used in this Act:

(1) The term "high potential historic sites" means those historic sites related to the route, or sites in close proximity thereto, which provide opportunity to interpret the historic significance of the trail during the period of its major use. Criteria for consideration as high potential sites include historic significance, presence of visible historic remnants, scenic quality, and relative freedom from intrusion.

(2) The term “high potential route segments” means those segments of a trail which would afford high quality recreation experience in a portion of the route having greater than average scenic values or affording an opportunity to vicariously share the experience of the original users of a historic route.

(3) The term “State” means each of the several States of the United States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Trust Territory of the Pacific Islands, the Northern Mariana Islands, and any other territory or possession of the United States.

(4) The term “without expense to the United States” means that no funds may be expended by Federal agencies for the development of trail related facilities or for the acquisition of lands or interest in lands outside the exterior boundaries of Federal areas. For the purposes of the preceding sentence, amounts made available to any State or political subdivision under the Land and Water Conservation Fund Act of 1965 or any other provision of law shall not be treated as an expense to the United States.

— END —

PUBLIC LAW 102-461

H.R. 6184

One Hundred Second Congress of the United States of America

AT THE SECOND SESSION

*Begun and held at the City of Washington on Friday, the third day of January,
one thousand nine hundred and ninety-two*

An Act

To amend the National Trails System Act to designate the American Discovery Trail for study to determine the feasibility and desirability of the designation as a national trail.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. DESIGNATION OF AMERICAN DISCOVERY TRAIL AS A STUDY TRAIL.

Section 5(c) of the National Trails System Act (16 U.S.C. 1244(c)) is amended by adding at the end the following new paragraph:

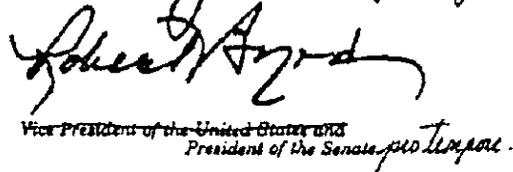
"(34) American Discovery Trail, extending from Pt. Reyes, California, across the United States through Nevada, Utah, Colorado, Kansas, Nebraska, Missouri, Iowa, Illinois, Indiana, Ohio, West Virginia, Maryland, and the District of Columbia, to Cape Hanlopen State Park, Delaware; to include in the central United States a northern route through Colorado, Nebraska, Iowa, Illinois, and Indiana and a southern route through Colorado, Kansas, Missouri, Illinois, and Indiana."

SEC. 2. DESIGNATION OF ALA KAHAKAI TRAIL AS A STUDY TRAIL.

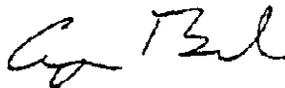
Section 5(c) of the National Trails System Act (16 U.S.C. 1244(c)) is further amended by adding at the end the following new paragraph:

"(35) Ala Kahakai Trail in the State of Hawaii, an ancient Hawaiian trail on the Island of Hawaii extending from the northern tip of the Island of Hawaii approximately 175 miles along the western and southern coasts to the northern boundary of Hawaii Volcanoes National Park."


Speaker of the House of Representatives


Vice President of the United States and
President of the Senate pro tempore

APPROVED
OCT 23 1992



STATEMENT OF THE HONORABLE DANIEL K. AKAKA

“AMENDING THE NATIONAL TRAILS SYSTEM ACT” UNITED STATES SENATE

Mr. President, today Senator Inouye and I are introducing legislation designed to recognize the importance of the ancient trails of Hawaii.

The National Trails System Act was established to provide for the ever-increasing outdoor recreation needs of our population and to promote the enjoyment and appreciation of the open-air and historic resources of the Nation. Under the Act, eight National Historic Scenic and nine National Historic Trails have been established and 33 trails have been or are being studied for inclusion in the system. Altogether more than 29,000 miles of trails have been designated at National Scenic or Historic trails. However, not one mile of trail in Hawaii has been established or designated for study.

The historic trails of Hawaii long served the people and *ali'i*, or ruling leaders, for transportation, communication and trade. Although the canoe was a principal method of travel in ancient Hawaii, human survival depended on extensive cross country trails that enabled gathering of food and water, and harvesting of materials needed for shelter, clothing, medical care, tools, canoe building, religious observances and much more. These ancient trails served Hawaii for more than a thousand years. Most islands had an *alaloa*, or perimeter, trail close to the shoreline as well as *mauka-makai* trails, extending from seashore to the mountains. Within each *ahupua'a*, a land tract running from the shoreline to the interior, the trails were used for the trade of products gathered from the sea for those produced from the land.

The ruling monarchs of Hawaii depended on these trails for communication through the use of runners. Runners were not only the bearers of information and materials but, during the years of Kamehameha, were also spearfighters. Cross-country running on the trails was associated with sporting endeavors upon which wagers were made. These island trails were important to the culture of Hawaii and are a permanent mark upon the land testifying to Hawaii's past.

Just as the markings of Conestoga wagons can still be seen on pioneer trails throughout the Plains states, the impressions made by my forebearers can still be seen in the earth and lava rock of these trails.

The ancient trails of Hawaii urgently need protection. Land development and the construction of modern day transportation systems have destroyed many of these ancient trails. Those that remain are in danger of being destroyed by future development.

In 1988, the State of Hawaii recognized the perils to the remaining trails and the need for a comprehensive state-wide trail and access system. In response, the State of Hawaii instituted the *Nā Ala Hele* Program to develop and improve mountain and shoreline trails and access while helping to conserve Hawaii's environment and cultural heritage. The opportunity exists to study at least one of the trails identified by the *Nā Ala Hele Program* for designation as a national scenic or historic trail. One of the best preserved ancient trails, but also highly threatened, is the Ala Kahakai, or the "Trail by the Sea", on the Island of Hawaii.

My proposal would designate the Ala Kahakai as a shoreline trail extending from the northern tip of Hawaii Island approximately 175 miles along the western and southern

coasts to the northern boundary of Hawaii Volcanoes National Park. Sections of the ancient coastal alāloa trail are in good condition, but some segments have been destroyed by wave action, four-wheel drive vehicles, land-clearing activities and lava flows. The Trails and Access Program of Hawaii's Department of Land Natural and Resources Forestry and Wildlife Division has prepared a detailed description of the proposed study route. I ask unanimous consent that the description be reprinted in full at the conclusion of my remarks. Let me briefly describe just a few of the historic and scenic highlights along the route.

The trail route passes through four National Parks and several State parks. The best known of these is Hawaii Volcanoes National Park and the others are of historical and cultural significance to the people of Hawaii and this nation. Pu'ukoholā Heiau National Historic Site contains the John Young homesite and the Pu'ukoholā Heiau. John Young was a British sailor who became a trusted advisor of Kamehameha I. The Pu'ukoholā Heiau which was a *luakini*, or human sacrificial temple, was completed in 1791 and dedicated to the war god, Kuka'ilimoku, by Kamehameha through the sacrifice of his cousin and principal rival for supremacy of Hawaii Island. With his cousin's death, Kamehameha ruled the island. Another of the Historical Parks is Pu'uhonua o Hōnaunau National Historic Park, which is an ancient place of refuge where until 1819 the vanquished warriors and kapu or taboo breakers escaped death if they reached it ahead of their pursuers.

The route of the trail is also extremely scenic and provides unobstructed ocean-to-mountain vistas. The trail traverses or passes adjacent to all of the island's white sand beaches. Lava flows are visible along the majority of the trail and the sea can be heard in the lava tubes under a hiker's feet. Behind some lava shores are small storm beaches and a few native plants such as the silver-gray-green *hinahina* and the large-leafed *noni*. The near-shore water is quite clear, in some areas, and brightly-colored fish are visible from the high shore.

Along the coast from 'Upolu Point to Kawaihae, an almost continuous string of fishing village ruins have been preserved by dry climate and isolation. This area was heavily populated in Kamehameha's time. Elsewhere along the route are petroglyphs, house sites, agricultural areas, heiau, salt pans, and fish ponds which provide evidence of past habitation and are of immense interest to archaeologists and Hawaiians intent upon re-discovering their heritage.

North of the long curve of palm-shaded beach that separates the ocean from the fishponds at Anaeho'omalū, there is Waiulua Bay with its brackish ponds. Many of the ponds are decoratively bright with orange and yellow algae and some of them contain mutated species that delight marine biologists.

In 1991, the American Hiking Society and *Backpacker* magazine listed the Ala Kahakai as threatened and encouraged preservation. The State of Hawaii recognizes the importance of this trail and is working diligently to preserve what remains and re-establish that which is gone. This trail deserves to be studied for inclusion in the National Trails System. The Federal Government should take action to preserve the historic trail which played a significant role in the development of Hawaii. The Federal Government, **through** the National Park Service, should work with the State of Hawaii in a spirit of cooperation to complete a study as required by the National Trails System Act. In completing the study, the National Park Service should look for innovative solutions to management

problems and not assume that the trail must be managed by the National Park Service. The designation of a trail as a part of the National Trails System and monetary assistance from the federal government should not preclude local or state management. Sharing of management with state and local governments is economically and politically advisable.

Mr. President, I urge my colleagues to support this legislation. I ask unanimous consent that the full text of my bill and the description of the route of the Ala Kahakai be printed in the Record.

HAWAII REVISED STATUTES
[CHAPTER 520
LANDOWNERS LIABILITY]

SECTION

- 520-1 PURPOSE
- 520-2 DEFINITIONS
- 520-3 DUTY OF CARE OF OWNER LIMITED
- 520-4 LIABILITY OF OWNER LIMITED
- 520-5 EXCEPTIONS TO LIMITATIONS
- 520-6 PERSONS USING LAND
- 520-7 RIGHTS
- 520-8 RULES AND REGULATIONS

[§520-1] Purpose. The purpose of this chapter is to encourage owners of land to make land and water areas available to the public for recreational purposes by limiting their liability toward persons entering thereon for such purposes. [L 1969, c 186, §1]

Case Notes

Cited. 557 F.2d 1308.

[§520-2] Definitions. As used in this chapter:

- (1) "Land" means land, roads, water, water courses, private ways and buildings, structures, and machinery or equipment when attached to realty, other than lands owned by the government.
- (2) "Owner" means the possessor of a fee interest, a tenant, lessee, occupant, or person in control of the premises.
- (3) "Recreational purpose" includes, but is not limited to, any of the following, or any combination thereof; hunting, fishing, swimming, boating, camping, picnicking, hiking, pleasure driving, nature study, water skiing, winter sports, and viewing or enjoying historical, archaeological, scenic, or scientific sites.
- (4) "Charge" means the admission price or fee asked in return for invitation or permission to enter or go upon the land.
- (5) "House guest" means any person specifically invited by the owner or a member of the owner's household to visit at the owner's home whether for dinner, or to a party, for conversation or any other similar purposes including for recreation, and include playmates of the owner's minor children. [L 1969, c 186, §2; am imp L 1984, c 90, §1]

[§520-3] Duty of care of owner limited. Except as specifically recognized by or provided in section 520-6, an owner of land owes no duty of care to keep the premises safe for entry or use by others for recreational purposes. Or to give any warning of a dangerous condition, use, structure, or activity on such premises to persons entering for such purposes. [L 1969, c 186, §3]

Case Notes

Section renders United States not liable under Federal Ton Claim Act. 723 F.2d 705

Hawaii Legal Reporter Citations

No duty. 79 HLR 79-0809; 80-1 HLR 800137.

§520-4 Liability of owner limited. Except as specifically recognized by or provided in section 520-6, an owner of land who either directly or indirectly invites or permits without charge any person to use such property for recreational purposes does not thereby:

- (1) Extend any assurance that the premises are safe for any purpose.
 - (2) Confer upon such person the legal status of an invitee or licensee to whom a duty of care is owed.
 - (3) Assume responsibility for or incur liability for any injury to person or property caused by an act of omission or commission of such persons.
- [L 1969, c 186, §4]

§520-5 Exceptions to limitations. Nothing in this chapter limits in any way any liability which otherwise exists:

- (1) For wilful or malicious failure to guard or warn against a dangerous condition, use, or structure which the owner knowingly creates or perpetuates and for wilful or malicious failure to guard or warn against a dangerous activity which the owner knowingly pursues or perpetuates.
- (2) For injury suffered in any case where the owner of land charges the person or persons who enter or go on the land for the recreational use thereof, except that in the case of land leased to the State or a political subdivision thereof, any consideration received by the owner for such lease shall not be deemed a charge within the meaning of this section.
- (3) For injuries suffered by a house guest while on the owner's premises, even though the injuries were incurred by the house guest while engaged in one or more of the activities designated in section 520-2(3). [L 1969, c 186, §5]

§520-6 Persons using land. Nothing in this chapter shall be construed to:

- (1) Create a duty of care or ground of liability for injury to persons or property.
- (2) Relieve any person using the land of another for recreational purposes from any obligation which the person may have in the absence of this chapter to exercise care in the person's use of such land and in the person's activities thereon, or from the legal consequences of failure to employ such care. [L 1969, c 186, §6; am imp L 1984, c 90, §1]

§520-7 Rights. No person shall gain any rights to any land by prescription or otherwise, as a result of any usage thereof for recreational purposes as provided in this chapter. [L 1969, c 186, §7]

Hawaii Legal Reporter Citations

Public prescriptive rights not barred. 80-2 HLR 800829.

§520-8 Rules and regulations. The department of land and natural resources shall make rules and regulations pursuant to chapter 91, as it deems necessary to carry out the purpose of this chapter. [L 1969, c 186, §8]

A BILL FOR AN ACT

COPY

RELATING TO LANDOWNERS' LIABILITY.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:

1 SECTION 1. Findings and purpose. The legislature finds
2 that encouraging the public to engage in recreational activities
3 makes for healthier citizens and allows everyone to enjoy
4 Hawaii's natural resources. In 1969, when the legislature
5 enacted chapter 520, Hawaii Revised Statutes, to encourage wider
6 access to lands and waters for hunting, fishing, and other
7 activities, the intent was to make access easier and limit
8 landowners' liability.

9 The purpose of this Act is to clarify the liability of an
10 owner of land so that a landowner whose land is being accessed in
11 order to reach property used for recreational purposes would also
12 have limited liability, where the access is required by the
13 county or state.

14 SECTION 2. Section 520-4, Hawaii Revised Statutes, is
15 amended to read as follows:

16 "[~~§~~520-4] Liability of owner limited. (a) Except as
17 specifically recognized by of provided in section 520-6, an owner
18 of land who either directly or indirectly invites or permits
19 without charge any person to use such property for recreational

1 purposes does not thereby:

2 (1) Extend any assurance that the premises are safe for any
3 purpose.

4 (2) Confer upon such ~~person~~ the legal status of an invitee
5 or licensee to whom a duty of care is owed.

6 (3) Assume responsibility for or incur liability for any
7 injury to person or property caused by an act of
8 omission or commission of such persons.

9 (b) An owner of land who is required or compelled to
10 provide access or parking for such access through or across the
11 owner's property because of state or county land use, zoning, or
12 planning law, ordinance, rule, ruling, or order, to reach
13 property used for recreational purposes, shall be afforded the
14 same Protection as to such access, including parking for such
15 access, as an owner of land who invites or permits any person to
16 use that owner's property for recreational purposes under
17 subsection (a).

18 SECTION 3. Statutory material to be repealed is bracketed.
19 New statutory material is underscored.

20 SECTION 4. This Act shall take effect upon its approval.

APPROVED BY THE
GOVERNOR ON

JUN 12 1996

SB2548 CD1 JDC

HAWAII REVISED STATUTES
[CHAPTER 198D]
HAWAII STATEWIDE TRAIL AND ACCESS SYSTEM

SECTION

- 198D-1 DEFINITIONS
- 198D-2 ESTABLISHMENT OF HAWAII STATEWIDE TRAIL AND ACCESS SYSTEM
- 198D-3 INVENTORY
- 198D-4 CLASSIFICATION
- 198D-5 IDENTIFICATION OF PROPOSED, POTENTIAL, AND NEEDED TRAILS AND ACCESSES
- 198D-6 REGULATION OF USE OF TRAILS AND ACCESSES
- 198D-7 EXAMINATION OF LEGAL ISSUES
- 198D-8 REQUEST TO ACQUIRE RIGHTS FOR PUBLIC USE OF ADDITIONAL TRAILS AND ACCESSES
- 198D-9 OTHER POWERS AND DUTIES OF DEPARTMENT
- 198D-10 LIMITATION ON CHAPTER'S PROVISIONS
- 198D-11 RULES

[§198D-1] Definitions. For the purpose of this chapter:

“Access” means an easement or way:

- (1) Over which the general public has the right to travel; and
- (2) Which is used by the general public or intended for use by the general public primarily to reach or depart a public beach, shore, park, trail, or other public recreational area.

It includes a lateral easement along the shoreline, coastline, or beach.

“Department” means the department of land and natural resources.

“Trail” means an identifiable linear course used primarily for or used to get a recreational, educational, or inspirational experience. It includes, but is not limited to:

- (1) A corridor trail, which is a designated route, segregated from a highway, providing a continuous linkage between or among major urban areas, fragmented accesses, and major trail areas;
- (2) A segment or connector trail, which is a designated route from one locale to another; and
- (3) A special use trail, which is a designated course for a special activity or function. [L 1988, c 236, pt of §2]

[§198D-2] Establishment of Hawaii statewide trail and access system.

There is established the Hawaii statewide trail and access system, to be known as Na Ala Hele. The Hawaii statewide trail and access system shall consist of all trails and accesses in the State. The department of land and natural resources shall plan, develop, acquire land or rights for public use of land, construct, and engage in coordination activities to implement the system, in accordance with this chapter. [L 1988, c 236, pt of §2]

§198D-3 Inventory. (a) The department shall establish, maintain, and amend, as required, an inventory of all trails and accesses in the State, whether wholly or partly on public or private lands and whether or not under the jurisdiction of the department, and a separate inventory of all trails and accesses to public hunting areas in the State. The inventories shall include:

- (1) Maps and lists of all trails and accesses;
- (2) Name and length of each trail or access;
- (3) The person or agency having management responsibility for each trail or access;
- (4) The predominant transportation mode for each trail or access;
- (5) The development standard, condition, and grade of each trail and access;
- (6) The description of amenities or other features on or in close proximity to each trail or access;
- (7) The status of availability to the general public of each trail or access; and
- (8) Other information for each trail or access deemed necessary or desirable by the department.

(b) The department shall publish and periodically update documents, which shall be available to the general public. The documents shall contain that portion of the inventories which include trails and accesses available for the use of the general public. The department may charge an appropriate fee for the documents and any updates. [L 1988, c 236, pt of §2; am L 1990, c 53, §1(1)]

§198D-4 Classification. The department shall classify each trail and access in the inventories according to the following

- (1) Function:
- (2) Type:
- (3) Theme:
- (4) Actual and desired use intensity; and
- (5) Any other classification deemed necessary or desirable by the department. [L 1988, c 236, pt of §2; am L 1990, c 53, §1(2)]

§198D-5 Identification of proposed, potential, and needed trails and accesses. (a) In addition to the inventories under section 198D-3, the department shall identify and maintain a listing of:

- (1) Proposed trails and accesses which may be opened to the public:
- (2) Potential expansions of trails and accesses:
- (3) Potential or desirable connectors between existing trail systems:
- (4) Public beach, shore, park, trail, and other recreational areas to which access is unavailable or inadequate: and
- (5) Trails and accesses to public hunting areas.

(b) The listing may be published in the inventories required under section 198D-3. [L 1988, c 236, pt of §2; am L 1990, c 53, §1(3)]

§198D-6 Regulation of use of trails and accesses. The department, by rule adopted in accordance with chapter 91, may regulate the use of trails and accesses under the department's jurisdiction. Regulation of the use of trails and accesses shall be established for the following purposes:

- (1) To preserve the integrity, condition, naturalness, or beauty of the trails or accesses;
- (2) To protect the public safety; or
- (3) To restrict or regulate public access to protected or endangered wildlife habitats, except for scientific or educational purposes. [L 1988, c 236, pt of §2; am L 1990, c 53, §1(4)]

[§198D-7] Examination of legal issues. The department, in consultation with the attorney general, shall examine legal issues relating to trails and accesses. The legal issues examined shall include:

- (1) Theories, options, and doctrines by which trails and accesses may be placed into or retained in public use;
- (2) The validity and feasibility of dedication requirements to obtain public use of trails and accesses;
- (3) The extent of liability exposure of the State, counties, and private landowners when allowing trails and accesses under their respective jurisdictions to be used by the general public; and
- (4) Strategies to reduce or limit the liability exposure of the State, counties, and private landowners in order to promote public use of trails and accesses under their respective jurisdictions which are closed to the general public. [L 1988, c 236, pt of §2]

[§198D-8] Request to acquire rights for public use of additional trails and accesses. The department may request the legislature for appropriations to acquire rights to trails and accesses which are closed to public use or which are necessary to effectuate the statewide trail and access system. [L 1988, c 236, pt of §2]

§198D-9 Other powers and duties of department. The department:

- (1) May **establish** signing and **design standards** for classifications of trails and accesses;
- (2) Shall establish advisory councils to **solicit advice** and **assistance** in **implementation** of the **statewide trail** and access system. **Appointment** of **members** to advisory councils shall be made by the department. If **established**, members of the advisory councils shall **serve** part-time and shall not be compensated for **official** duties performed. Advisory councils may be established on regional, islandwide, countywide, or **statewide** bases:
- (3) Shall **serve as the** centralized information agency for **matters** relating to the statewide **trail and** access system;
- (4) Shall **coordinate** its **activities** under **this** chapter, including its compilation of the inventories and **classifications** of trails and accesses, with other public agencies;
- (5) Shall **advise** and, when able, assist **other** public agencies in the **development, construction, operation,** maintenance, and **regulation of** trails and accesses under **their** jurisdiction;
- (6) Shall advocate before **the legislature,** governor, and public agencies the **implementation** of the statewide **trail** and access system; and
- (7) Shall submit an annual **report to the** governor and legislature on **activities** engaged in **under this chapter.** [L. 1988, c. 236, pt of §2; am L. 1990, c. 53, §1(5)]

[§198D-10] Limitation on chapter's provisions. (a) Nothing in this chapter shall be construed as conferring or imposing upon the department any rights, powers, and duties over:

- (1) Lands nor under its jurisdiction; or
- (2) The activities of other public agencies;

except if provided by other law or agreement.

(b) The designation as part of the statewide trail and access system of trails and accesses, the use to which the public has no rights, shall nor be construed as establishing public rights to use those trails and accesses. [L. 1988, c. 236, pt of §2]

[§198D-11] Rules. The department may adopt rules in accordance with chapter 9 for the purposes of this chapter. [L. 1988, c. 236, pt of §2]

A BILL FOR AN ACT

RELATING TO THE STATEWIDE TRAIL AND ACCESS SYSTEM.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:

1 SECTION 1. Chapter 198D, Hawaii Revised Statutes, is
2 amended by adding a new section to be appropriately designated
3 and to read as follows:

4 ~~§198D-~~ Agreements to defend and indemnify. (a) The
5 department may enter into agreements with owners of public or
6 private land to further the purposes of this chapter.
7 Agreements between the State and an owner may provide that the
8 State will defend the owner from claims made against the owner by
9 public users of the owner's land. These agreements may also
10 provide that the State will indemnify the owner for losses
11 incurred due to public use.

12 (b) The existence of an agreement does not allow an action
13 to be brought against the State. The State shall not be made a
14 party in any action solely because of the existence of an
15 agreement to defend or indemnify. Any action defended by the
16 State pursuant to an agreement shall be deemed an action against
17 the owner, and the State may assert all defenses available to the
18 owner.

1 {c) If the agreement provides Eor indemnification by the
2 State. no judgment shall be executed against an owner until the
3 legislature has reviewed and approved the judgment."

4 SECTION 2. New statutory material is underscored.

5 SECTION 3. This Act shall take effect upon its approval.

Approved by the JUN 12 1992
Governor on

COPY

BENJAMIN J. CAYETANO
GOVERNOR



RECEIVED

MARGERY S. BRONSTER
ATTORNEY GENERAL

JOHN W. ANDERSON
~~STEPHEN J. COLEMAN~~
FIRST DEPUTY ATTORNEY GENERAL

97 MAR 13 P 1:28

STATE OF HAWAII
DEPARTMENT OF THE ATTORNEY GENERAL
LAND/TRANSPORTATION DIVISION
ROOM 300, KEKUANAO'A BUILDING
465 SOUTH KING STREET
HONOLULU, HAWAII 96813

March 12, 1997

The Honorable Michael D. Wilson
Chairperson of the Board of Land
and Natural Resources
State of Hawaii
1151 Punchbowl Street
Honolulu, Hawaii 96809

Dear Mr. Wilson:

Re: **Kona Coast State Park: Ownership/Public Rights to Use the Ala Kahakai and Related Trails Located at Makalawena, North Kona, Hawaii, TMK:7-2-04:1**

This is in response to **your** January 16, 1997 memorandum requesting a legal opinion on whether the shoreline lateral trail, also known as the Ala Kahakai Trail, and the **mauka-makai** trail, also known as the **Makalawena-Akahipu'u** Trail, are public trails. Both trails are in the **Kona** area of the Big Island.

Answer

Briefly, our answer is that both trails are public trails. As such they are under the jurisdiction of the Board of Land and Natural Resources (**BLNR**) as provided in § 264-1(b), Hawaii Revised Statutes (HRS).

Statement of Relevant Facts

The **Kona** Coast Regional State Park, under the jurisdiction of the Division of State Parks of the Department of Land and Natural Resources (**DLNR**), contains two sections, the **Kua** Bay section and the Mahai'ula section, both acquired by the State through condemnation action. The trails that are the subject of this request are between the **Kua** Bay and Mahai'ula sections and traverse the ahupua'a of Makalawena which is owned by Bishop Estate.

The Honorable Michael D. Wilson
March 12, 1997
Page 2

Mahoe Collins, a land division abstractor in **DLNR**, after a thorough review of records of title, made the following findings and conclusions with respect to both the coastal trail and the mauka-makai trail in his October 20, 1994 title report:

Pursuant to the Mahele of 1848 **Kamehameha** III surrendered all of his interest in and to the subject ahupuaa of **Makalawena** unto the chiefess **Akahi** (Mahele Book, page 36). By Land Commission Award No. **5368:3** dated March 29, 1855 and Royal **Patent** No. 7731, dated June 4, 1884, the chiefess **Akahi** perfected her title to **Makalawena**. Said Land Commission Award, granted the subject land by name only and reserved the rights of native **tenants**.

By Order of the Supreme Court under Probate No. 82 entitled, 'In the Matter of The Estate of **Akahi**, Deceased Testate', the Ahupuaa of **Makalawena**, besides other lands, was distributed by devise to **Bernice** Pauahi Bishop.

Under date of May 10, 1883, the boundaries and area of **Makalawena** were confirmed and certified by Boundary Certificate No. 152. Said ahupuaa contained 656 acres.

By the will of **Bernice** Pauahi Bishop under Supreme Court Probate No. 2425, the Ahupuaa of **Makalawena**, besides other lands, was devised and bequeathed to the Trustees of the Estate on March 4, 1885. **Makalawena**, besides other lands, at this memo is still owned by the **Bernice** Pauahi Bishop Estate.

* * *

... Registered Map No. 1280, by J. S. Emerson dated 1888, delineates a mauka-makai trail through **Makalawena** from **Akahipuu** to the shoreline and continuing north to **Awakee**.

In prehistoric Hawaii, the annual season of the **Makahiki** prescribed a ritual coastal circuit of the island made by priests, chiefs and commoners.

Dr. Kenneth Emory of the Bishop Museum states that 'the path followed by the **Makahiki** gods was the coastal route along the island. This would have been the major trail along the coast [the subject trail being a **portion**

The Honorable Michael D. Wilson
March 12, 1997
Page 3

thereof] . . . each island had its coastal Makahiki trail.' (Friends of William Ellis Trail. Proposal For the Establishment of the William Ellis Trail. p.1)

* * *

. . . Hence, the trail between Kawaihae and Kailua known as the Kamehameha Trail was probably built in the 1870's as a horse trail.

* * *

"The family walked the old coastal trail [from Kaupulehu] to Makalawena to stay with Aunty Ana and Tutu Una. If we were going to church, we would go over on Saturday, nanea (relax, enjoy), then come back after church. . . and we would usually stop, spend time at Kuki'o." (Rosendahl, Paul H. Archaeological Reconnaissance Survey Makalawena 1986. p. 136-137).

In conclusion, the existence of a shoreline trail through Makalawena, by historical accounts, pre-dates the 1778 arrival of Captain Cook and by Kama'aina testimonies, said trail has continued into the present, to serve the public traversing the coast.

The subject trail, being a portion of the prehistoric coastal Makahiki Trail laid out prior to the Highway's Act of 1892, by said Act, is lawfully determined to be a public trail owned by the State of Hawaii.

Furthermore, the mauka-makai Akahipu'u-Makalawena trail, by said Act, is also owned by the State of Hawaii

Memorandum of Title, Mahoe Collins (October 20, 1994).

The State Historic Preservation Division (SHPD) of DLNR has similarly concluded that the Ala Kahakai Trail, formerly called the ala loa or ala aupuni, was one of the major trails of the Hawai'i kingdom, running along the shore and connecting most of its community lands. With respect to the Makalawena-Akahipu'u Trail, an archaeological reconnaissance survey done by Theresa Donham in 1986 concluded that the trail was a historic period foot/cart kerbstone road which was probably built in the latter half of the 19th century, well before 1892.

Discussion

The Great Mahele marked a period when privatization of land holding was established in lieu of the former feudal system of land tenure. See generally, **J. Chinen, The Great Mahele** (U.H. Press, 1958). The Great Mahele was initiated with the establishment of the Board of Commissioners to Quiet Land Titles in 1846 to adjudicate claims and award fee simple title to land used and occupied by the resident population. See, Act to Organize the **Executive** Departments of the Hawaiian Islands, Part **I**, Chapter VII, Art. **IV.**, Laws of **Haw.**, 1846, reprinted in 1925 Haw. Rev. **Laws** 2120 (Vol. II, appendix).

The commission adjudicated land claims and awarded private titles pursuant to a set of "Principles" that outlined the rights and interests of all persons to their land in relation to the rights of the King and the government. See, Principles Adopted by the Board of Commissioners to Quiet Land Titles in Their Adjudication of claims Presented to Them, Laws of Haw. 1847, reprinted in 1925 Haw. Rev. Laws 2124, (Vol. II, appendix). Pursuant to the Principles, certain "sovereign prerogatives" of the **King** could not be conveyed to private ownership but had to be retained for the public good. One of these "sovereign prerogatives" concerned public thoroughfares:

Fourth to provide public thoroughfares and easements, by means of roads, bridges, streets, etc. for the **COMMON** good.

* * *

These prerogatives, powers and duties, His **Majesty** ought not, and ergo, he cannot surrender. Hence the following confirmation of the Board, and the titles consequent upon them must be understood subject to these conditions.

1925 Haw. Rev. Laws 2128 (Vol. II, appendix).

The Highways Act of 1892 provided that all publicly used roads and trails existing at the time of its **enactment** were declared to be public highways:

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

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Act 47, L. 1892, § 2 (§ 264-1, HRS). See also, In re Kelley, 50 Haw. 567, 579, 445 P.2d 538, 546 (1968). Maui Ranch Estates v. County of Maui, 6 Haw. App. 415, 20, 724 P.2d 118, 122-23 (1986) .

To constitute a "public trail" under § 264-1, HRS, a trail must either: (1) Have been declared a public right-of-way by the Highways Act of 1892, or opened, laid out, or built by the government, or otherwise created or vested as a nonvehicular public right-of-way at any time thereafter, or in future (§ 264-1(b)), or (2) Opened, laid out, or built by private parties and dedicated or surrendered to the public use, (§ 264-1(c)), HRS. In any of the above cases, the "public trail" would then be owned by the government in fee (§ 264-2, HRS). Further, the public trail could not be disposed of without prior governmental action pursuant to § 264-1(d) and chapter 171, HRS.

Based upon the information provided, the subject trails were in public use at the time of the Highways Act of 1892. In particular, the Makalawena-Akahipu'u Trail running **mauka-makai** was in existence at least in 1888 as documented in Registered Map No. 1280. Further, the historic accounts provided by Dr. Emory, William Ellis, archaeological surveys conducted by Theresa Donham, Ross Cordy, and Paul Rosendahl, as well as **Kamaaina** testimony (In re Ashford, 50 Haw. 314, 316, 440 P.2d 76 (1968)) support the conclusion that the subject trails are historic trails built before 1892 and reserved for the public pursuant to the Principles.

with respect to your question regarding the process to get clear title, the State owns the subject trails in fee simple pursuant to § 264-2, HRS. There can be no adverse possession against the sovereign. State v. Zimring, 52 Haw. 472, 478, 479 P.2d 205 (1970). Moreover, according to the sovereign prerogatives previously discussed, the subject trails were never conveyed to private ownership but were retained for the public use. **However**, we would recommend that your staff notify Bishop Estate that the State claims ownership to the subject trails and intends to open, at this time, the Ala Kahakai Trail for public access.

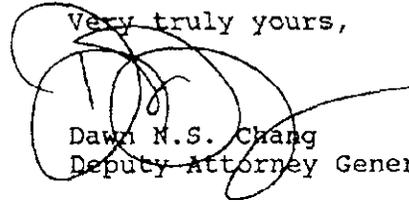
Conclusion

The Ala Kahakai Trail and the Makalawena-Akahipu'u Trail are public trails under the jurisdiction of the **BLNR**. The

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subject trails are owned in fee simple by the State and reserved for the use of the public.

Very truly yours,



Dawn N.S. Chang
Deputy Attorney General

dnc:kk
1663

**APPENDIX B:
ESTIMATED FEDERAL COSTS**

In 1997 Dollars

Item Description	Alternative B	Alternative D
Management Plan & Initial Brochure	\$275,000	\$275,000
Phased Costs (total)		
Archeological Surveys/Ethnography ¹	5500,000	5350,000
Trail identification restoration/construction ²	5304,000	\$104,000
Trailhead development	\$2,225,000 ³	\$900,000 ⁴
Campsite development ⁵	\$75,000	
Facility planning (25% of construction)	\$515,000	\$225,000
TOTAL PHASE COSTS	\$3,679,000	\$1,579,000
Annual Operations Costs:		
Staff ⁶ /travel	\$175,000	\$160,000
Office, equipment, supplies	\$20,000	\$20,000
Advisory Council support (10 years)	\$5,000	\$5,000
Partner assistance ⁷	\$35,000	\$29,000
Brochures/interpretive materials/signs	\$30,000	510,000
TOTAL ANNUAL OPERATIONS COSTS	\$265,000	\$224,000

¹ The state archeologist estimates that somewhat over half of the trail is either inventoried or urbanized.

² The cost of metes and bounds survey has been added to estimates from the DEIS. We estimate that approximately 40 miles of the 66 miles of trail across private land may require a metes and bounds survey provided by other than the landowners. At \$2,600 per mile, this adds \$104,000 to the estimate.

³ Based on 25 trailheads spaced approximately every five miles and taking into account that some trailheads already exist along the South Kohala and North Kona coasts and in the state parks along the trail. Each would have 5 simple graded parking stalls (@ \$300 each), a unisex composting toilet (@ \$75,000 each), and signs (@ \$5,000 each site). The estimate includes 1000 linear feet of access road with simple grading and raised to minimize erosion (\$100 per linear foot). In remote areas, trail users would be advised to bring water. In less remote areas, potable water in bottles would be trucked in. Federal funds are assumed to provide about one-half the cost of development with other funds coming from nonfederal sources.

⁴ Ten trailheads are estimated.

⁵ The estimate is based on a primitive camping opportunity every ten miles. In addition to the trailhead development, campsites would require some clearing and grubbing (@ \$4,000 each), a catchment system for gray water uses (@ \$5,000 each), and a larger composting toilet (add \$75,000 each). Federal funds to be matched by nonfederal sources.

⁶ A full-time staff of three is estimated. Alternative D would have two full-time and one part-time persons.

⁷ The category of partner assistance has been added. Partners include nonprofit support associations and state and county agencies.

**APPENDIX C:
LISTED FEDERAL SPECIES STATUS
AND HERITAGE GLOBAL RANKS**

On August 13, 1996, the U.S. Fish and Wildlife Service provided the following list of federally endangered, threatened, proposed, or candidate species that may occur within the Ala Kahakai study area. On April 21, 1997, the United States Department of Commerce National Oceanic and Atmospheric Administration provided a list of protected marine species.

Scientific Name	Common/Hawaiian Name	Federal Status
MAMMALS		
<i>Lasiurus cinereus semotus</i>	Hawaiian hoary bat / 'ope'ape'a	endangered
<i>Monachus schauinslandi</i>	Hawaiian monk seal	endangered
BIRDS		
<i>Fulica americana alai</i>	Hawaiian coot / 'alae ke'o ke'o	endangered
<i>Corvus hawaiiensis</i>	Hawaiian crow / 'alala	endangered
<i>Anasi wyvilliana</i>	Hawaiian duck / <i>koloa maoli</i>	endangered
<i>Branta (Nesochen) sandvicensis</i>	Hawaiian goose	endangered
<i>Buteo solitarius</i>	Hawaiian hawk / 'io	endangered
<i>Himantopus mexicanus knudseni</i>	Hawaiian stilt / ae'o	endangered
REPTILES		
<i>Chelonia mydas</i>	Green turtle / honu	threatened
<i>Eretmochelys imbricata</i>	Hawksbill turtle / honu'ea	endangered
SHRIMP		
(found in anchialine pools)		
<i>Antecaridina lauensis</i>	no common name (NCN)	species of concern
<i>Calliasmate pholidota</i>	NCN	species of concern
<i>Halocaridina palehemo</i>	NCN	species of concern
<i>Metabetaeus lohena</i>	NCN	species of concern
<i>Palaemonella burnsi</i>	NCN	species of concern
<i>Procaris hawaiana</i>	NCN	species of concern
<i>Vetericaris chaceorum</i>	NCN	species of concern
SNAILS		
<i>Neritilia hawaiiensis</i>	Anchialine pool snail	species of concern
PLANTS		
<i>Nothoestrum breviflorum</i>	NCN / 'Aiea	endangered
<i>Ischaemum byrone</i>	NCN / Hilo ischaemum	endangered
<i>Colubrina oppositifolia</i>	NCN / Kauila	endangered
<i>Abutilon mensiesii</i>	NCN / Ko'oko'aula	endangered
<i>Sesbania tomentosa</i>	NCN / 'Ohai	endangered
<i>Gardenia brighamii</i>	NCN / Na'u	endangered
<i>Bobea timonioides</i>	NCN / 'Ahakea	species of concern
<i>Capparis sandwichiana</i>	NCN / Pua pilo	species of concern
<i>Fimbristylis hawaiiensis</i>	NCN	species of concern

On October 10, 1996, the Hawaii Natural Heritage Program provided the following List of Elements (species and natural communities) which occur along the Ala Kahakai corridor.¹

Element Name	Common Name	G RANK
INVERTEBRATES		
<i>Antecarindina lauensis</i>	Anchialine pool shrimp	G1G2
<i>Calliasmata pholidota</i>	Anchialine pool shrimp	G2
<i>Metabetaeus lohena</i>	Anchialine pool shrimp	G1
<i>Neritilia hawaiiensis</i>	Anchialine pool snail	G1
<i>Neritilia sp 1</i>	Anchialine pool snail	G1?
<i>Neritilia sp B</i>	Anchialine pool snail	G1?
<i>Palaemonella burnsi</i>	Anchialine pool shrimp	G1
<i>Procaris hawaiiiana</i>	Anchialine pool shrimp	G1
<i>Vetericaris chaceorum</i>	Anchialine pool shrimp	G1
NATURAL COMMUNITY		
<i>Heteropogon contortus</i> lowland dry grassland	Pili lowland dry grassland	G4
High salinity lava anchialine pool	high salinity lava anchialine pool	G2
High salinity lava tube anchialine pool	high salinity lava tube anchialine pool	G1
Low salinity lava tube anchialine pool	low salinity lava tube anchialine pool	G1
<i>Myoporum sandwicense</i> coastal dry shrubland	Naio coastal dry shrubland	G1
<i>Sesbania tomentosa</i> lowland dry shrubland	'Ohai lowland dry shrubland	G1
Uncharacterized anchialine pool	Uncharacterized anchialine pool	GU
PLANT		
<i>Abutilon menziesii</i>	Ko'ioia'ula	G1
<i>Capparis sandwichiana</i>	Pua pilo, Maiapilo	G2
<i>Fimbristylis hawaiiensis</i>		G1
<i>Ischaemum byrone</i>		G2
<i>Ophioglossum concinnum</i>	Pololei	G2
<i>Portulaca villosa</i>	'Ihi	G1
<i>Sesbania tomentosa</i>	'Ohai	G2
<i>Solanum nelsonii</i>		G2
VERTEBRATES		
<i>Anas wyvilliana</i>	Hawaiian duck / Koloa	G1
<i>Branta sandvicensis</i>	Hawaiian goose / Nene	G1
<i>Buteo solitarius</i>	Hawaiian hawk / 'Io	G1
<i>Chelonia mydas</i>	Green turtle / Honu	G3
<i>Corvus hawaiiensis</i>	Hawaiian crow / 'Alala	G1
<i>Eretmochelys imbricate</i>	Hawksbill sea turtle	G3
<i>Fulica alai</i>	Hawaiian coot / 'Alae ke'oke'o	G2
<i>Gallinula chloropus sandvicensis</i>	Hawaiian gallinule / 'Alae-'ula	G5T2
<i>Gymnothorax hilonis</i>	Anchialine muraenid eel	G1
<i>Himantopus mexicanus knudseni</i>	Hawaiian stilt / Ae'o	G5T2
<i>Lasiurus cinereus semotus</i>	Hawaiian hoary bat / 'Ope'ape'a	G5T2
<i>Monachus schauinslandi</i>	Hawaiian monk seal	G2

¹Heritage Global Ranks

- G1 = Taxa critically imperiled globally (typically 1-5 current locations)
- G2 = Taxa imperiled globally (typically 6-20 locations)
- G3 = Taxa very rare with restricted range (typically 21-100 current locations)
- G4 = Taxa apparently secure globally (typically >100 locations)
- G5 = Taxa demonstrably secure globally
- T = Same criteria as Global Ranks, but applies to subspecies or varieties

APPENDIX D: REMNANTS OF THE PREHISTORIC ALA LOA ALONG THE ALA KAHAKAI ROUTE

This appendix is quoted directly, with the exception of **some** punctuation marks, from Ross Cordy, *The Ala Kahakai or the Ala Loa: An Archeological and Historic Preservation Perspective*. Changes in the text are noted with brackets [].

In leeward North Kohala where the ground *is sometimes* rockier [than windward Kohala], the ala loa has been found in a few cases. In Kaoma and Hihū *ahupua'a* (near today's Mahukona and Lapakahi State Historical Park), the trail is set inland about 1000 feet or more (several hundred meters). It is visible as a faint depression with some stones slightly piled on either side.' In a few spots there were small platforms on the side to sit on or a shrine, a small platform with an upright. In Lapakahi, this trail swings closer to the sea and is just behind the coastal housing compounds, a situation also present in Waikā and Kahuā at the southern end of North Kohala.

Upon reaching Kawaihae, the trail was similarly behind the coastal housing enclosures until the sand shore of the bay was reached. There, it ran along the edge of the sand in front of the house enclosures.* In this area, Hawaiian Māhele documents (land records) of the late 1840s label the trail the *alanui*.³ Just before the *luakini heiau* (*Pu'ukoholā*) and the ruler's residential area (called Pelekane today), a major branch trail leads up to Waimea. The route of the original ala loa by this heiau and the king's residence is not clear. A 1903 map shows a trail going along the shore below the heiau, so perhaps the route went seaward of the heiau.⁴

Beyond Kawaihae, in contrast to the soil lands, the rockier lands of South Kohala, Kona, Ka'ū and Puna are present, and here pieces of the prehistoric trail survive as a winding or relatively straight foot-path. In Kalāhuipua'a (today's Mauna Lani Resort), the ala loa crosses the rougher Kanikū 'a'ā lava flow. The trail often appears as a winding, crushed lava foot path-two to three feet wide. It winds in and out and under the late 1800s Māmalohoa Trail." Upon descending off the Kanikū 'a'ā flow and onto older pāhoehoe lands in 'Anaeho'omalū, the straight 1880s trail is clearly apparent running through the Waikoloa petroglyph field. Less apparent is a dark, vividly worn path in the lava about two to three feet wide. This worn path is sometimes 20-30 feet away from the more recent trail, sometimes *joins* that trail and follows its route, and sometimes passes under and to the other side of the recent trail. This is the prehistoric ala loa. It continues across the Waikoloa Beach Resort lands of 'Anaeho'omalū, being slightly visible in spots and quite faint in others.⁶ Beyond 'Anaeho'omalū to the 1859 lava flow around Kiholo Bay, [the State Historic Preservation Division (SHPD or SHPO) has] no records on the trail. But south of sandy Kiholo Bay, the trail runs along the shore in Pu'uanahulu along the cliffs (near Luahinewai Pond) where it is a winding crushed 'a'ā path. In Ka'ūpūlehu and between Kūki'o and Maninōwali on 'a'ā flows, this crushed path is also apparent with some beach stepping stones placed in the trail.⁷ On intervening pāhoehoe lands and beaches, no remnant is visible.

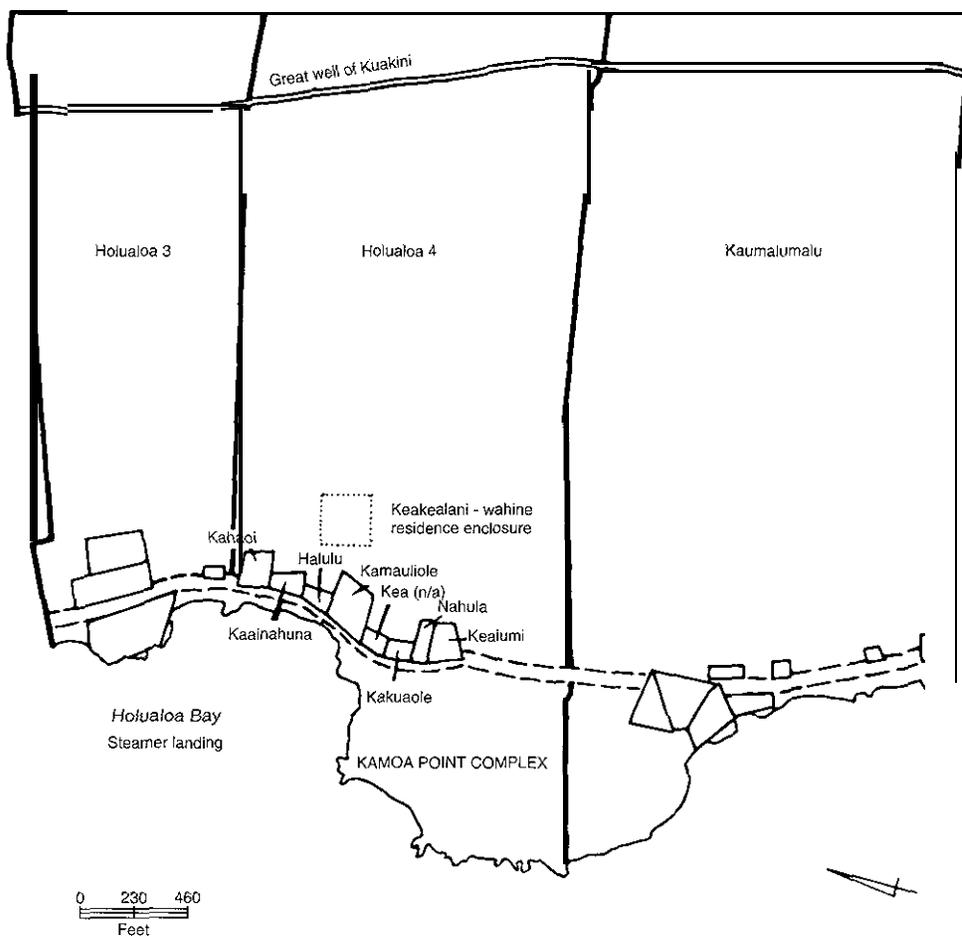
Beyond the vast 1801 pāhoehoe flow, in the lands from Keāhole Point to Kailua, most of the trail's route ran along the sand or pāhoehoe, leaving no visible remnants.

Once in Kailua, the trail ran along the route of present Ali'i Drive to Kahalu'u in today's Keauhou Resort.⁸ This was mostly pāhoehoe land, but today it is urbanized. South of Keauhou to Kealakekua [Bay], the trail seems to have approximated today's coastal jeep road, although in the Hōkūkano-Ke'ekē'e area a new route was built to bypass the shore, evidently in the late 1880s.⁹ In all these lands from Kailua to Hōkūkano, the trail was often flanked by houses. In the 1850s when houselots became walled with dry-laid stone, the trail passed through walled houselots, and thus, had the appearance of being walled on both sides [See Figures 1 and 2].

They went past the Kaaipuhi spring, between the houses on both sides of the trail (1812 observation in Kailua. 'Ti 1959:111).

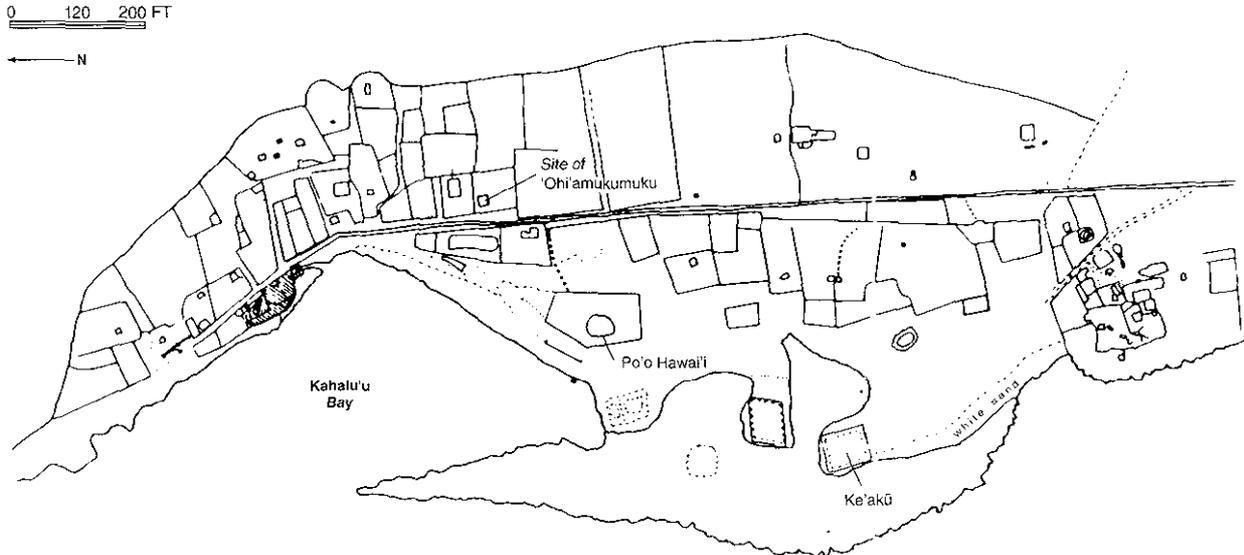
A feel for this trail can be seen in Nāpō'opo'o today on the south shore of Kealakekua Bay, where the main road is flanked by such walls. A similar pattern can be seen along the jeep road just south of Keauhou.

- FIGURE 1 -
 MAP OF HŌLUALOA SHOWING HOUSELOTS (WALLED)
 ALONG THE ALA LOA
 (Figure 6 from Cordy's paper)



Most of these houselots are on the inland side of the trail. The area labeled Kamoā Point Complex on the shore side of the trail--was the location of large temples used by the ruler. The ruler's house, however, was inland-labeled here Keakealani-wahine residence enclosure. (From McEldowney 1983: Fig.4).

- FIGURE 2 -
 MAP OF KAHALU'U SHOWING KULEANA HOUSELOTS ALONG TRAIL
 (WHICH IS NOW ALI'I DRIVE)
 (Figure 7 from Cordy's paper)



'Ohi'amukumuku heiau, a luakini, was on the inland side of the trail. The ruler's residence (Po'o Hawai'i) and another luakini (Ke'akū heiau) were located on the seaward side of the trail. (Reinecke map adapted by Tomonari-Tuggle 1985:40)

Sections of this Kailua to Kealakekua road did cross rougher 'a'ā flows. For example, between Kahalu'u and Keauhou, such a tract of 'a'ā was present.

There was a kind of path formed across the most level part of it, by large smooth round stones, brought from the sea-shore, and placed about three or four feet apart. By stepping from one to another of these we passed over the roughest piece of lava we had yet seen [after leaving Kailua-Kon-Ross Cordy] ; (1823 observation. Ellis 1963:76).

South of Kealakekua Bay to the Ka'ū border, [SHPD] has limited information on the ala loa. [SHPD does] have records on pieces of the trail as they approach or pass through dense clusters of habitations (somewhat like villages). In three different areas—Pāpā Bay, the south side of Honomalino Bay and Kīpāhoehoe—the trail is one meter wide and consists of paved beachstones.¹⁰ In Kīpāhoehoe, cairns mark a portion of the trail. The trail at Pāpā Bay is extremely attractive, being a smooth beachstone paving and running by the house sites of this former community

Once into Ka'ti, discontinuous pieces of the trail can be seen from the Kona border to the palī (cliff) at South Point. Again, over the 'a'ā, the trail is visible as a crushed path, here usually with stepping stones and fill across low points (causeways). On pāhoehoe, the ala loa is *sometimes* apparent as a worn path and sometimes leaves no remains except for stone cairns and pieces of coral." Little is visible at South Point where deep soils are present. But [SHPD does] have records of the trail from Honuapo to Punalu'u in central Ka'ti. Between Hōkūkano and Hīlea, a rugged 'a'ā field is present, and "The road across it was

formed of large smooth round stones, placed in a line two or three feet apart.” In the Punalu’u area this trail was called the alanui aupuni in 1852.¹³ Beyond Punalu’u to the start of Hawaii Volcanoes National Park, segments of the coastal trail are visible. As elsewhere the trail can be seen across the ‘ā’ā flows “as trodden surface,” with it disappearing on the pāhoehoe.¹⁴

Once into Puna, a similar situation exists. Portions of the trail are visible. Stretches of rough ‘ā’ā are crossed by a trail made of waterworn boulders—one to three stones wide and continuous. This continuous waterworn construction may be an architectural style somewhat unique to Puna although it is found in places in South Kona. Areas where this type of trail can be seen include Āpua,¹⁵ Pūlama (inland of Waha’ula heiau),¹⁶ Kehena,¹⁷ Keauohana (near Kehena),¹⁸ Ke’eke’e,¹⁹ and Nānāwale.²⁰ In smooth pāhoehoe areas, sometimes the trail is visible. In 1930, Hudson noted that between Apua Point and Keauhou Landing the trail was a “worn track across the smooth pahoehoe flows”.²¹ This pattern continues on around the Puna shore and up to Hilo Bay...

— ENDNOTES —

- ¹ Burgett & Rosendahl 1990: site description under site 13570.
- ² Cf. Anonymous 1903; Jackson 1883; Loebenstein 1903
- ³ Kelly 1974:69 for LCA 4522 and 4523
- ⁴ Loebenstein 1903.
- ⁵ State Historic Preservation Division site file, 10-10-11.334.
- ⁶ Barrera 1971; Walker & Rosendahl 1986; Donham 1988; Jensen 1988, 1989.
- ⁷ In Pu’uanahulu near Luahinewai (Cordy 1989-1991:58-59), in Ka’upulehu (Carter 1985; Walker & Rosendahl 1988) and between Kuki’o and Marini’owali (Cordy 1981).
- ⁸ Allen 1986; Hammatt, Borthwick & Shideler 1994:11; McEldowney 1983; Tomonari-Tuggle 1985.
- ⁹ Kaschko 1984:12-15; Hammatt et al. 1994:186-187.
- ¹⁰ Information on the trail in State Historic Preservation Division site inventory files for sites 1993 (Honomalino), 4185 (Pāpā Bay), and 4192 (Kīpāhoehoe).
- ¹¹ Ilaun & Walker 1987:23
- ¹² Ellis 1963:142. In this area from Honuapo to Punalu’u, a later, straighter 1800s version of the ala loa is present. It has curbing, is wider and has causeways. Parts of the old trail on the edge of Ninole Fishpond were damaged by an 1868 tidal wave (Kelly 1972).
- ¹³ Kelly 1972:56, Fig. 19 shows map of 1852 grant.
- ¹⁴ McDermott et al. 1993:225-226. The trail segments in the area from Hionamoā to paaauu (?) are labelled as site 17,407.
- ¹⁵ Emory et al. 1959:82.
- ¹⁶ Emory et al. 1959:71.
- ¹⁷ Hudson 1932:309; Bevacqua & Dye 1972:22. The trail here is labelled site 2540.
- ¹⁸ Cordy 1987. The Trail here is labelled site 10,922.
- ¹⁹ Hansen n.d. The trail here is labelled A17-4.
- ²⁰ Hudson 1932:311.
- ²¹ Hudson 1932:89.

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APPENDIX E: CULTURAL PROPERTIES ASSOCIATED WITH THE ALA KAHAKAI

Cultural sites along national trails are especially vulnerable. Many are not readily apparent to the non-archaeologist, and can be inadvertently damaged. Others can be looted. For that reason in a public document such as this, detailed listings of sites along the *ala loa* are not given. Only selected examples of protected sites are described below with text quoted directly from Helene R. Dunbar, *Cultural Resources Assessment Ala Kahakai, Hawai'i Island*, U.S. National Park Service, Department of Interior, San Francisco Support Office, San Francisco, California, 1997.

KOHALA DISTRICT

MO'OKINI HEIAU AND THE KAMEHAMEHA I BIRTHPLACE, 'UPOLU POINT

Mo'okini is the largest temple on Hawai'i Island, and one of the most significant sacred traditional cultural properties in the Hawaiian Islands. This National Historic Landmark is associated with a number of historic figures and events (Dunbar and Napoka 1990):

- Construction is attributed to the priests Pā'ao and Mo'okini who arrived from *Kahiki* (a "foreign place" believed by some to refer to the ancestral Polynesian homeland) around the 13th or 14th centuries. Several families today claim descent from these individuals.
- The site has a long association with the Kohala District chiefs, including Kamehameha I's grandfather, Alap'ai nui who reigned as paramount chief of Hawai'i Island around 1740 A.D.
- Mo'okini was one of Kamehameha's major temples, and a *luakini* heiau.
- Kamehameha's high priest, Hewahewa, the last high priest of the Hawaiian kingdom, officiated here.
- **Formerly** there was also a chiefly residence for the sacred high chiefs in Pu'uepa-Kokoiki; Kamehameha I was most likely taken from his birthsite nearby, to Mo'okini Heiau for his birth rituals.

According to tradition, the legendary priest-navigator Pā'ao first landed in Puna District where he built Waha'ula Heiau, a temple that shares some architectural similarities with Mo'okini Heiau (Emory *et al.* 1959). Finally he settled in Kohala District on the northern tip of land he named Uporu ('Upolu) after his home district somewhere to the south of the Hawaiian Islands. After an unspecified time interval, Pā'ao decided conditions were favorable for setting up a ruling chief of his own choosing, and obtained one from abroad ("Kahiki"). Pili Ka'aiea, himself a descendant of the ancient Polynesian gods, was installed as ruling chief of Hawai'i Island. Pili married into Hawaiian nobility and founded the chiefly family which supplied, generation after generation, the sacred rulers of the Island of Hawai'i (Fornander 1969(1):86, 191-92, 201; (2):22, 38, 39). His descendants became the ruling chiefs of the six traditional chiefdoms of the island. With but one brief interlude, they ruled until 1893. Pā'ao himself became the high priest of an order he established, one that continued until 1819.

Only the temple remains. A State of Hawaii commemorative plaque marks the alleged birthsite. The ancient trails, the former chiefly compound, and all other structural associations, were destroyed when the surrounding land was leveled for a sugarcane plantation in the 19th century.

The importance of Mo'okini Heiau has increased since recent lava flows surrounded Waha'ula Heiau, the only other known structure associated with Pā'aō. The State of Hawaii in conjunction with Mookini Luakini, Inc., a non-profit private foundation, has partially developed this landmark for public interpretation. The site is maintained by personnel from nearby Lapakahi State Park.

LAPAKAHI STATE HISTORICAL PARK

Lapakahi provides a glimpse into the life of the common people in contrast to the great centers maintained by the ruling chiefs of ancient Hawai'i. It is a 600 year old farming and fishing settlement that has been partially restored. Lapakahi contains the rock-walled foundations of house sites and canoe sheds, as well as shrines, burial cairns, and other features associated with daily life. A major network of terraces comprising the vast agricultural system that supported the settlement is located several miles inland above the village on the slopes of the Kohala Mountains. Although no archaeological vestiges of the *ala loa* remain, multiple footpaths connect the coastal region with the upland agricultural fields. Lapakahi is on both the State and National Registers of Historic Places.

PU'UKOHOLĀ HEIAU, KAWAIHAE

Pu'ukoholā National Historic Landmark is located within Pu'ukoholā National Historic Site, overlooking Kawaihae Bay in the district of South Kohala. It was built between 1790 and 1791. In addition to what may be vestiges of the *ala loa*, the landmark district includes Pu'ukoholā Heiau, Mailekini Heiau, the former Hale o Kapuni Heiau (a submerged shark temple), Pelekane (the former chiefly residential complex), Kamehameha's "leaning post" (a *pōhaku* where he allegedly rested to watch sharks feeding at offshore Hale o Kapuni), and Pahukanilua, the homestead of John Young, the former British sailor who became a high chief under Kamehameha.

Kawaihae and Pu'ukoholā formed the setting of Kamehameha I's rise to power and consolidation of the Hawaiian Islands under one rule. By late prehistoric times, warfare had become a frequent means for the descendants of Pili Ka'aiea to enlarge territorial holdings. Kawaihae was a favored battleground; armies from the six kingdoms frequently fought here. Invading fleets from Maui Island also made Kawaihae their target. Apple (1969:12) says "remnants of defeated Maui war fleets, en route home from battles, refreshed at Kawaihae and sometimes cut down coconut trees there as final acts of defiance to the Hawai'i chiefs." Mailekini Heiau was an ancient and important prehistoric and historic site associated with the inter-chiefdom and inter-island rivalry of the time period prior to Kamehameha I's rise to power; it was one of the prizes gained by the Maui or Hawai'i chief who held Kohala (Kamakau 1961:56, 58, 66, 110-111, 150).

A number of prominent historic figures are associated with the residential complex known today as Pelekane. Although earlier paramount chiefs such as Alapa'i nui probably resided there sporadically, it achieved its greatest prominence between 1790 and 1810 when Kamehameha I was a frequent resident (Kamakau 1961:350). Pelekane most likely was the birthplace of Queen Kamamalu, daughter of Kamehameha I, in about 1802. She was the half-sister of Liholiho (Kamehameha II), and as permitted under ancient

Hawaiian kinship rules, later became his wife. She died of measles, as did Kamehameha II, on a state visit to England in 1824 (Ti 1959:70). Liholiho, as Kamehameha II, was a periodic visitor to the king's residence at Kawaihae. It is known he retired there in the interim period following the death of Kamehameha I, and that he visited during journeys around the Island to the *luakini* heiau during the annual *Makahiki* ceremonial season. He began "...in Kailua, whence he went to Kawaihae and continued from there around the island to the Hale o Keawe" at Hōnaunau (Ti 1959:137). Tradition further indicates that Queen Emma, granddaughter of Kamehameha I and John Young, who became the bride of Kamehameha IV, may have been born or resided at Pelekane (see Kelly 1974:16).

Finally, Kawaihae became the primary residence of John Young, who along with Isaac Davis, provided the technological knowledge of cannon, *rifles*, fortifications and martial arts that were indispensable to Kamehameha I's military successes and which served to preserve for history their role in Hawaiian unification. John Young in particular appears to have set the course which led Hawai'i into the sphere of American influence and ultimately to statehood (Apple 1969:22). His home in Kawaihae was the first western style structure built in the islands.

KALĀHUIPUA'A, AND 'ANAEO'OMALU, SOUTH KOHALA

Waikoloa Beach Resort is located in 'Anaeho'omalua and the Mauna Lani Resort is located in the land unit of Kalāhuipua'a. These resorts have incorporated historic preserves set aside in State historic preservation agreements. As discussed earlier, sections of the ancient coastal trail, a prehistoric bypass trail, and the historic (1880s) Māmalahoa Trail have been recorded at various locations within these historic preserves.

PUAKŌ PETROGLYPH ARCHEOLOGICAL PRESERVE (MAUNA LANI RESORT)

This extensive rock art site contains over three thousand units carved between 1000 and 1800 A.D. (Georgia Lee, personal communication, February 1996). Rock art specialist Edward Stasack (personal communication, February 1996) believes it may have been associated with the *ala loa* whose route may lie beneath the modern Puakō Road although there is no documentation or archaeological confirmation.

Hawaiian petroglyphs appear to have served a variety of purposes. Many appear to commemorate personal experiences, or are acknowledgements of the *'aumākua* (ancestral spirits). The place where the petroglyphs were executed also may have had sacred importance. Other images may relate to mythology, and a few possibly depict precontact and early historic events. Common forms of stone carvings include dots, circles, straight lines, wavy and curved lines, and simple stick figures representing dogs, turtles, fish, birds, pigs, crabs and human beings. Some figures are fanciful anthropomorphs, but others depict men on surfboards and canoe paddlers with paddles in hand. Sails and canoes are also represented. Post contact petroglyphs may depict western ships, horseback riders (*paniolo*), and Hawaiian words written in a style introduced by nineteenth century missionaries.

At Puakō, a large number of the rock art elements consist of cupules, sometimes covered with a stone. These holes (*lua*) are thought to be connected with a birth ritual of a new born child. It was believed that placing the umbilical cord stump (*piko*) in the pecked cup would generate helpful *mana* (spiritual power) to nourish the child. Many human forms also are depicted here including linear figures, family groups, triangular human

figures and muscular figures, but one of the most intriguing series of figures, close to the Ka'eo Trail (a modern access trail from Puakō up to Petroglyph Field A) is a line of thirty figures lined up head to foot that are believed to represent a column of marching warriors or perhaps a family lineage

KALĀHUIPUA'A (MAUNA LANI RESORT)

This ancient land unit, containing a segment of the *ala loa*, centers around four fishponds, the largest of which, Kalāhuipua'a Fishpond, is still in use today. Various stories are associated with the fishponds. The ancient trail (winding in and out under the 1800s trail) leads around the ponds and along the coast to dozens of ancient sites. Excavation of lava tube shelters and house sites confirms they were used from 1200-1700 A.D. Petroglyphs include triangular and linear human figures, dots, circles, *papamū* and an impressive depiction of a helmeted warrior.

WAIKOLOA PETROGLYPH PRESERVE AT 'ANAHO'OMALU (WAIKOLOA BEACH RESORT)

Protected within the Waikoloa Beach Resort are two restored, operative fishponds, C-shaped stone breakwalls used by early travelers as shelters against the prevailing wind, other structural remains, and the extensive Waikoloa Petroglyph Preserve through which the ancient *ala loa* passes. Common petroglyph carvings include cupules that may be associated with birth rituals. Other elements include various styles of human figures, canoes, a turtle, a crab claw, fishhooks, and a nineteenth century cowboy (*paniolo*) on horseback. A stick-figure image of Lono, god of the *Makahiki*, can be seen among the other petroglyphs beside the old foot-worn Ala Māmalahoa. It is estimated that the earliest petroglyphs were done around 800 A.D. when the 'Anaeho'omalu region was first extensively settled.

Near the main Waikoloa petroglyph field is a large abraded quarry area on the inland side of the coastal bypass trail. "Here porous pieces of *pāhoehoe* were ground down in basin-like depressions into hand-held sized abraders used for woodworking. Hundreds of basins on the *pāhoehoe* surface are scattered through this quarry. Also, a few temporary shelters are present in the form of rock shelter overhangs and a few small surface enclosures. Dates from these shelters show use of the quarry beginning about A.D. 1400 and increasing after A.D. 1600" (Cordy 1994b:14).

"At the Kona border, on the seaward edge of the coastal bypass trail, is a small rectangular platform, the Ke ahu a Lono, which Lonoikamakahiki is said to have built ca. 1640-1660 in commemoration of his reconciliation with his chief advisor, Kapaihiahilina. Recent oral histories also identify it as the *ahupua'a* shrine for the 'Anaeho'omalu-Waikoloa area. The platform has recently been reconstructed and has permanent interpretive signage" (Cordy 1994b:14).

NORTH AND SOUTH KONA DISTRICTS

KA'ŪPŪLEHU (KONA VILLAGE RESORT)

Despite alterations to the terrain wrought by the lava flows from the 1801 eruption of Mt. Hualālai, Ka'ūpūlehu contains the ruins of a prehistoric settlement on Kahuwai Bay, a petroglyph field of at least 324 units, restored fishponds and a portion of a h&a sled ramp. Vestiges of the *ala loa* which probably circled the bay may be present; however, it is known the 1801 lava flow extensively altered the configuration of Kahuwai Bay. The prehistoric *ala loa* would have been buried wherever lava flowed to the sea.

The fifteen acre Ka'ūpūlehu petroglyph field is one of the most significant and unique rock art sites in Hawai'i. The most unusual aspect of the site is the large number of Hawaiian sail motifs pecked into the smooth *pāhoehoe* lava. There are scenes with figures in elaborate headdresses which seem to indicate chiefly concerns (Stasack and Lee 1992; Lee and Stasack, in press). There are also canoe paddlers, and *papamū*. Other elements are unique and include a surfing fisherman, a head-to-head depiction of twins, elaborate kite designs, and what appears to be a captive individual slung from poles, possibly a sacrificial victim.

Ka'ūpūlehu is of historic interest, too, for the incident of the *Fair American* (1790), a ship attacked by Hawaiians who were retaliating for the flogging of one of their chiefs by Captain Metcalf of the ship *Eleanora* just a few days earlier. To lay hands on a chief by such means was punishable by death. Captain Metcalf's son, Simon Metcalf, was captain of the *Fair American*. He and all his men were slain, except for Isaac Davis, who escaped by swimming to shore. The crew of the *Fair American* is believed to be buried in the Ka'ūpūlehu area. However, Davis, who was captured, entered the limelight of history and became, with John Young, a trusted advisor of Kamehameha I.

KEĀHOLE POINT TO KALOKO AHUPUA'A

"This stretch of land crosses the former *ahupua'a* of Kalaoa, 'O'oma, Kohanaiki, and Kaloko. The area consists of dry, arid lava lands near the shore. Prehistoric agricultural fields were several miles inland on the upland slopes where rainfall was sufficient for year-round cultivation. The bulk of the dwellings in this area, however, were along the shore, being connected to the upland fields by inland-heading [*mauka-makai*] trails" (Cordy 1994b:14). In contrast with the more densely populated Kaloko *ahupua'a* to the south, the settlements of Kohanaiki, 'O'oma, and Kalaoa, were small and dispersed, reflecting a notable drop in prehistoric population beyond Kaloko. Small clusters of house ruins are scattered just behind the sandy shore. Kohanaiki and 'O'oma each have small community *heiau* (a platform and enclosure, respectively) located immediately seaward of the *ala loa*'s former location (now marked approximately by a jeep road in the sand). "A few other small *religious* structures are present, notably a fishing shrine in 'O'oma which is a small platform with three upright stones. Additionally, a complex of modified tidal (anchialine) ponds in Kohanaiki are present, marked off by large stone cairns. These ponds seem to have been used in part for the raising of bait for offshore fishing" (Cordy 1994b:14).

"Two resorts are currently being proposed by developers for the Kohanaiki-'O'oma-Kalaoa area, (Kohanaiki and 'O'oma II). If they are approved and built, a number of historic sites will be preserved, including Kohanaiki's *heiau* and several house sites. Just north, the remainder of 'O'oma and Kalaoa are in the State's Natural Energy Laboratory

Authority's land. Here a multi-acre historic preserve encloses 'O'oma's heiau, the fishing shrine and several house sites. In Kalaoa, the best example of a small prehistoric house site along the trail is being preserved, and a historic preserve which includes a complex of 1800s to early-1900s house ruins has been set aside. All of these sites are scheduled for interpretation under state historic preservation agreements tied to development. (Cordy 1994b:15).

KALOKO HONOKŌHAU NATIONAL HISTORICAL PARK

This great chiefly center is a National Historic Landmark (Honokōhau Settlement, December 29, 1962) and a newly developing National Historical Park. It contains over 200 sites and features denoting a sizable population in late prehistoric times. Some historic structures are also present. Almost every type of precontact structure is represented including 'Aimakapā and Kaloko fishponds (the largest surviving ponds on the island), and 'Ai'ōpiō fishtrap; several heiau; a ko'a; burial areas; house platforms; stone enclosures believed to be agriculture planters; a hōlua slide; canoe landings; lava tube shelters; salt pans; papamū surfaces for kōnane; and several types of trails. The latter include mauka-makai trails, the inland straighter-line historic Ala Māmalahoa, and the probable route of the ala loa along the shore, although the latter is no longer visible.

"The shoreline itself consists of fairly rugged pāhoehoe tidal rocks. A narrow band of sand usually lies just above the high tide line. The houses that were along this shore were generally found just inland of the coastal sand strip and would have lined the trail which ran in front of them on the sand, to the south of Kaloko fishpond are unwalled house ruins, both single structures and groups of multiple structures. One has been interpreted as a high chief's residence. To the north and back of the fishpond are house ruins which have one meter high enclosing walls around the houseyards. These walled houselots are more common to the mid-1800s period. To the south of the fishpond are also two large pavings interpreted as community heiau and just inland is a large prehistoric cemetery. These Kaloko sites reflect a typical Kōna community that would be found along the ala loa" (Cordy 1994b:15).

Kaloko has tremendous significance to people of Hawaiian ancestry, some of whom believe it is the sacred and kapu final resting place of Kamehameha I whose bones were placed in a hidden sepulchre near those of other noted ali'i (Kamakau 1964; USDI 1994:96). The location remains a closely guarded secret. Kaloko is also believed to be the resting place of Kahekili, ruler of Maui, as well as other members of the Kamehameha family.

KAMAKAHONU AND THE AHU'ENA HEIAU, KAILUA

Kamakahonu, located on the north side of Kailua Bay, was from 1813 to 1819 the residence of Kamehameha I. It was here that his heir, Liholiho (Kamehameha II) was declared king, and in November 1819, abolished the traditional religious system, the kapu, an act that vastly altered Hawaiian life. It was also here that the first American missionaries came ashore in 1820 (after a brief stop in Kawaihae) to confer with Kamehameha II and his chiefs regarding a program for western religious instruction.

Only a fraction of the once multi-acre compound remains. The ala loa that formerly connected Kamakahonu with other settlements north and south of Kailua has been obliterated by modern construction, in particular Ali'i Drive, King Kamehameha's Kona Beach Hotel and its adjacent facilities, and modernization of the Kailua Wharf (Dunbar 1985).

Most of the original 11 structures in the compound described by ʻŪi (1959:117-121) were destroyed; however, Kamehameha I's temple, the Ahu'ena Heiau, has been reconstructed and can be viewed on guided interpretive tours sponsored by the King Kamehameha Hotel. Kamakahonu is both a State and National Historic Landmark.

HULIHE'E PALACE, KAILUA

The palace was built in 1838 by Kuakini, governor of Hawai'i and brother of Kamehameha's favorite wife, Ka'ahumanu. Later, King David Kalākaua (1874-1891) redecorated Hulihe'e and used it as a summer palace. Across the street (Ali'i Drive) is Moku'aikaua Church, the first Congregational church built in Hawai'i. According to Ellis (1963), stones from an old heiau were used for the foundation of the original church which was built in 1823 but destroyed by fire in 1835. The present structure was completed in 1837. Any vestiges of prehistoric or historic period trails have been lost to twentieth century construction.

KAHALU'U ROYAL CENTER

Kahalu'u *ahupua'a* was the location of another famous prehistoric royal center. "It was a residence of Lonoikamakahiki ca. 1640-1660, and the oral histories specifically note its use by Alapa'i nui, Kalani'ōpu'u and Kamehameha-successive rulers from 1740-1760 on. The focus of this center was Kahalu'u Bay, a sand fringed bay. The ruler's residence was on the south end of the bay by a natural pond called Po'o Hawai'i, and a number of large heiau encircled the bay. High chiefs' residences undoubtedly were nearby and some were in Keauhou *ahupua'a* just to the south. In Kahalu'u, eight major heiau are still present near the shore. Between the Keauhou Beach Hotel and the Kona Lagoon Hotel, Ke'ekū Heiau (a *luakini*) extends off the shore on the *pāhoehoe* tidal flats. At this enclosure-type heiau Lonoikamakahiki is said to have offered up the body of the Maui ruler, Kamālāwalu, to his gods after an invading Maui army was routed and defeated in Kohala. Petroglyphs on the tidal rocks reportedly commemorate this event. One hundred feet away, also extending offshore is the ruins of Hapaiali'i Heiau, and another 100 or so feet north is Kapuanoni Heiau, a temple dedicated to agricultural and fishing success. Just behind Kapuanoni is the Keauhou Beach Hotel, and on its landscaped grounds on the south edge of Kahalu'u Bay is a pond—Po'o Hawai'i—where the ruler's residence is said to have been located. No surface architecture survives of the ruler's residence" (Cordy 1994b:16).

"Other *heiau* encircle the bay. The foundation of another *luakini*, 'Ohi'amukumuku—used in the time of Kalani'ōpu'u and Kamehameha, is present at the head of the bay within a ruined churchyard. Kūemanu, a large surfing *heiau*, is on the north edge of the bay. The houses of this center are largely gone today" (Cordy 1994b:16). Some habitations are being preserved, as well as agricultural fields, just inland within the Keauhou Resort. The *ala loa* in this area passed inland of the heiau and ruler's residence; however, as with the royal center in Kailua, it now lies under paved Ali'i Drive, a two lane paved main road with adjacent modern houses, condominiums, and hotels.

KAMEHAMEHA III BIRTHPLACE, KEAUHOU

Keauhou was an important chiefly center and one of several important *ali'i* sporting areas along the Kona Coast in the prehistoric and early historic periods. Kamehameha 111 (Kauikeaouli), a younger son of Kamehameha I, was born there in 1814. The actual birth-site consists of a natural arrangement of stones surrounded by a rock wall.

KEAUHOU HŌLUA SLIDE

This National Historic Landmark is located above the Kamehameha III birthsite, somewhat inland from the *ala loa* which at this location deviated from Ali'i Drive and paralleled the shore. The Keauhou slide is the longest (over one-half a mile) and largest *hōlua* sled run ever built by the Hawaiians, large enough to accommodate two parallel racers (Dunbar 1987). The size of this structure dominates the landscape. The volume of stone used in its construction dwarfs that of the largest known temple platforms, making it in fact the largest surviving structure from ancient Hawai'i.

It has been speculated (Kekahuna 1953; James 1995, as well as others), the slide originally extended another 3,000 feet, all the way down to the sea; however, there is no archaeological evidence, historic photos, or information from the traditional sources to support such a claim. Curiously, not even the indefatigable recorder Ellis (1963), who traveled the *ala loa* to Keauhou Bay, mentions the sled run although he commented extensively on the Hōnaunau slides which, by contrast, are considerably smaller. Today the Keauhou sled run ends abruptly at Ali'i Drive, leaving one with the impression that its terminus may have been truncated by highway construction.

KUAMO'O BATTLE SITE (1819)

Not far from Keauhou is the famous battle site where Kekuaokalani, nephew of Kamehameha I, fought against the forces of Liholiho (Kamehameha II) to restore the national religious system. It was the last battle fought on the island of Hawai'i. Kekuaokalani was defeated and killed. Rock platforms mark the burials of the slain warriors interred along the ancient *ala loa*. Cordy (personal communication, March 27, 1997) notes, "The trail is visible in this area, often as more modern curbed trail, flanked by houseyard lots."

KEALAKEKUA BAY STATE HISTORICAL PARK

Kealakekua Bay, one of the ruling centers of the Kingdom of Hawai'i, was associated with many of the Kingdom's renowned rulers such as Keawanui'a'Umi, Lonoikamakahiki, Kalaniopu'u, Kiwalao, Kamehameha, Keaweahuelu, Naihe, and Kapiolani. Ka'awaloa on the north side of the bay was a chiefly residential complex. Napo'opo'o on the south side of the bay contained a priestly residential complex near Hikiau *heiau* as well as houses of commoners and lesser chiefs. Hikiau was one of six *luakini heiau* on Hawai'i Island, and at the time of western contact, was apparently the *heiau* and chiefly complex used for opening and closing rites of the annual *Makahiki* rituals. (Belt Collins)

Kealakekua Bay and the ancient village sites of Nāpo'opo'o and Ka'awaloa provided the background for one of the most dramatic events in the annals of culture contact. It was here that the British ships *Resolution* and *Discovery* dropped anchor on January 17, 1779, and here that Captain James Cook was feted as the god Lono, the god of agriculture and prosperity, on the temple platform of Hikiau Heiau.

Cook had first arrived in Hawai'i in 1778, stopping off at Kaua'i; however, his return the following year coincided with the annual *Makahiki*, the season that honored Lono with tribute offerings, feasting, competitive games, and *hula* performances. Traditionally warfare was taboo during this period. The emblem of Lono was an upright pole with cross-beam and hanging *tapa* cloth, which the Hawaiians likened to the mast and sails of the European ships. During this visit to Hawai'i Island, Cook performed the first Christian ceremony at Hikiau Heiau, a funeral service for a crew member who had died January 28,

1779. Within days, Cook's ships departed and all would have gone well, but fate ordained otherwise. A broken mast forced Cook's return to Kealakekua Bay for repairs. By then the *Makahiki* had ended and attitudes had changed. There followed a skirmish at the water's edge fronting Ka'awaloa village (a residence of ruling Chief Kalani'ōpu'u), and Captain Cook was slain. Cook had been attempting to take Chief Kalani'ōpu'u hostage in return for a cutter that had been stolen from his ship and later broken up by Hawaiians for its iron nails. Cook's body was then taken to nearby Puhina o Lono Heiau for traditional Hawaiian rites that included cooking and cleaning flesh from his bones, an honor afforded to only the highest and most sacred Hawaiian chiefs. A white obelisk on the north side of the Bay, the Captain Cook Monument, marks the spot where Cook lost his life.

MOKU'ŌHAI BATTLEGROUND (1782)

Located along the *ala loa*, Moku'ōhai was the decisive 1782 battle in which Kamehameha I defeated his cousin Kiwala'ō. The battle was fought in the land of Ke'eī near the bay listed on the maps as Mokuakae.

PU'UHONUA O HŌNAUNAU NATIONAL HISTORICAL PARK

The current interpretive emphasis of this sacred precinct is on the religious structures associated with the use of the area as a temporary place of refuge (*pu'uhonua*) for children, women, the elderly (and some chiefs as well) during war, or those fleeing punishment. "In a larger perspective, however, Hōnaunau was one of the royal centers along the Kona Coast. It contains the ruler's residential area and immediately seaward a large wall (the Great Wall), at one end of which was a royal mausoleum (the Hale o Keawe). Seaward of the mausoleum, was the *luakini heiau* 'Ale'ale'a, and other religious structures on the *pu'uhonua* grounds. Houses of high chiefs extended south along the shore. And not far to the south were several *hōlua* slides. The *ala loa* entered this area of Hōnaunau from the north, passed along the inland side of the ruler's dwelling, and then it may have proceeded seaward of the dwellings to the south" (Cordy 1994b:17).

"The Great Wall was said to have been constructed in the reign of Keakealanikane, 1660-1680. And the ruler Keawe seems to have used Hōnaunau as one of his favorite residences, ca 1700-1720. Not surprisingly, the Hale o Keawe housed his bones, and those of his immediate family and descendants. Hōnaunau continued to be used occasionally as a royal center until the abolition of the *kapu* and the departure of the royal centers to other islands in 1820, but its primary period of use as a royal residential area may have been during Keawe's reign" (Cordy 1994b:17).

"The *ala loa* is no longer visible in this immediate area as the park's visitor center and parking lot are just inland of the royal residential area. In the ruler's residential area, few ruins are visible on the surface--a pond and a portion of a nearby paving can be seen. However, archaeological work, although limited, has found considerable subsurface remains. Notably, the Hale o Keawe, the Great Wall, and the 'Ale'ale'a *luakini* platform have been restored. The Hale o Keawe's thatched house, surrounding images, and wooden fence provide a striking recreation of this mausoleum, one of only two once present on Hawai'i Island. The massive size of the Great Wall and the 'Ale'ale'a platform also readily give the viewer the impression of the scale of public-ceremonial structures at Hawaiian royal centers. The rubble ruin of another large *heiau* is also nearby. Beyond the *pu'uhonua* area to the south, the ruins of the shoreside dwellings and *hōlua* slides are also present, although they are not actively interpreted at this time" (Cordy 1994b:17)

KA'Ū DISTRICT

Although sparsely inhabited today, there are vestiges of many trails in Ka'ū which indicate its importance in the past. The labor to create certain types of trails is indicative of powerful chiefs. Here, too, the trails, ancient village sites, chiefly residences with associated fishponds, and numerous coastal landing spots for canoes testify to the district's former importance in trade and chiefly affairs.

SOUTH POINT NATIONAL HISTORIC LANDMARK DISTRICT

The coastal attraction of Ka Lae for ancient Hawaiians and modern fishermen alike lies in the adjacent deep-sea fishing zone with its abundance of prized pelagic (open sea) game species. Powerful cross-currents meet here and bring schools of fishes making for excellent but dangerous fishing grounds where tuna (*aku* and *ahi*), marlin (*a'u*), and dolphin (*mahi mahi*) are still avidly sought.

The landmark consists of a series of archaeological settlements, structures and features that define the area's significance as a favored fishing area in prehistoric time. There are dozens of ancient salt pans and canoe mooring holes carved into shoreline rocks; a significant fishing temple, Kālalea Heiau (reputedly used by Kamehameha I) at which offerings are still left by fishermen; and ancient habitation sites such as Makalai Shelter, Wai'ahukini Shelter, and the famous Pu'u Ali'i Dune Site whose radiocarbon dates suggest it was among the earliest known settlements in the Hawaiian Islands. During excavations conducted by the Bishop Museum in the 1950s at several of the South Point habitation sites, thousands of fishhooks and fishhook fragments were recovered from datable deposits (the earliest fishhooks and stone adzes from the Pu'u Ali'i Site resemble forms from the Marquesas, 2400 miles to the south). The South Point fishhooks were serrated according to stylistic changes over time and thus provide a relative dating chronology for cross-dating other sites in Hawai'i (Emory, Bonk and Sinoto 1959).

The prehistoric ala *loa* passed through South Point, but much of it was on sand and hence not visible.

PUNALU'U RUINS

The importance of this former royal center, which may be commercially developed and interpreted under a historic preservation agreement with the state, is evident in the remains of a huge *luakini* called Punalu'unui overlooking the Punalu'u Bay and a coastal fishpond of the same name. Remnants of Punalu'u habitation sites are behind the pond. The area contains petroglyphs and east beyond Punalu'u, vestiges of a coral marked ala *loa*.

PUNA DISTRICT

All locations discussed in this section are within Hawaii Volcanoes National Park.

As with Ka'ū District, there are many vestiges of trails that have interpretive potential, but there has been no systematic research to identify and date these remaining trail segments.

Some aspects of trail location and uses can never be known due to recent and vast lava flows. There are some clues in the literature, but for present purposes these remain inconclusive because it is not always clear if a reference to an "ancient trail" refers to the

actual prehistoric *ala loa*, or to a nineteenth century trail (e.g., the Hawaii Department of Transportation classification of all pre-1892 roads and trails as “ancient”).

Spears, who was doing archeological survey for Hawaii Volcanoes Park in the vicinity of Panau Iki (1995) is of the opinion (personal communication, October 9, 1996) that the Puna-Ka’ū trail referred to on the 1922 USGS maps and some later editions is in general an accurate guide to the older coastal trail route through the district. The following properties are included in Puna-Ka’ū Historic District (129,655 acres), a property entered on the National Register of Historic Places on July 1, 1974.

KEALAKOMO VILLAGE

Kealakomo is of historic interest because it was at this village on the ancient coastal trail that Reverend Ellis was met by some two hundred native inhabitants when he descended from a visit to Kilauea down to the coast. Coastal villages typically contain house sites, walled enclosures, canoe shelters, *ko’a*, *heiau*, and grave sites. Particularly noteworthy of the rock art at Kealakomo is the large number (67) of *papamū*, or rectangles of dots where the checker-like game of *kōnane* was played. Emory et al. (1959a:3) noted that Kealakomo “was and still is important as a salt producing center. Dried fish were exported from here to Ola’a and inland places in exchange for taro [*kalo*], tapas, and other products which could not be produced on this dry coastal land.”

The Kealakomo visited by Ellis was a village already adapted to western contact; hence, there were probably already changes in traditional settlement pattern, with possible modifications to the alignment of the ancient *pre-contact trail*. At least 85% of the area has now been inundated by lava, but remains of the trail that passed through the area can still be picked up further east.

PU’U LOA PETROGLYPHS

This extraordinary site is located two and one-half miles east of Kealakomo. *Pu’u Loa* (“long hill” or “hill of long life”) has the most concentrated complex of petroglyphs (approximately 23,000 units) known in the Hawaiian Islands, and perhaps anywhere in the Pacific (Lee 1993; Lee and Stasack, in press). The most prevalent forms are the *piko* or *lua* glyphs associated with birth rituals for newborn children; however, human figures and other images are also carved in the *pāhoehoe*.

Although not specifically referencing the *ala loa*, Emory et al. (1959a:3) spoke of an ancient trail passing through the site:

east of Kealakomo, and nearly a mile from the shore, the ancient trail passes over a *pāhoehoe* pressure dome about 400 feet long named Puu Loa, “Hill of Long Life.” The dome itself and the area along both sides of the trail as it approaches the hill from either direction is covered with hundreds of glyphs.

Prehistoric art specialist, Georgia Lee (personal communication, February 20, 1996) also believes the prehistoric main trail through Puna was set back from the coast in this area and did go through the site.

NPS Pacific Area Project archeologist Laura Schuster (personal communication, May 2, 1997) has walked the sections of the trail noted by Emory, Lee and Spears. Her description of the trail moves from east to west:

the trail that continues through *Pu’uloa* connected with *Lae’apuki* As the trail crossed different *ahupua’a* the trail became more defined, with curb stones, etc. and for the length of the trail, an earlier trail alignment or worn *pāhoehoe* is

visible. This earlier worn area would weave in and out of the curbstones along the trail section in Lae'puki. The trail through Panau nui/iki did not have curbstones and inland *mauka/makai* trails were present, but rare. The intersection of a trail, a hill like Pu'uloa, where the *piko ceremony* was carried out, and *ahupua'a* boundaries is a pattern that is repeated at least five times between Pu'uloa and Ka'ili'ili. I would agree with Emory that this is an old trail, [that] may have been modified in some areas, like Lae'puki, but it is old.

LAE'APUKI AND KAMOAMO A VILLAGE RUINS

These former coastal villages and trail associations were destroyed in the same 1988-95 series of lava flows that encircled Waha'ula Heiau. Lae'apuki (occupied until 1920) had been a farming and fishing community whose local economy converted to goat and cattle herding following western contact. Kamoamo a, an ancient farming and fishing settlement, had been partially destroyed by the *tsunami* of 1868.

WAHA'ULA HEIAU

Now completely covered by lava from a 1997 flow, the Waha'ula temple complex consisted of low wall enclosures. Construction has been attributed to the legendary Pa'ao (Malo 1951:6-7; Ladefoged et al. 1987:56) who is also credited with the construction or refurbishment of Mo'okini Heiau near 'Upolu Point in Kohala. (Note: Cordy, personal communication, March 27, 1997, believes "the oral histories relating to Pa'ao and Pili date to around A.D. 1400, using 20 years per generation".) Thrum (1908:52) said the temple formerly had a *pu'uhonua*, but this was not verified in the archaeological work reported by Ladefoged (et al.). A possible explanation is provided by Kelly, citing unpublished notes by Stokes (in Bryan and Emory 1986:154), who says another heiau called Waha'ula, but located in the land of Kamā'ili, Puna, was claimed by local residents to have been the original heiau of Waha'ula, and that the stones were taken to Pūlama to build the large Waha'ula in its present location.

Waha'ula was reconditioned by 'Imaikalani, a chief of Ka'ū in the late 1500s or early 1600s A.D., and again by Kalani'ōpu'u around 1770 A.D. Kamehameha I ordered the final renovations in early historic times, dedicating the temple to his family war god, Kūkā'ilimoku. In the early nineteenth century, Liholiho (Kamehameha II) visited Waha'ula during the peaceful period of the annual *Makahiki* cycle.

Other structures existed in the vicinity of the temple, including portions of the *ala loa*; however, in 1989 a massive lava flow crossed the Chain of Craters Road in Hawaii Volcanoes National Park, covering hundreds of recorded archeological sites and surrounding the temple.

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'a'ā	Solidified lava with a rough, clinkery surface.
ahu	A heap of stones erected as a marker; a cairn; the altar upon which tribute offerings were placed.
ahupua'a	A major land division, usually extending from the ocean to high in the mountains.
aku	Tuna (<i>Scombridae</i>).
ala loa	Coastal trail around an island; long trail.
ali'i	Hawaiian sacred chiefs and chiefesses; the nobility.
a'u	Marlin, or any of the several game fish of the genus <i>Makaira</i>
'aumākua	Ancestral guardian spirits. Hawaiian temple platform. There were numerous temples for many different purposes such as agricultural prosperity, fishing, surfing, the hula, etc. Only the highest ranking one, the <i>luakini</i> , was used for human sacrifice.
hōhua	An inclined dry-laid masonry ramp on which sledding contests were held.
hula	Ancient form of dance.
Kahiki	The "ancient ancestral lands"; believed to refer to Tahiti in the Society Islands.
kapa	Tapa, or barkcloth (<i>Broussonetia papyrifera</i>).
kapu	Taboo; sacred; no trespassing.
ko'a	Fishing shrine.
kōnane	An ancient Hawaiian game resembling checkers.
Lono	God of agriculture, fertility and peace.
lua	Pit, indentation, hole.
luakini	The <i>heiau</i> maintained by a paramount chief in his chiefdom for prayer and human sacrifice; the highest rank of temple. Dedicated to the war god, Kū.
mahi mahi	Dolphins (<i>Coryphaenidae</i>).
makai	Toward the sea; at the coast.
makahiki	The ancient annual Hawaiian religious festival which included ceremonial collection of taxes. It began about the middle of October and lasted four lunar months, with sports and religious observances and a taboo on war.
mana	Spiritual power, derived from the ancient gods, contained in varying degrees in all life forms and inanimate objects.
mauka	Towards the interior, or mountains; inland.
paniolo	The Hawaiian term for cowboy. Ranch hands were imported from Mexico in the 1830s to teach Hawaiians cattle punching and to help control the large herds of wild cattle that had multiplied since their introduction to the island in the 1790s. "Checkerboard" for game of <i>kōnane</i> , consisting of small, shallow holes arranged in a grid, either on native rock or a detachable slab.

<i>pāhoehoe</i>	Solidified, smooth unbroken surface lava. When compared with 'a'ā, often appears as billowy fields with hollows and small hills; large cracks mark some billows.
<i>piko</i>	Umbilical cord stump.
<i>pōhaku</i>	Rock, stone.
<i>pu'uhonua</i>	Polynesian concept of refuge; sanctuary. These were established places of refuge such as Pu'uhonua o Hōnaunau, but a high chief or chiefess and/or a piece of land controlled by such could also be declared <i>pu'uhonua</i> . Some lava tubes and caves also served as refuges.
<i>tapa</i>	See <i>kapa</i> .
<i>tsunami</i>	Tidal wave (Japanese).

**APPENDIX F:
TRAILS SEGMENT DESCRIPTION ALONG
THE ALA KAHAKAI¹**

District: Location / Mileage From 'Upolu Point	Description	Notes
NORTH KOHALA		
'Upolu Airport to Honoipu Landing / 0–3.75 ²	Paved road to 'Umiwai Bay; dirt road past Mo'okini Heiau and Kamehameha I Birthplace State Memorial.	Chalon International of Hawaii, Inc. has development plans for North Kohala from 'Upolu Point to Māhukona which include the Ala Kahakai and the railroad. (Chalon, 1991) ³ Hiked on National Trails Day (NTD), June 3, 1993
Honoipu Landing to Kapa'a Beach County Park / 3.75–7.0	Mostly a dirt path, some on cattle land. Some fences cross trail.	Short segment required of private landowner—dirt trail. Hiked on NTD. [Frank Hustace, Pat Wagner] ⁴
Kapa'a Beach County Park to Māhukona / 7.0–8.75	Generally rock surface, but some dirt path. Kiawe and fences noted as blocking trail. Dirt 4-wheel drive road and old sugar cane railroad right-of-way.	The railroad was used for public transportation and is a public right-of-way. Hiked on NTD—almost continuous cultural sites noted. [Midge Eichner, Chris Campbell]
Māhukona through Lapakahi State Historical Park / 8.75–10.5	In Kaoma and Hihui <i>ahupua'a</i> trail set inland several hundred meters, visible as a faint depression with some stones slightly piled on either side (Cordy). In Lapakahi, trail is closer to the sea and just behind coastal housing compounds.	Hiked NTD. [Midge Eichner, Chris Campbell]
NORTH / SOUTH KOHALA		
Lapakahi SHP to Kawaihae / 10.5–23.0	<i>Kama'āina</i> report trail use between Māhukona and Kawaihae. Numerous known archeological remains along entire segment. (Withington) Dirt path along shore. Extensive dirt 4-WD roads.	Buffalo grass and kiawe have covered the trail. Dirt road is choice in modern use rather than ancient trail. Hiked in 4 segments on N D. [Toni Withington, Judy Graham, Sonny Kaniho]
SOUTH KOHALA		
Kawaihae / 23.0	Trail behind coastal housing enclosures until the sand shore of the bay; there it ran along sand edge in front of house enclosures (Cordy). Route of <i>ala loa</i> at Pu'ukoholā Heiau and the king's residence is not clear (may have been seaward of the <i>heiau</i> (Cordy).	
Kawaihae through Mauna Kea and South Kohala Resorts to Hāpuna Bay / 23.0–26.75	Dirt trail marked "Ala Kahakai" ⁵ at Waikui. Public access trails through Pu'ukoholā Heiau NHS, Spencer Beach County Park, Mauna Kea Beach Hotel and South Kohala Resort.	Hiked on NTD. [Betty Hannah]

¹ Prepared in consultation with Deborah Chang.

² The mileages shown are taken from the County of Hawaii, *Public Access to the Shoreline, County of Hawaii*, September, 1979.

³ All names in parentheses () refer to authors of printed material listed in the bibliography.

⁴ Names in brackets [] in the "Notes" and "Description" columns identify National Trails Day (NTD) trail segment leaders who provided descriptions and photos of the trail.

⁵ The State Demonstration Trail, "Ala Kahakai" extends from Kawaihae to the north edge of Kailua-Kona at Old Kona Airport Park. The trail is not managed, cleared, or marked throughout the entire distance.

TRAILS SEGMENT DESCRIPTION ALONG THE ALA KAHAKAI (cont.)

District: Location Mileage From 'Upolu Point	Description	Notes
Hapuna Bay to Waialea Bay / 26.75–28.0	Dirt trail. [D. Chang]	Part of demonstration trail in state park. Hiked NTD. [Sandra Ednie]
Waialea Bay past Puakō boat ramp to Holoholokai Beach county Park / 28.0–29.0	Dirt trail to boat ramp. Sea walls block access at some Puakō beach lots. Sand and coral trail from "Ruddles' Place" to Holoholokai. [D. Chang]	Puakō beach lots have sea walls which may get in the way of lateral shoreline access. The trail may need to use a paved road, especially during high surf. Hiked on NTD. [Sandra Ednie]
Holoholokai through Mauna Lani and Waikoloa Beach Resorts to 'Anaeho'omalu / 29.0–35.0	In Kalāhuipua'a (Mauna Lani Resort), trail is a winding, crushed 'a'ā foot path across Kanikū lava flow. On pāhoehoe lava, straight 1880s trail runs through the Waikoloa petroglyph field. Nearby is a footpath worn in the lava, the prehistoric <i>ala loa</i> (Cordy).	Prehistoric trail is intermittently visible from the 1880s trail [Chang]. Hiked on NTD. [Mark and Ann Stevens] The inland 1880s trail from Kalāhuipua'a to Kiholo via Waikoloa petroglyph field is on National Register. This trail offers an alternative to the winding shoreline trail depending upon the purpose of travel.
NORTH KONA		
'Anaeho'omalu to Kapalaoa / 35.0–38.5	Trail follows sandy beach at 'Anaeho'omalu to Kapalaoa.	'Anaeho'omalu to Kiholo hiked on NTD. [Charlie Gindler]
Kapalaoa to Weliweli / 38.5–40.0	Prehistoric crushed 'a'ā trail leads to anchialine pond at Akahu Kaimu and continues to Weliweli. Crushed 'a'ā trail passes between house and shore at Weliweli.	High surf has destroyed a portion of this segment; it would need restoration.
Weliweli to Kiholo / 40.0–44.0	Combination of pebble beach and pāhoehoe lava of 1859 flow [D. Chang].	Nā Ala Hele marked the trail with white coral between Keawaiki and Kiholo.
Kiholo to Luahinewai / 44.0–46.0	Trail runs on sandy shore until it becomes a winding crushed 'a'ā path near to Luahinewai Pond [D. Chang].	Hiked an NTD. [Rodman]
Luahinewai to Ka'ūpūlehu / 46.0–50.0	Trail over <i>pāhoehoe</i> and some crushed 'a'ā. Some sections have been restored by Nā Ala Hele [D. Chang].	Hiked on NTD. [Rodman]
Ka'ūpūlehu to Kūki'o / 50.0–51.75	Combination sandy beach and crushed 'a'ā path. Four Seasons has a clearly evident segment of ancient trail [D. Chang].	Kona Village, Four Seasons, and Kukio Beach Resorts may preserve trail segments and protect archeological sites. Public access to the beach at Kona Village is bordered by barbed wire fence. Hiked on NTD. [Michael Tomich]
Kūki'o to Maniniōwali (Kua Bay) / 51.75–53.0	Prehistoric crushed 'a'ā path with some beach steppingstones (Cordy).	Maniniōwali is state owned. This segment and Maniniōwali to Mahai'ula have white sand beaches, anchialine ponds, and many archeological sites. Hiked on NTD. [Michael Tomich]
Maniniōwali to Mahai'ula / 53.0–56.0	Many coral and sandy beaches [D.Chang]. From Makalawena to Mahai'ula remnants of a stepping-stone trail that may be part of the prehistoric <i>ala loa</i> can be seen inland from the shoreline.	The shoreline trail passes Pu'u Kuili cinder cone and a sea arch. Hiked on NTD. [Michael Tomich] Within Kona Coast State Park under development.
Mahai'ula to Keāhole Point / 56.0–61.0	1801 lava flow affected prehistoric trail. The trail is intermittent but easy to walk because of <i>pāhoehoe</i> [D. Chang].	Hiked on NTD. [Claire Hachmuth] There may be safety restrictions to use because of airport. [Sakai]

TRAILS SEGMENT DESCRIPTION ALONG THE ALA KAHAKAI (cont.)

District: Location / Mileage From 'Upolu Point	Description	Notes
Keāhole Point through Honokōhau / 61.0–66.5	A little over one mile of the 5.5-mile Māmalahoa Trail exists within Kaloko–Honokōhau NHP. A newly opened trail crosses park land inland of Kaloko Fishpond. An improved coastal jeep trail exists to the south of Kaloko and continues to the north end of Honokohau beach (Schuster).	Federal and state ownership: boundaries of Kaloko–Honokōhau NHP run from Wawahaiwa'a Point to Ala'ula Cove. Hiked on NTD. [Martin]
Honokōhau to Kailua / 66.5–71.5	The coastal trail runs along mostly <i>pāhoehoe</i> which is not clearly marked, but provides easy walking.	Segments of prehistoric trail are on state lands. Hiked on NTD. [Michael Tomich] Noted need to traverse inland to get around the Honokōhau Boat Harbor; also, Thurston Estates boat channel interrupts trail continuity.
Kailua–Kona to Keauhou / 71.5–78.75	Prehistoric <i>ala loa</i> ran along the route of present Ali'i Drive. It was mostly <i>pāhoehoe</i> land, but portions did cross 'a'ā flows with rounded stones. Today it is urbanized (Cordy).	From Kailua to Hōkūkano, the <i>ala loa</i> was often flanked by houses. In 1850s when houselots became walled with dry-laid stone, the trail passed through walled houselots (Cordy). Hiked on NTD in two sections. [Beth Robards, W. Kriewald]
NORTH KONA / SOUTH KONA		
Keauhou around Kealakekua Bay / 78.75–89.0	The <i>Ala loa</i> approximated today's coastal jeep road. Some trail near Kealakekua Bay is on 'a'ā lava.	The walled pattern can be seen today at Nāpō'opo'o on the south shore of Kealakekua Bay and along jeep road just south of Keauhou (Cordy). Hiked on NTD in three segments. [W. Kriewald, Curt Tyler, Rick Frye]
SOUTH KONA		
Kealakekua Bay to Hōnaunau Bay / 89.0–93.0	A 100 foot stretch of paving stone was found just south of Kipu rock and about 200 feet from shore. For the rest of this 4.5 mile stretch, the old trail has either been destroyed by storm waves or the route was over bare <i>pāhoehoe</i> , leaving little or no trace [NTD notes]	Hiked NTD. [D. Martin, J. Shimoda, G. Joyce]
Hōnaunau Bay to Ho'okena / 93.0–97.5	Shoreline trail within Pu'uhonua o Hōnaunau NHP has been washed away by coastal storms; segments of the 1868 trail and constructed stone ramp remain. Segments of the <i>ala loa</i> may exist within Kī'ilae Village. Trail passes stone arches and abandoned stone church.	Hiked on NTD. [Terry Wallace]
Ho'okena to Ka'ohe / 97.5–103.0	Segments of trail made of water-worn stones placed on crushed 'a'ā, and flat <i>pāhoehoe</i> stones placed on 'a'ā lava. Partly jeep trail.	Hiked on NTD.
Ka'ohe to Papa Bay / 103.0–111.5	Some jeep trail. Long section made of water-worn stones placed on 'a'ā (especially at Kipāhoehoe) and crushed 'a'ā with water-worn stones thrown aside.	Hiked on NTD. [Ken Brown, Charles Young]
Papa Bay to Kapu'a Bay / 111.5–118.5	Trail generally apparent on open 'a'ā fields, although obstructed by Kiawe in some places [NTD notes]. Trail destroyed in places by jeep roads. [D. Chang]	Hiked on NTD. [Jack Davis] Several pebble and sandy beaches along the way. The continuously paved <i>mauka-makai</i> trails in the Kapu'a and Okoe areas suggest that it may have been a hub of ancient commerce. [D. Chang]

TRAILS SEGMENT DESCRIPTION ALONG THE ALA KAHAKAI (cont.)

District: Location/Mileage From 'Upolu Point	Description	Notes
Kapu'a Bay to Manukā / 118.5–124.5	Footpath varying from well-established crushed 'a'ā to <i>pāhoehoe</i> to soil to sand. Some trail overgrown with Kiawe. Passes gray sand beach, hōiua slide, and numerous cultural sites. Many indigenous and endemic plant species. [NTD notes, and Gloria Amaral, Sierra Club–Moku Loa Group]	Hiked on NTD. [Jim Wiley] Some of the best examples of <i>mauka-makai</i> trails continuously paved with water-worn boulders in this area. [D. Chang]
KA'Ū		
Manukā to Ka Lae (The Point or South Point) / 124.5–147	Discontinuous pieces of trail: over 'a'ā the trail is visible as a crushed path with steppingstones; on <i>pāhoehoe</i> , the <i>ala loa</i> is sometimes apparent as a worn path and sometimes left no remains except for stone cairns and pieces of coral (Cordy).	Not hiked on NTD. Sizable petroglyph field at Pōhue and ancient coastal sites present along coast.
Ka Lae to Ka'alu'alu / 147.0–155.0	Jeep road.	Not hiked on NTD. Green sand beach along the way. Ka Lae is a sacred area with many historic sites and Hawaiian Home Lands ownership. [D. Chang]
Ka'alu'alu to Kimo Point / 155.0–164.5	Well-worn trails, some 'a'ā and some worn into <i>pāhoehoe</i> . Jeep roads cut across path. Some trail overgrown with vegetation [noted on NTD].	Hiked on NTD. [Basil Hansen, Berna Ming, Dekker]
Kimo Point to Honu'apo / 164.5–167.0		Not hiked on NTD.
Honu'apo to Punalu'u / 167.0–174.5	From Whittington Beach Park to Kāwā Bay, easy hiking; from Kāwā Bay to Ninole, arduous hiking for experienced hikers, but provides good representative sample of ancient trail segment over 'a'ā fields with interesting cultural sites along this section [from NTD notes].	Hiked on NTD. [M. Gates]
Punalu'u to Palima Point / 174.5–179.5	Part of trail over 'a'ā with rounded stones. Kamehame Bay is site of hawksbill turtle nesting.	Hiked on NTD. [Toni Thomson]
Palima Point to Kapā'o Point (boundary of Hawaii Volcanoes NHP) / 179.5–184.0		Not hiked on NTD
Kapā'o (boundary of Hawaii Volcanoes NP ⁶) by Nāpu'uonā'elemākule to 'Opihinehe / 184.0–190.75	A portion hiked on NTD: "ancient trail from Ka'ū to Puna—it's been off the map for many years." Following a faint trail and ahu, the group reached Kamo'o'ali'i Heiau. [Gloria Amaral]	Within Hawaii Volcanoes National Park (HAVO) Hiked on NTD. [Gloria Amaral]
KA'Ū / PUNA		
'Opihinehe to 'Āpua Point / 190.75–201.25	Puna Coastal trail from Halapē to 'Āpua.	Within HAVO. Not hiked on NTD.

⁶ The remainder of the trail is within the wilderness area of Hawaii Volcanoes National Park. Overnight camping requires registration at the Kīlauea Visitor Center. Life-threatening situations such as advancing lava flows, earthquakes, or tsunami occur in this area, and park rangers must be able to locate and account for all persons in the wilderness area. The native Hawaiian residents of Kalapana and their guests have exclusive fishing and seafood-gathering rights from the eastern park boundary to a fence line between Keauhou and Halapē. (Clark)

TRAILS SEGMENT DESCRIPTION ALONG THE ALA KAHAKAI (cont.)

District: Location / Mileage From 'Upolu Point	Description	Notes
PUNA		
'Āpua Point to Pu'u Loa / 201.25-207.0	At 'Āpua a stretch of 'a'ā lava is crossed by a trail of water-worn boulders measuring one to three stones wide (Cordy).	Within HAVO. Hiked on NTD [Susan McGovern] on "well-marked and NPS maintained" Puna Coast Trail.
Pu'u Loa to Lae'apuki / 207.0-211.0	Trail intermittently defined with curbstones. In Lae'apuki, an earlier trail worn in <i>pāhoehoe</i> is visible weaving in and out of the curbstones. Intersection of a trail, a hill like Pu'uloa, and <i>ahupua'a</i> boundaries is a pattern repeated at least five times between Pu'uloa and Ka'ilili'i. (Laura Schuster)	Not hiked on NTD
Lae'apuki to Waha'ula Heiau boundary of Hawaii Volcanoes NP) / 211.0-215.0	Trail inundated with lava in the 1992-1997 flow from Kilauea. Waha'ula Heiau was covered by lava in 1997.	



**APPENDIX G:
LAND OWNERSHIP AND
LAND USE POLICY/REGULATION REPORT
FOR THE
ALA KAHAKAI NATIONAL TRAIL SYSTEM
FEASIBILITY STUDY**

April 18, 1996

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PURPOSE AND METHOD

Public Law 102-461, October 23, 1992, amended the National Trails System Act to name the Ala Kahakai as a study trail to "determine the feasibility and desirability of its designation as a national trail." The Ala Kahakai is an approximately 175-mile portion of the ancient Hawaiian trail (ala loa) on the island of Hawaii, extending from Upolu Point at the northern tip of the island, down the west coast, around South Point, to the east boundary of Hawaii Volcanoes National Park near Wahaula Heiau.

The trail route is described as a portion of the ancient shoreline trail around the island of Hawaii. The exact location of the trail is not fully known at this time, although local segments are well known and much of the trail was walked on National Trails Day in June 1993. Generally, the trail is located within 500 feet of the shoreline or the coastal bluffs, and in many cases, closer than that. National authorization of the trail would emphasize protection of the historic, ancient trail and not simply a trail for public access. Nonetheless, segments of the trail which have been reconstructed after natural or human destruction of the original trail could provide links between ancient trail segments. Therefore, all lateral shoreline trails are pertinent to the national trail study.

Feasibility and desirability of authorizing a national trail are partially determined by ownership of the trail and the degree to which private groups and landowners and public agencies, other than the federal government, would participate in acquiring and managing necessary lands. The objectives of this report are to estimate public and private ownership along the trail, including any easements or other dedications for public use across private lands along the Ala Kahakai corridor, and to document existing restrictions placed on land use by county, state and federal laws and regulations.

Existing land use records were reviewed to collect the necessary data for the report. These records and documents included the following:

- county real property tax records
- Tax Map Key records
- The Na Ala Hele Trail and Access Inventory Database (1990)
- E Mau na Ala Hele's land ownership database
- The County Planning Department's Shoreline Public Access Inventory (work in progress)
- County Planning Department land use permit records
- Department of Land and Natural Resources, State Na Ala Hele Program files
- County of Hawaii Public Access to the Shoreline Inventory (1979)

The data sources were utilized to compile a tax map key based land ownership inventory of properties along the theoretical trail route within the study area. The land ownership inventory includes all properties along the route with a few notable exceptions. Areas with a high concentration of small lot sizes such as portions of Kailua-North Kona, Napoopoo, Keei and Milolii Beach Lots-South Kona were not included. Due to the highly developed nature/large number of small landowners involved with these parcels, it is assumed that the public roadway along the coast will serve as the connecting link between trail segments. In addition to tax map key number and ownership, the inventory also indicates the length of the parcel (along the shoreline) as well as information regarding the presence of any access along (lateral) and to the shoreline.

Existing documents and reports were reviewed to provide a summary of state and county land use policy as it may affect ownership rights and the use of land along the trail corridor. These documents and reports included the following:

- Na Ala Hele Program Plan (1991)
- Hawaii County General Plan (1989)
- Inventory of Public Shoreline Access, County of Hawaii (1979)
- Hawaii Revised Statutes (HRS) Chapter 226, relating to State Planning
- HRS Chapter 205A relating to Coastal Zone Management
- HRS Chapter 205A-49 relating to Shoreline Setbacks
- HRS Chapter 205 relating to State Land Use Law
- HRS Chapter 189D relating to the Statewide Trail and Access Program
- HRS Chapter 171-26 relating to Rights-of-Way to the Sea and Game Preserves
- HRS Chapter 343 relating to Environmental Impact Statements
- HRS Chapter 46-6.5 relating to Dedication of Rights-of-Way and Easements to Counties by Subdividers
- Hawaii County Ordinance No. 96-17 relating to Public Access to the Shoreline and Mountain Areas

LAND OWNERSHIP

Land ownership along the 175 mile route of the Ala Kahakai study area was determined by examining real property tax records and tax key maps. These records indicate that approximately 53% of the Ala Kahakai route is government owned land. The break down between Federal, State, County and Hawaiian Home Lands is provided in Table 1. The remainder or 47% of the route is privately owned. Table 2 provides a break down of the private land owners who own at least .4 of a mile of land along the Ala Kahakai Route.

- TABLE 1 -
GOVERNMENT LANDS ALONG THE ALA KAHAKAI ROUTE, ISLAND OF HAWAII
(In Miles and Percent of Total)

<i>Total Study Area</i>	Federal (1)	state (2)	County (3)	Hawaiian Home Lands	Total Gov.
175	30.17	46.92	9.82	6.98	93.24
(100%)	(17.2%)	(26.8%)	(5.6%)	(3.9%)	(53.3%)

- (1) Federal land including National Park and lighthouse sites
- (2) State land, including those encumbered by private leases, those under Executive Order to the County and old government roads assumed to be owned by the State
- (3) County land including County roads

-TABLE 2 -
 PRIVATE LAND OWNERS ALONG THE ALA **KAHAKAI** ROUTE,
 ISLAND OF **HAWAII**
 (Those Who Own .4 Mile or More)

Land Owner	Length (In Miles)
1. B.P. Bishop Estate	15.32
2. Kau Agribusiness Co. Inc.	10.70
3. Hawaii Kau Aina	5.49
4. Kapua Ventures, ETAL	4.17
5. Elizabeth M. Stack, ETAL	3.47
6. Chalou International of Hawaii, Inc.,	2.51
7. Richard Smart Trust	2.49
8. Mauna Lani Resort, Inc.	2.20
9. Court Street Holdings	2.08
10. Mahola Inc.	1.86
11. Yee Hop Ltd.	1.55
12. Magoon Estate, Ltd.	1.35
13. Liliuokalani Trust Estate	1.19
14. Nansay Hawaii, Inc.	1.04
15. Kevin Yancy, Trustee. Lyle Anderson Vendee AS.	1.04
16. Notepower Ltd.	0.95
17. 1250 Oceanside Partners	0.91
18. Pacific Investment Hawaii, Inc.	0.89
19. Kahua Ranch Ltd., ETAL	0.74
20. Lanpar/HTL Associates-Global Resort Part. LE	0.70
21. International Air Services Co., Inc.	0.70
22. Captain Cook 660 Partners	0.69
23. Waikoloa Land & Cattle Co	0.68
24. Thomas Okuna, ETAL	0.61
25. Mary A. Ulrich	0.59
26. Matsuhei Okuna	0.57
27. Mauna Kea Beach Hotel Corp.	0.54
28. American Trust Company Hawaii, Inc. Trustee	0.49
29. Puakea Say Ranch Park Owners	0.48
30. Huehue Ranch Associates, L.P.	0.47
31. Cal Pacific International, Inc. ETAL	0.44
32. Mauna Kea Development Corp.	0.42
33. Yukio Naito, Trustee	0.42
34. Dahlas & Mieko Antoku, ETAL	0.41
35. The Queen Emma Foundation	0.40
36. Cecil Carmichael Trust, ETAL	0.40

ACCESS EASEMENTS / DEDICATIONS

Government public access requirements, to and along the shoreline, have resulted in easements and other dedications which permit public use of trails across private property. These access requirements are the result of permit conditions which are imposed as part of the development review process described in further detail later in the report. In some cases, easements have been dedicated as a result of court settlement agreements arising from suits brought by private individuals or organizations.

Table 3 identifies the estimated length of easements or other dedications that permit public use of trails across private property along the shoreline. Approximately 15.49 miles of easements or dedications have been required by governmental action within the study area. Of this total, approximately 11.08 miles are in place and/or recorded on deed documents. Approximately 4.41 miles are situated on parcels which have not been developed and may not be currently available for public access.

- TABLE 3 -
PUBLIC ACCESS EASEMENTS OR DEDICATIONS
ACROSS PRIVATE PROPERTY REQUIRED BY GOVERNMENT ACTION
 (Length In Miles)

TMK No.	Owner	Length	Provided
5-6-2:42	Puakea Bay Ranch Park Owners	0.48	Yes
5-6-2:41	George & Shirley Isaacs	0.22	Yes
5-7-2:11	Chalon International of HI.	0.54	Not Built
5-9-1:06	Kohala Waterfront Joint Venture	0.30	Not Built
6-2-2:06	The. Queen Emma Foundation	0.40	Yes
6-2-2:07	Haseko Corp.	0.19	Yes
6-2-2:05	Bernice R. Spaulding	0.07	Yes
6-2-2:24	Arlin Trust	0.07	Yes
6-2-2:14	Mauna Kea Beach Hotel Corp.	0.01	Yes
6-2-2:04	Mauna Kea Beach Hotel Corp.	0.44	Yes
6-2-2:19	Mauna Kea Beach Hotel Corp.	0.04	Yes
6-2-2:20	Mauna Kea Beach Hotel Corp.	0.05	Yes
6-2-2:13	Mauna Kea Development Corp.	0.42	Yes
6-6-2:37	Mauna Kea Development Corp.	0.30	Yes
6-8-22:08	ONKD Inc.	0.21	Yes
6-8-22:09	Mauna Lani Resort, Inc.	0.26	Yes
6-8-22:01	Mauna Lani Resort, Inc.	0.02	Yes
6-8-22:15	MLR Inc./Mauna Lani Hotel LE	0.21	Yes
6-8-22:26	Mauna Lani Resort, Inc.	0.61	Yes
6-8-22:27	Mauna Lani Resort, Inc.	0.64	Yes
6-8-22:32	Mauna Lani Resort, Inc.	0.47	Yes
6-9-7:34	TJK Waikoloa Partners	0.18	Yes
6-9-7:38	ATPAC Hawaii Ltd. Partnership	0.30	Yes
6-9-7:14	Lanpar/HTL Assoc./Global Res. Part. LE	0.70	Yes
6-9-7:13	Waikoloa Land & Cattle Co.	0.30	Yes
6-9-7:12	Waikoloa Land & Cattle Co.	0.34	Yes
6-9-7:11	Waikoloa Development Co.	0.34	Yes
7-2-3:02	B.P. Bishop Estate/Kona Village Ass. LE	0.66	Yes
7-2-3:06	B.P. Bishop Estate/Kona Village Ass. LE	0.70	Yes
7-2-3:05	B.P. Bishop Estate/Kona Village Ass. LE	0.19	Yes
7-2-3:04	B.P. Bishop Estate/Kaupulehu Makai Vt LE	0.57	Yes
7-2-4:05	Huehue Ranch Assoc., L.P.	0.47	Not Built
7-3-9:03	Nansay Hawaii, Inc.	1.04	Not Built
7-8-13:43	B.P. Bishop Estate/Azabu USA LE	0.09	Yes
7-8-13:02	B.P. Bishop Estate/Azabu USA LE	0.09	Yes
7-8-13:03	Kamehameha Investment Corp.	0.14	Yes
7-8-10:03	Otaka, Inc.	0.23	Yes
7-8-20:28	Kanaloa at Keauhou Assn. of Apt. Owners	0.25	Yes
7-8-10:66	Kamehameha Investment Corp.	0.20	Yes
7-9-12:03	Kevin Yancy Trustee/Lyle Anderson Vendee	1.04	Not Built
8-1-4:03	1250 Oceanside Partners	0.91	Not Built
9-5-17:05	Kau Agribusiness	0.70	Yes
9-6-1:03	SM Investment Partners	0.07	Not Built
9-6-1:02	SM Investment Partners	0.04	Not Built
TOTAL		15.49	

ANCIENT TRAILS

The County of Hawaii Public Access to the Shoreline Inventory (1979) was utilized to estimate the potential miles of "ancient trail" (as defined in the Highways Act of 1892) that may exist along the Ala Kahakai. It should be noted, however, that the above-described report established study parameters that limited the scope of the inventory of ancient trails. These are stated, in part, as follows: "Although it is surmised that the ancient Hawaiian trails along the shoreline are public rights-of-way, only **those segments which traverse through government land or are part of the tax maps or old survey maps as public trails have been inventoried.**" (emphasis added)

"In the ancient Hawaiian method of governance, these trails were open for the use of the people living within the ahupua'a. Existing state laws continue to protect the right of the public to use these trails. However, there are problems in identification. Over time, many of these trails have been obliterated by disuse, by further development of the land, by lava flows, or by the use of trails by modern methods of travel."

Approximately 76 miles of the properties within the study area have ancient trails described in the County of Hawaii Public Access to the Shoreline Inventory (1979). Table 4 provides a break down between Federal, State and private ownership of these parcels. Approximately 33.21 miles (43.5%) are government owned while the remaining 43.18 miles (56.5%) are privately owned.

- TABLE 4 -
PROPERTY WITH ANCIENT TRAILS DESCRIBED IN THE
COUNTY OF HAWAII PUBLIC ACCESS TO THE SHORELINE INVENTORY
(In Miles and Percent of Total)

Total Study Area	Federal	State	Sub-Total Government	Private
76.39	10.60	22.61	33.21	43.18
(100%)	(13.9%)	(29.6%)	(43.5%)	(56.50%)

¹ National Park Service editor's note: This statement quoted from the *Inventory of Public Shoreline Access County of Hawaii*, is not entirely correct. *Mauka-Makai* trails within an *ahupua'a* were open to the use of the people living in the *ahupua'a*, but trails which extended across more than one *ahupua'a* (as does the *ala loa*) were open to general use.

LAND USE POLICIES AND REGULATIONS

The State of Hawaii utilizes a two-tiered land use planning and regulatory system. Planning and regulatory functions are shared between the state and county governments. At the state level, the Hawaii State Plan, which was adopted in 1978 and revised in 1986 and again in 1991 (Hawaii Revised Statutes, Chapter 226, as amended) establishes a set of themes, goals, objectives and policies that are intended to guide the long term growth and development of the state. Similarly, at the county level, the Hawaii County General Plan serves as the long range policy document guiding the long-range development of the Island of Hawaii. The General Plan for the County of Hawaii was adopted in 1971 and subsequently amended in 1989.

The planning objectives and policies provide the analytical basis for regulatory decisions affecting the use of property. Hawaii State Plan objectives and policies that may affect land use decisions involving the Ala Kahakai include the following:

- Exercise an overall conservation ethic in the use of Hawaii's natural resources.
- Provide public incentives that encourage private actions to protect significant natural resources from degradation or unnecessary depletion.
- Pursue compatible relationships among activities, facilities, and natural resources.
- Promote increased accessibility and prudent use of inland and shoreline areas for public recreational, educational, and scientific purposes.
- Promote the preservation and restoration of significant natural and historic resources.
- Provide incentives to maintain and enhance historic, cultural, and scenic amenities.
- Protect those special areas, structures, and elements that are an integral and functional part of Hawaii's ethnic and cultural heritage.
- Promote the recreational and educational potential of natural resources having scenic, open space, cultural, historical, geological, or biological values while ensuring that their inherent values are preserved.
- Assure adequate access to significant natural and cultural resources in public ownership.

The Hawaii County General Plan Policies as they pertain to trails and recreation include the following:

- Public access to the shoreline shall be provided in accordance with an adopted program of the County of Hawaii.
- The County shall establish a system of pedestrian access trails to places of scenic, historic, natural or recreational values.
- The County in coordination with appropriate State agencies shall establish a program to inventory ancient trails, cart roads and old government roads on the island.
- The County shall develop facilities and safe pathway systems for walking, jogging and biking activities.

The objectives and policies contained in the Hawaii State Plan as well as the Hawaii County General Plan provide a supportive framework for establishing, protecting and managing an ancient Hawaiian trail such as the Ala Kahakai on the Island of Hawaii. Regulatory mechanisms have also been established to provide the necessary tools for accomplishing this task. As with many other governmental services and programs, however, the lack of adequate funding remains a major obstacle to fulfilling these objectives.

THE REGULATORY SYSTEM

All lands in the State of Hawaii are classified into one of four land use categories which are Urban, Rural, Agriculture and Conservation. The counties are responsible for regulating uses and activities in the Urban district and share responsibilities with the state in the Rural and Agricultural districts. The state, through the Department of Land and Natural Resources, is responsible for regulating land use in the Conservation district.

Overlaying the general regulatory framework are special laws which apply to coastal and shoreline development as well as those specifically addressing trails and public access issues. A brief summary of the relevant laws is provided below. As part of the state's Coastal Zone Management Act adopted in 1973, Special Management Areas (SMA) were established to ensure that proposed developments minimize adverse environmental impacts to coastal resources, protect public recreation and wildlife resources and ensure adequate public access to these areas. The counties were given the authority to establish the SMA boundaries and adopt permit requirements. As contained in chapter 205A, HRS, the purpose of these requirements is described as follows:

“It is the State policy to preserve, protect, and where possible, to restore the natural resources of the coastal zone of Hawaii. Therefore, special controls on development within the area along the shoreline are necessary to avoid permanent loss of valuable resources and the foreclosure of management options, and to insure that adequate public access is provided to public-owned beaches, recreation areas, and natural reserves, by dedication or other means.”

In addition, the following objectives contained in chapter 205A, HRS provide additional support for ancient trails and access requirements:

- Provide coastal recreational opportunities accessible to the public.
- Protect, preserve, and where desirable, restore those natural and man-made historic and pre-historic resources in the coastal zone management area that are significant in Hawaiian and American history and culture.

County SMA permit conditions have been the primary source of public access easements and dedications that have been added to the public shoreline access inventory. The SMA requirements apply only to those lands proposed for development and the conditions of permit approval may not be enforced if development does not occur. It should be noted that agricultural, forestry and aquaculture activities are not subject to SMA permit requirements.

Chapter 205A-41, HRS contains additional provisions establishing a shoreline setback law for the state. The law authorizes the counties to establish minimum shoreline setback requirements of 20 or 40 feet depending on the size of the parcel. Uses and activities proposed within the shoreline setback area are subject to variance procedures administered by the counties. Shoreline setback variance conditions of approval have also been utilized to obtain public access dedications to and along the shoreline.

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

At the state level, the Department of Land and Natural Resources (DLNR) has the primary responsibility for administering the laws which affect trails and access issues.

Requests to utilize state land or lands within the State Land Use Conservation district must be approved by the Board of Land and Natural Resources (BLNR). These applications must be accompanied by an Environmental Assessment (EA) complying with chapter 343, HRS, Hawaii's Environmental Impact Statement (EIS) Law. The EA should include a summary description of the affected environment including any archaeological resources present on the property. Any structure, including ancient trails, which are over fifty years old falls under the definition of "historic property" of chapter 6E, HRS, Hawaii's Historic Preservation Law. The State Historic Preservation Division of DLNR is responsible for evaluating the values of the historic resource and determining whether preservation or protection of the resource is necessary. The BLNR may impose conditions which require the establishment or maintenance of public rights of way through the affected property. With regard to state property, chapter 171-26, HRS requires BLNR to establish public access rights-of-way to public beaches, game management areas, public hunting areas and public forests and forest reserves prior to approving leases, sales, licenses or permits on public lands.

Chapter 198D, HRS, establishes the Hawaii statewide trail and access system. The DLNR is directed to "plan, develop, acquire land or rights for public use of land, construct, and engage in coordination activities to implement the system, in accordance with this chapter." The Na Ala Hele Trail and Access Program has been established in DLNR's, Division of Forestry and Wildlife. Trails included in the Na Ala Hele system must be determined to have a functional value to be included in the system.

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GLOSSARY

<i>'a'ā</i>	Solidified lava with a rough, clinkery surface.
<i>ahu</i>	A heap of stones erected as a marker; a cairn; the altar upon which tribute offerings were placed.
<i>ahupua'a</i>	A major land division, usually extending from the ocean to high in the mountains.
<i>ala</i>	Anciently a footpath, trail, way; now also road or highway.
<i>'alā</i>	Waterworn stones used as steppingstones or to mark a footpath; Also called pa'alā.
<i>ala aupuni</i>	Government trail, or government road.
<i>ala loa</i>	Coastal trail around an island; long trail.
<i>Ala Kahakai</i>	Trail by the sea.
<i>alanui aupuni</i>	Large government trail.
<i>ali'i</i>	Hawaiian sacred chiefs and chiefesses; the nobility.
ancient trail	Used in this study to refer to trails defined in the Highways Act of 1892 which permits the public's right of access over private property based on Hawaiian custom and practice. It must be shown that customary usage across ahupua'a boundaries was established prior to November 25, 1892.
<i>heiau</i>	Hawaiian temple platform. There were numerous temples for many different purposes such as agricultural prosperity, fishing, surfing, the hula, etc. Only the highest ranking one, the luakini, was used for human sacrifice.
historic	Used in this study to refer to post-western contact after 1778.
<i>hōlua</i>	An inclined dry-laid masonry ramp on which sledding contests were held.
<i>'ili'ili</i>	Pebbles.
<i>hula</i>	Traditional form of dance.
<i>Ka Lae</i>	Literally "the point" (South Point).
<i>Kahiki</i>	The "ancient ancestral lands"; believed to refer to Tahiti in the Society Islands.
<i>kahuna</i>	Prophet, seer; members of a priestly class; also classes of specialists and experts (e.g. navigators, healers, tapa workers, sculptors, architects, medical practitioners, genealogists, and so on).
<i>kama'āina</i>	Native born Hawaiian; person familiar from childhood with any locality; in modern usage it refers to all long-time residents.
<i>Kāne</i>	One of four god types of ancient Hawai'i (Kane, Ku, Lono and Kanaloa).
<i>kapa</i>	Tapa, or barkcloth (<i>Broussonetia papyrifera</i>).
<i>kapu</i>	Taboo; sacred; no trespassing.
	The algaroba (<i>Prosopis pallida</i>), a legume from Peru. First introduced to Hawai'i in 1828.

<i>ki'i pōhaku</i>	A recent term to describe petroglyphs or rock art (literally “stone images”)
<i>koa</i>	An endemic tree (<i>Acacia koa</i>), common in the dry forests, the wood of which was prized for canoes and other artifacts.
<i>ko'a</i>	Fishing shrine.
<i>konohiki</i>	Land manager of an ahupua'a; a lesser chief.
<i>kōnane</i>	An ancient Hawaiian game resembling checkers,
<i>Kū</i>	A category with hundreds of gods. Kuka'ilimoku was the war god of the Pili line of chiefs, of which Kamehameha was a member.
<i>Kūkā'ilimoku</i>	Kamehameha I's war image, among others. He was given charge of it by his uncle, Kalaniopu'u.
<i>Ku'ula</i>	Heiau for the worship of fishing gods; also a fish god stone.
<i>loko kuapā</i>	Fishpond wall.
<i>loko pu'uone</i>	Pond by the shore
<i>Lono</i>	One of four god types; associated with agriculture, fertility and peace,
<i>lua</i>	Pit, indentation, hole
<i>luakini</i>	The heiau maintained by a paramount chief in his chiefdom for prayer and human sacrifice; the highest rank of temple. Generally dedicated to different Kū variants of each kingdom, which were the gods of war and of national prosperity. Hale o Keawe is dedicated to Lono.
<i>Māhele</i>	Literally “a division, or a portion”. The Great Māhele of 1848 was a division of lands between the king, chiefs, and government, that established land ownership on a Western style, fee-simple basis. From this single act, the entire social, economic and political order of ancient Hawai'i was altered forever.
<i>makai</i>	Toward the sea; at the coast.
<i>makahiki</i>	The portion of the Hawaiian annual cycle which saw desanctification of the luakini temples and the ceremonial collection of taxes or tribute. It began about the middle of October and lasted four lunar months, with sports and religious observances and a taboo on war. Spiritual power, derived from the ancient gods, contained in varying degrees in all life forms and inanimate objects.
<i>mauka</i>	Towards the interior, or mountains; inland.
<i>NE Ala Hele</i>	The name given to Hawaii's Statewide Trail and Access System which was established in 1988. Nā Ala Hele develops and improves mountain and shore-line trails and accesses, both historic and modern, throughout the state while conserving Hawai'i's unique environment and cultural heritage.
<i>Ōhi'a</i>	An endemic tree (<i>Metrosideros polymorpha</i>) dominant in the wet forests. The wood was used for temple images.
<i>'opihī</i>	Several species of limpets (<i>Cellana</i> spp.).
<i>pa'alā</i>	water-worn stones. See alā.
<i>pali</i>	A cliff or precipice.

<i>papamū</i>	“Checkerboard” for game of <i>kōnane</i> , consisting of small, shallow holes arranged in a grid, either on native rock or a detachable slab.
<i>pāhoehoe</i>	Solidified, smooth unbroken surface lava. When compared with ‘ā’ā, often appears as billowy fields with hollows and small hills; large cracks mark some billows.
<i>piko</i>	Navel; umbilical cord stump
prehistoric	Used in this report to mean prior to western contact, before 1778
<i>pu’uhonua</i>	Place of refuge; sanctuary. These were established specific sites usually associated with a <i>luakini heiau</i> at a royal center such as <i>Pu’uhonua o Hōnaunau</i> , of the ruler himself or herself.
<i>tsunami</i>	Seismic wave (Japanese)

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NATIONAL PARK SERVICE U.S. DEPARTMENT OF THE INTERIOR

As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historical places; providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U. S. administration.

