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# **Ala Kahakai**

## **Alternatives for Administering a Coastal Trail System**

Susan S. Rutka

July 1973

ALA KAHAKAI  
Alternatives for Administering a Coastal Trail System

by

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## ABSTRACT

*This report sets forth alternatives for administering Ala Kahakai (Trail by the Sea), the proposed demonstration project for a statewide trail system in Hawaii. Located on the Kona coast of the island of Hawaii, Ala Kahakai would be composed of old Hawaiian trails passing through a scenic shoreline area of historical, biological, and geological significance and possessing great recreational value. Because numerous federal, state, and county agencies and private interests exercise control over the trail network and adjacent lands and waters, an effective administrative structure must be designed. This study examines the experiences of several jurisdictions outside Hawaii involved in the establishment and management of trail systems, and suggests a few administrative arrangements which might work for Ala Kahakai.*

## PREFACE

In March 1973, the Hawaii State Department of Planning and Economic Development and Department of Land and Natural Resources published a report entitled *Na Ala Hele (Trails for Walking)*. This report describes the concept of a statewide trail system and proposes the implementation of demonstration project along the north Kona coast of the island of Hawaii, to be known as *Ala Kahakai* (Trail by the Sea). Ala Kahakai would encompass existing shoreline trails built and used by the old Hawaiians when West Hawaii was a major population center of the islands.

During the planning phase an important task will be the determination of an administrative arrangement for Ala Kahakai. Jurisdictional conflicts and complex patterns of land ownership and control in the region underscore the need for a viable means of organizing and managing the trail system. The objective of this paper is to examine the alternatives and suggest administrative structures that might best achieve the purposes of Ala Kahakai, keeping in mind the possibility that the concept may be expanded into a statewide system of trails.

## TABLE OF CONTENTS

ALA KAHAKAI. . . . .	1
The Setting: North Kona and South Kohala . . . . .	2
Land Ownership. . . . .	4
SOME GENERAL GUIDELINES. . . . .	9
ALTERNATIVE STRUCTURES: LOCAL, STATE, AND FEDERAL LEVELS. . . . .	12
WHAT OTHERS HAVE DONE. . . . .	14
National Trails System Act. . . . .	15
Oregon Coast Trail. . . . .	18
Washington State Recreation Trails System . . . . .	19
Tennessee Trails System . . . . .	21
San Mateo County Hiking and Riding Trail Project. . . . .	23
England and Wales . . . . .	24
Napatree Point, Rhode Island. . . . .	27
SUGGESTED ADMINISTRATIVE ARRANGEMENTS. . . . .	30
State and National Systems. . . . .	30
Local Systems . . . . .	31
Designing Hawaii's System . . . . .	31
ADDITIONAL REFERENCES. . . . .	37

## LIST OF FIGURES

### Figure

1	Map of proposed West Hawaii shoreline trail. . . . .	5
2	Design of a lake/bay agency: institutional determinants and elements. . . . .	10

## ALA KAHAKAI<sup>1</sup>

Puukohola *heiau* (place of worship), a national historic site near Kawaihae, has been proposed as a starting point for Ala Kahakai. It was here that Kamehameha the Great killed an opponent and gained control of the Big Island as a first step toward unifying the Hawaiian Islands. Between this site and the old Kona Airport (an interim county park just north of Kailua-Kona), 50 miles of trails along about 35 miles of shoreline would be linked by two more county parks, two state parks, two state small-boat harbors, a state historic and recreational area, and a national bird refuge. These facilities would serve as access points from the main coastal highway and as service nodules, providing parking, restrooms, picnic and camping areas, concessions, and other accommodations. Certain resorts on private land may also function as service nodules.

It is appropriate that West Hawaii's network of old Hawaiian coastal trails be designated as the initial component of Na Ala Hele. Completion of the Queen Kaahumanu Highway from Ke-ahole to Kawaihae will improve access to a scenic and relatively undeveloped shoreline containing features of historical, cultural, biological, and geological significance. This coastal zone also holds great recreational potential. In anticipation of the accelerated development of the north Kona coast (see *Hawaii Impact Tourism Plan, West Hawaii*) and increased stress on its natural and historical resources, Ala Kahakai would provide a means with which to manage this environment, including the adjacent waters and submerged lands.

In prehistoric times, West Hawaii was the island's most populous region, and some villages were occupied continuously until recent times. Traces of these once-flourishing settlements still remain; they are of immense interest to archaeologists and to Hawaiians intent upon rediscovering their heritage. House sites, agricultural areas, *heiaus*, salt pans, and petroglyphs provide the most visible evidence of past habitation.

The Hawaiians lived in harmony with the sea. Several inland ponds, connected to the ocean by *makahas* (water-circulation channels) were utilized for aquaculture. Hawaiian cultural groups have proposed the renovation of certain ancient fishponds and a revival of the practice of pond culture. Other coastal ponds, fed by both salt and fresh water, were sources of drinking water in this arid environment. Today, hikers can cool off in many of these refreshing ponds. Some contain organisms unique to the brackish pond ecosystem and may have to be declared off-limits to

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<sup>1</sup>For a detailed description of Ala Kahakai, the proposed pilot project for a statewide trail network, see: Department of Land and Natural Resources, State of Hawaii, and Department of Planning and Economic Development, State of Hawaii, *Na Ala Hele (Trails for Walking)*, March 1973. Portions of this paper appear in the section on "Administration of Trail Systems", pp. 34 - 54.

See also: Department of Planning and Economic Development, State of Hawaii, *Hawaii Tourism Impact Plan, West Hawaii*, Vol. II, 1972, pp. 74 - 75.

swimmers and preserved for scientific study.<sup>2</sup> Opaepula Pond at Makalawena is a refuge for the rare, native Hawaiian stilt.

Ala Kahakai intersects expanses of land covered by lava flows; this stark landscape illustrates the changes wrought by volcanic activity from Mauna Kea, Mauna Loa, and Hualalai. Interspersed throughout the lava are pockets of vegetation called *kipukas*. Several kinds of indigenous plants can be found, including the rare *loulou* palm, beautiful *maiapilo*, and *hinahina*, *noni*, and *ilima*.

People interested in marine life forms can snorkel in the many excellent coral reef areas which abound with sea life. The rocky shoreline along some stretches promises to be perfect for shore-fishing, a sport enjoyed by many local people. In addition, the proposed demonstration trail would link several beach parks suitable for swimming, picnicking, and camping.

#### The Setting: North Kona and South Kohala

The Hawaii County General Plan<sup>3</sup> concludes that recreational areas and facilities in the South Kohala and North Kona districts are generally inadequate. The projected population increase in South Kohala and completion of the Queen Kaahumanu Highway will intensify pressures on existing parks, especially Hapuna and Spencer Beach Parks, and create demands for additional recreational opportunities. North Kona is experiencing similar pressures.

The following courses of action recommended in the General Plan relate to the coastal trail concept:

Ensure public use of and access to beach areas in South Kohala.

Establish public access to and the development of shoreline regions along the North Kona coast so as to provide recreational opportunities in areas such as Keawaiki, Kiholo Bay, Kaupulehu (Kaulupulehu), Kukio and Kapapa Bays, Kua Bay, Kahoiawa, Makalawena, Mahaiula, and Honokohau.

Protect Opaepula, Kaloko, and Honokohau (Aimakapa) Ponds as natural areas.

Encourage the development of historic trails.<sup>4</sup>

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<sup>2</sup>John A. Maciolek, *Terminal Report: Aquatic Survey of Kona Coast Ponds, Hawaii Island* (unpublished paper).

<sup>3</sup>County of Hawaii, *The General Plan*, January 1971.

<sup>4</sup>County of Hawaii, *The General Plan*, January 1971, pp. 66 - 67.



Significantly, the General Plan regards West Hawaii's coastal zone as an "open area".<sup>5</sup> Open space is "that land which is basically not used for buildings or structures and is characterized by scenic beauty, existing openness, and natural conditions. It is the counterpart of development. Retained in its state of use, open space would maintain and/or enhance the conservation of needed or desired natural, scenic, or historical resources which might otherwise be permanently lost. It would also enhance the present or potential value of abutting or surrounding urban development."<sup>6</sup> The land from Ke-ahole to Anaehoomalu is regarded as a desirable open-space buffer between the growing urban areas of Waimea and Kailua. Thus, Hawaii County has committed itself to preserving open areas and considers public access to the shoreline to be a necessary prerequisite, although not a guarantee, of urban zoning approval. These aims are consistent with the Ala Kahakai proposal.

While the county exercises control over the use of land in urban districts and shares land-use control over agricultural and rural districts with the Land Use Commission, the State Board of Land and Natural Resources regulates land usage in conservation districts, which comprise 45 percent of the total acreage in the state. Land Board decisions are not subject to preview by the county or review by the Land Use Commission.<sup>7</sup> The coastal region between Anaehoomalu and Ke-ahole Airport is in a conservation district and, therefore, the Land Board has sole authority to grant or deny special use permits in this area.<sup>8</sup> In addition, the specific uses for which state lands (including submerged lands) can be leased are determined by the Department of Land and Natural Resources. The Department of Transportation also exercises authority over the use of the shoreline and submerged lands. However, flood control and navigational projects in the coastal zone are subject to review and approval by the U.S. Army Corps of Engineers.<sup>9</sup>

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<sup>5</sup>County of Hawaii, *The General Plan*, January 1971; see Land Use Allocation Maps of North and South Kohala Districts and North Kona District.

<sup>6</sup>County of Hawaii, *The General Plan*, January 1971, p. 92.

<sup>7</sup>Earl H. Bradley, Jr., and John M. Armstrong, *A Description and Analysis of Coastal Zone and Shoreland Management Programs in the United States*, Technical Report No. 20 (Ann Arbor: University of Michigan Sea Grant Program, March 1972), pp. 208 - 229.

<sup>8</sup>Petitions may be submitted for unusual and reasonable uses other than those for which the district has been classified. See map on p. 166 in the *Hawaii State Comprehensive Outdoor Recreation Plan* (SCORP), 1971, which outlines lands designated for conservation use on the Big Island.

<sup>9</sup>Department of Planning and Economic Development, State of Hawaii, *State Comprehensive Outdoor Recreation Plan*, December 1971, pp. 101 - 102.

Numerous proposals for land development in West Hawaii are being considered.<sup>10</sup> In the future the state and county will undoubtedly face increasing pressures from landowners and developers to carry out their plans. For example, Royal Hawaiian Management Corporation holds a 401-acre parcel in the coastal zone just south of Makalawena and has suggested the construction of a convention center with two high-rise towers. Huehue Ranch is already in the process of developing its Kaloko Pond site, where 80 urban acres are now available for resort use. For its Kukio property, Huehue has proposed three hotels, apartments and condominiums, low-density residential development, open space, a historical park, and a private club.<sup>11</sup>

### Land Ownership

Figure 1 illustrates the complexity of land ownership patterns in the section to be covered by Ala Kahakai. Fortunately, the state owns large tracts in this region. State, county, and federal parks, sites, and facilities would be located at convenient points along the trail system. However, this situation of multiple jurisdictions demands an administrative arrangement capable of coordinating the efforts of the three levels of government and overcoming conflicts that may arise.

Rights-of-way would have to be established over segments of Ala Kahakai which lie on private property; negotiations with the owners for access and land acquisition would be major responsibilities of the trail administration. Landholders would be receptive to the Ala Kahakai concept if they were assured of an administration capable of controlling activities on the trail. It is important that the interests of these property owners are adequately represented in the management of Ala Kahakai, especially since many of them would be asked to dedicate portions of their land for access.

As mentioned previously, certain beach resorts might provide services to Ala Kahakai users. Likewise, hotels may feature Ala Kahakai as an attraction for their guests; the presence of a well-managed historical trail system with a good interpretive program would surely enhance the recreational value of the area. Both Anaehoomalu and Kaulupulehu are sites of large and well-preserved petroglyph fields; these could be integrated into an interpretive program for the overall trail system.

### Jurisdictional Conflicts

The *State Comprehensive Outdoor Recreation Plan* (SCORP) concluded that the diffusion of power and responsibilities for recreation, conservation, and shoreline management "creates major jurisdictional conflicts and cloudy

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<sup>10</sup>These proposals can be located on the map on p. 96 of the *Hawaii Tourism Impact Plan, West Hawaii*.

<sup>11</sup>*Hawaii Tourism Impact Plan, West Hawaii*, pp. 103 - 104. See pp. 98 - 109 for an inventory of proposed developments in West Hawaii.

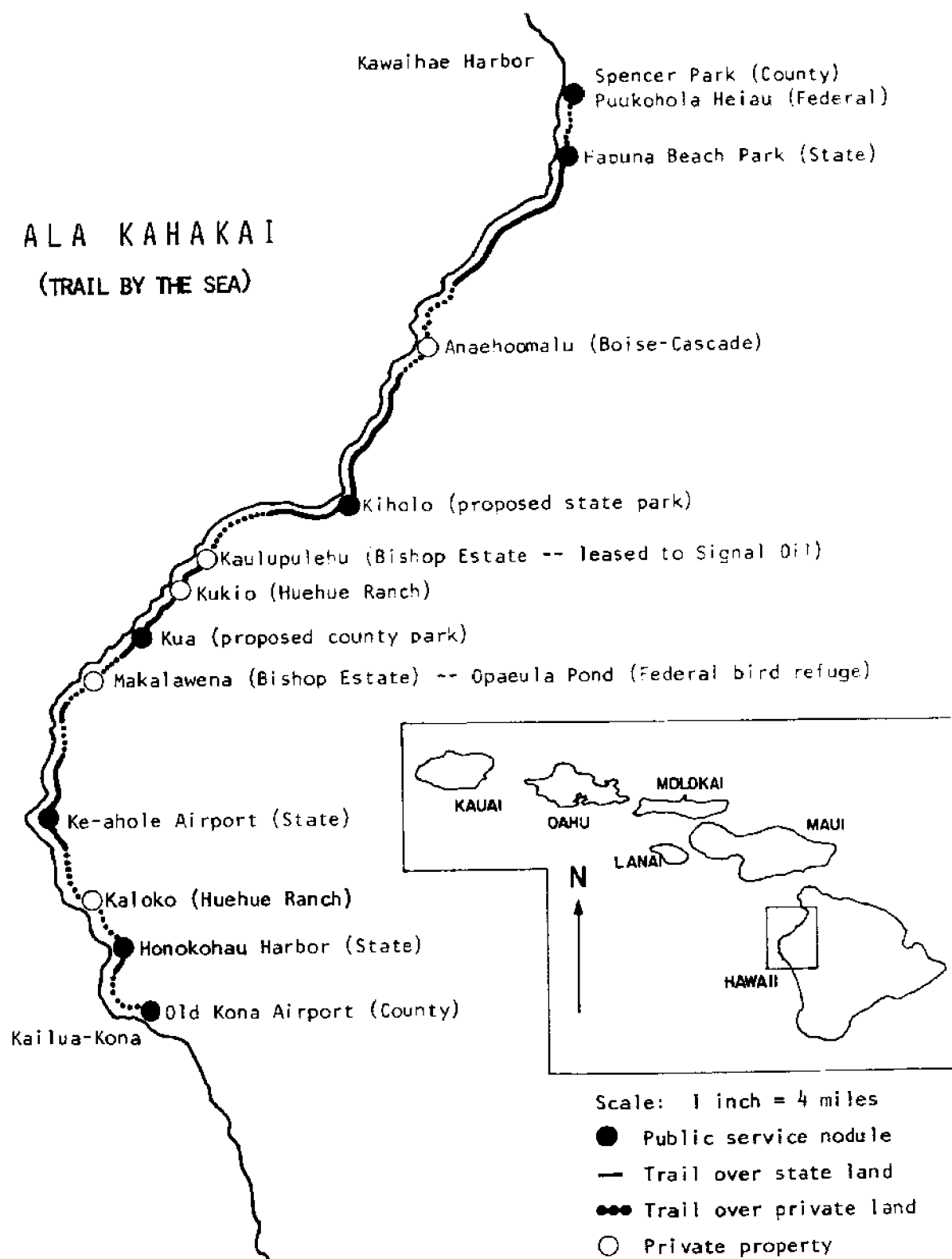


Figure 1. Map of proposed West Hawaii shoreline trail.

policies. Coordination is expected, but in practice is difficult to achieve."<sup>12</sup> Ala Kahakai's administrative organization would have to be able to foster cooperation between various governmental sectors and agencies which may have legal jurisdiction over the trail and trail activities. The following public agencies could have either legal authority over or a legitimate role in some aspect(s) or segment(s) of Ala Kahakai.

County of Hawaii

Department of Parks and Recreation

Department of Planning

State of Hawaii<sup>13</sup>

Department of Health

Department of Land and Natural Resources/Board of Land and Natural Resources

Division of Fish and Game

Division of Land Management

Division of State Parks, Outdoor Recreation and Historic Sites

Division of Water and Land Development

Natural Areas Reserve Systems Commission

Department of Planning and Economic Development

Department of Transportation

Land Use Commission

Marine Affairs Coordinator

Office of Environmental Quality Control/Environmental Council

University of Hawaii

U.S. Government

Army Corps of Engineers

Department of Commerce

National Oceanic and Atmospheric Administration

Department of the Interior

Bureau of Sports Fisheries and Wildlife

National Park Service

Department of Transportation

Coast Guard

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<sup>12</sup>SCORP, p. 94.

<sup>13</sup>For more information regarding state agency responsibilities, see: Management Services Division, Department of Budget and Finance, State of Hawaii, *Plan of Organization: Executive Branch, Hawaii State Government*, 2nd Revised Edition, February 1969.

Decisions of the State Land Use Commission and Board of Land and Natural Resources would have a significant impact on Ala Kahakai. For example, "up-zoning" or reclassifying private holdings for more intensive use without reference to recreation and conservation needs can price out of the market lands needed for parks or reserves. Government is finding it difficult to pay "current market prices" for parcels desirable for public recreational purposes and having commercial potential. Prime examples of this are the federal government's efforts to acquire Kaloko Pond and Hawaii County's purchase of Kua Bay. Secondly, reclassification or granting of zoning variances of land adjacent to an existing or planned park may permit a use incompatible with that recreational facility. The probability of this occurring is increased by two factors:

1. State land-use criteria do not provide any distinction between areas suitable for multiple uses and those having a delicate ecological balance where use restrictions should be severe.<sup>14</sup> However, two companion measures introduced during the 1973 session of the Hawaii State Legislature (Senate Bill No. 614 and House Bill No. 808) would authorize the Land Use Commission to designate "areas of critical state concern" within any land-use district at any time. If these bills are enacted into law, more precise planning and control of development could be provided for areas containing significant agricultural, natural, environmental, scenic, cultural, or historic resources.
2. Likewise, land in the coastal zone, aside from that included in the 20- to 40-foot setback, is not distinguished from land separated from the marine environment. Recent passage of the 1972 National Coastal Zone Management Act (P.L. 92-583) indicates that Congress, at least, considers the coastal zone as an entity demanding a unique management approach different from that used for non-coastal lands. Act 164, approved by the 1973 Hawaii State Legislature, authorizes the Department of Planning and Economic Development to prepare a management plan for Hawaii's coastal zone which complies with the requirements of P.L. 92-583.

According to *SCORP*, the most serious jurisdictional overlap exists between the state and county parks departments. Because division of responsibility between the two levels of government is not clearly defined, both may be planning to develop beach parks on adjoining land (as was the case with Magic Island and Ala Moana Park). Although the facilities may function as a unit, both departments have their own maintenance and enforcement personnel, thus increasing operational costs.<sup>15</sup> State and county parks along Ala Kahakai would not be adjacent to each other, but they would be in close proximity and would be part of a unified trails and parks system. The unifying nature of the trails might suggest the feasibility of a *single* maintenance and enforcement body for all public facilities along Ala Kahakai and for the trail itself. One way to avoid duplication of

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<sup>14</sup>*SCORP*, pp. 94 - 95.

<sup>15</sup>*SCORP*, pp. 96 - 97.

efforts, cut expenses, and make efficient use of personnel would be to assign the responsibility for maintenance of parks within a district or region to a single agency. For example, a contract could be negotiated whereby the county would maintain certain state parks within its boundaries. In the case of Ala Kahakai, it may be feasible for the state to maintain all public parks along the length of the trail.

Authority over the sphere of pollution control is also fragmented among several agencies. While the Department of Health monitors coastal waters and enforces pollution regulations, the Department of Transportation identifies maritime violators and maintains sole jurisdiction over pollution in small-boat harbors. Clearing beach debris is the responsibility of the counties; however, the counties feel financially burdened by this task. In the case of water-borne debris, such as oil pollution, the counties do not believe they have the resources or the authority to handle the problem.<sup>16</sup> The state's Civil Defense Division has prepared a contingency plan to handle oil spills.<sup>17</sup> Federal laws pertaining to pollution of "navigable waters" under United States jurisdiction are enforced by the Coast Guard.<sup>18</sup>

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<sup>16</sup>SCORP, p. 102.

<sup>17</sup>Civil Defense Division, Department of Defense, State of Hawaii, "State of Hawaii Marine Oil Spill Disaster Plan", January 1971.

<sup>18</sup>Justin Rutka and Chennat Gopalakrishnan, *Spheres of Influence in Hawaii's Coastal Zone, Volume 1. Federal Agency Involvement*, Sea Grant Advisory Report UNIH-SEAGRANT-AR-72-03 (Honolulu: The University of Hawaii Sea Grant Program, March 1973), p. 55.

## SOME GENERAL GUIDELINES

All of the factors discussed in the previous pages -- jurisdictional conflicts, land ownership patterns, ecological and historical values, etc. -- will influence the process of designing an institutional arrangement for Ala Kahakai. In an article titled "Institutions for Managing Lakes and Bays",<sup>19</sup> Lyle E. Craine provides a useful framework for conceptualizing these determinants and demonstrating how they influence the nature of an agency. Although Craine is concerned with the factors involved in designing a lake/bay agency and not a trail management system, utilizing his framework in the context of Ala Kahakai is justified for several reasons. Both projects deal with marine or aquatic environments subject to various pressures, such as shoreline development and water quality degradation, and environments suitable for multiple uses, not all of which are compatible with each other. Moreover, both are concerned with preserving certain natural scenic values along the shoreline. Finally, lakes and bays and a coastal trail network such as Ala Kahakai all demand institutional arrangements to coordinate multi-agency efforts.

The three institutional determinants outlined by Craine are:

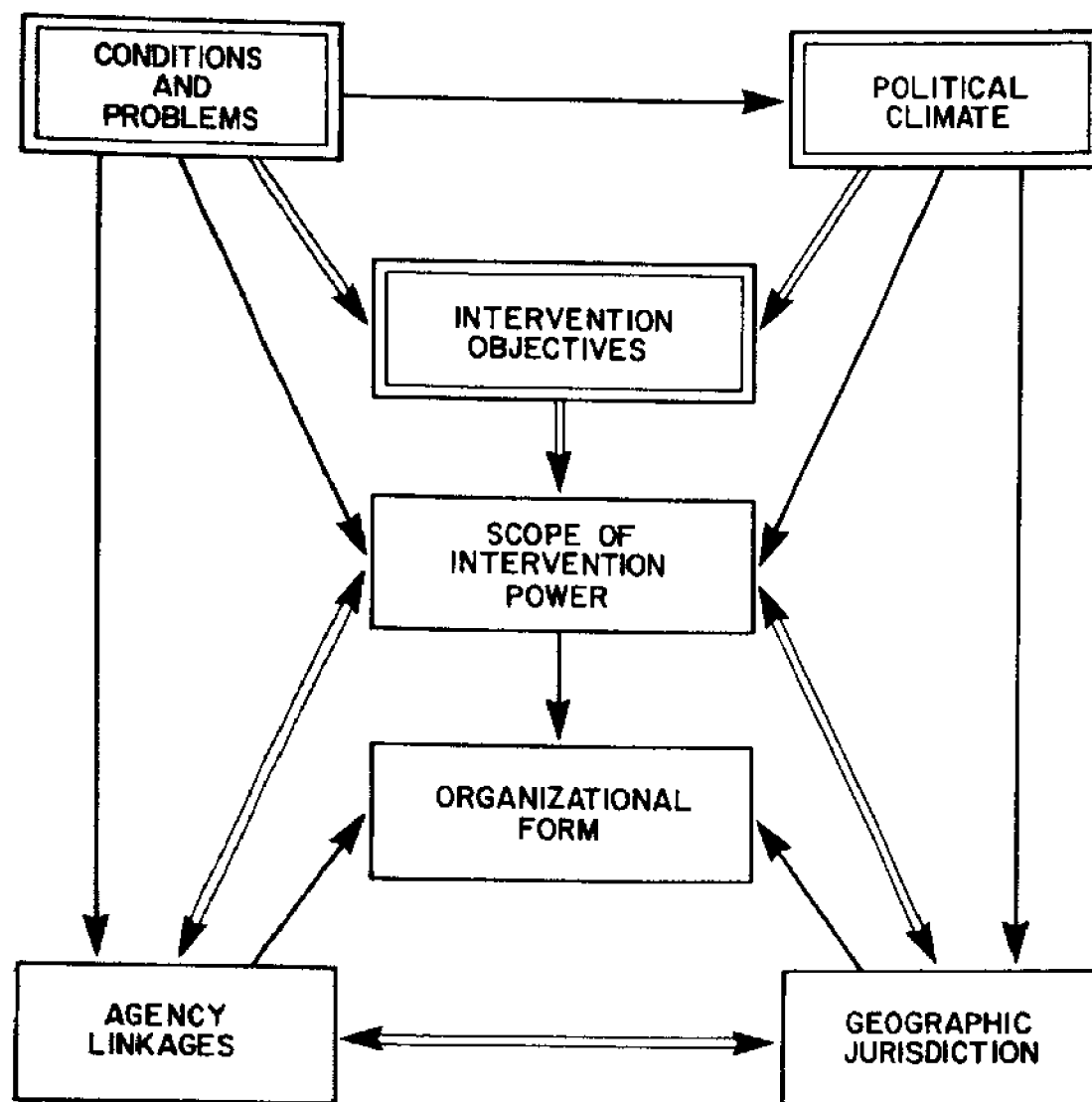
1. Environmental (physical, economic, and social) conditions and problems. Within this category are included the scenic, recreational, ecological, and historic values of Ala Kahakai. The effects of economic development of the West Hawaii shoreline should also be considered.
2. Intervention objectives. This concerns the roles of various governmental agencies, particularly the kinds of intervention powers they may be motivated to use. As discussed previously, Ala Kahakai's administration would have to be provided with some means to influence the "intervention objectives" of agencies whose decisions may affect the trail system.
3. Political climate. Are the priorities of local, state, and national governmental units compatible with the goal of preserving a historic trail and the promotion of a "trail ethic"? What is the prevailing public opinion?

Intervention objectives, conditioned by environmental parameters of the area, and by the political climate relevant to the area's use and development, become the primary determinant of the *scope* of an agency's powers. This scope is the basic element in constructing an institutional arrangement. Concurrently, three other institutional elements of an agency must be considered: its geographic jurisdiction, the kinds of operational linkages between it and other governmental units, and the form which the organization will take. Figure 2 illustrates these concepts and how they influence each other.<sup>20</sup>

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<sup>19</sup>Lyle E. Craine, "Institutions for Managing Lakes and Bays", *Natural Resources Journal*, Vol. II, No. 3 (July 1971), pp. 519 - 546.

<sup>20</sup>Craine, p. 529.



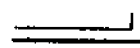

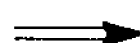

-  (Double Frame) Indicates Institutional Determinant.
-  (Single Frame) Indicates Institutional Elements.
-  Indicates Primary Influence.
-  Indicates Direct But Secondary Influence.

Figure 2. Design of a lake/bay agency: institutional determinants and elements.



Allan V. Kneese and Blair T. Bower suggest some criteria which regional water quality management agencies should meet, based on certain determinants -- technological and economic characteristics of efficient water quality management.<sup>21</sup> Keeping Craine's framework in mind, we can begin to identify determinants and criteria for a coastal trail management agency.

<u>Determinants</u>	<u>Criteria</u>
Existence of marine and pond ecosystems with varying levels of tolerance.	Trail agency should be able to protect areas with fragile ecosystems; restrict certain areas for scientific study only; educate hikers on the ecology of these features.
Coral reef and other shoreline areas suitable for fishing.	Trail agency should provide for enforcement of fishing regulations; need to cooperate with DLNR's Fish and Game Division.
Problem of users littering portions of trail not on public land.	Trail agency should designate responsibility for maintaining segments of trail system between public parks; work out efficient maintenance program for <i>entire</i> trail network.

Before expanding this list of determinants and criteria, it will be useful to consider some alternative arrangements and to examine the experiences of others in meeting requirements posed by conditions similar to those of Ala Kahakai.

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<sup>21</sup>Allen V. Kneese and Blair T. Bower, *Managing Water Quality: Economics, Technology, Institutions* (Baltimore: Johns Hopkins Press, 1968), pp. 303 - 308.

## ALTERNATIVE STRUCTURES: LOCAL, STATE, AND FEDERAL LEVELS

According to John M. Armstrong, the major issues in coastal zone management are centralization and decentralization.

To distribute authority in the coastal zone among the various levels of government involved, we need to invoke the principle of delegation of authority. Under this principle, coastal zone decision making is delegated at the lowest level of government consistent with the scope of the problems, but decisions must conform to the goals and constraints specified by the next higher level.<sup>22</sup>

Dr. Armstrong goes on to explain the general roles of levels of government. The federal government delegates decision-making authority to lower levels insofar as the decisions are consistent with the national interest, and provides monetary and technical assistance. The focal point of coastal zone management is the state, where the planning process takes place. Most of the routine decisions are made and implemented at the local level.

Hawaii's *State Comprehensive Outdoor Recreation Plan* provides certain guidelines which may help determine the responsibilities of each sector in the recreational sphere.

1. The county government is expected to serve population centers and provide community rather than resource-oriented facilities. Due to the cost factor, sites tend to be compact.
2. Large resource-oriented environments, often of historical-archaeological significance, are usually the domain of the state government. Services and facilities can be minimal; the assurance of access is sometimes sufficient. Projects which are costly to acquire and develop are more easily administered by the state than by the county. State projects should not be limited to one recreational group, but should serve statewide interests.
3. National Park Service knowledge and experience could be relied upon to develop recreational and historic areas, *e.g.*, interpretive programs.
4. Private enterprise should be encouraged to provide supporting facilities within and adjacent to public recreation areas, *e.g.*, budget overnight accommodations, camping sites, "cultural parks", and horseback riding.<sup>23</sup>

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<sup>22</sup>John M. Armstrong, "The Structure of Management and Planning for the Coastal Zone", presented at the Woods Hole National Workshop on Critical Problems of the Coastal Zone, Woods Hole Oceanographic Institution, Woods Hole, Massachusetts, June 2, 1972.

<sup>23</sup>SCORP, pp. 139 - 143.

Therefore the state appears to be the logical governmental unit to administer Ala Kahakai, especially since it may be considered as a pilot project for a statewide network of coastal trails. Total management of all aspects of the trail would demand financial resources, institutions, political powers, and a broad range of expertise not generally available at the county level. The state is in a better position to coordinate the multi-agency effort necessary to administer Ala Kahakai. It is also in a stronger bargaining position vis-à-vis private landholders and developers. In addition, much of the trail lies on state land.

With a state administrative unit, county and federal agencies would not necessarily be limited to minor roles; certain tasks such as trail maintenance may be handled more efficiently at the local level, and federal technical and financial assistance could prove to be invaluable. The following section presents a survey of what has been done in other jurisdictions at various levels of government, on the mainland and abroad, to organize entities similar in concept to the proposed West Hawaii coastal trail.

## WHAT OTHERS HAVE DONE

The concept of unified recreational, scenic, and/or historical trail systems is still relatively new in this country. The New Hampshire situation represents a not uncommon state of affairs in which trails have been developed largely on a piecemeal basis. Although this small state (approximately 9300 square miles) has no formal statewide network of trails, it does boast a very extensive foot-trail system which originated more than 150 years ago. Close to 900 miles of trails intersect private lands, and in the state park system there are 65 miles of foot-trails. Out of a statewide total of 2000 miles of foot-trails, more than 1000 miles lie within the boundaries of the White Mountain National Forest. Here, the U.S. Forest Service receives considerable aid in the maintenance of 500 miles of trails from 15 different groups, including the Appalachian Mountain Club and the Dartmouth Outing Club. Throughout the state, these and other private organizations cooperate with public agencies to maintain trails. However, the Director of Parks for New Hampshire, George T. Hamilton, has acknowledged that establishing trails here and there with no sense of direction or set of uniform guidelines, and relying heavily on informal arrangements, has its drawbacks.

Despite our vast network of foot-trails and the fine cooperative spirit which has existed among public agencies and private cooperators alike, there is a need to formalize our approach to the administration of foot-trails and other trails by the establishment of a statewide trails system. The use of all trails continues to mount. The question of what kind of back country facilities should be provided is being re-examined. Protection of trail right-of-way over private lands is increasingly pertinent. These and other factors point up the need for legislative endorsement and support for a network of recreational and scenic trails with state government assuming the responsibility for leadership and coordination in administering a statewide trails system.<sup>24</sup>

Several public agencies have attempted to formalize their approaches to the administration of trails. The following section will describe these examples in an attempt to derive applications for Ala Kahakai. First, the federal government's National Trails System Act and the two National Scenic Trails which have been implemented will be discussed. Second, the Oregon Coast Trail and statewide trail networks of Washington and Tennessee will be examined. Third, an example is given of a trail system administered by a local governmental unit. Fourth, the experience of England and Wales in managing parks and footpaths on private property provides an interesting case study. Finally, we will look into a management program for a coastal area which does not feature trails per se, but which contains resources somewhat similar to those of Ala Kahakai.

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<sup>24</sup>Bureau of Outdoor Recreation, U.S. Department of the Interior, *Proceedings: National Symposium on Trails*, Washington, D.C., June 2 - 6, 1971, p. 77.

## National Trails System Act

The National Trails System Act,<sup>25</sup> signed into law on October 2, 1968, designated the Appalachian Trail and the Pacific Crest Trail as National Scenic Trails and proposed the study of 14 potential routes for inclusion under the system. Extending from the Canadian to the Mexican border, the 2350-mile Pacific Crest Trail incorporates already-existing trails into a unified system administered by the Secretary of Agriculture (in consultation with the Secretary of the Interior), as most of the trails are located on Forest Service lands. The Secretary of the Interior, through the National Park Service (and in consultation with the Secretary of Agriculture) administers the Appalachian Trail which extends 2000 miles between Maine and Georgia. Advisory Councils are appointed by the Secretaries and are regularly consulted regarding trail matters.

### Appalachian Trail

Administrative responsibilities for the Appalachian Trail are divided among 16 governing bodies of 14 states, the National Park Service, and the National Forest Service. Approximately 34.1 percent of the trail route traverses federal property, including eight national forests and five areas of the National Park system. Overall responsibility is exercised by the National Park Service, which authorizes the directors of its Northeast and Southeast regional offices to appoint Trail Project Coordinators. Each coordinator carries out his duties in cooperation with his counterpart in the other region, the Chairman of the Appalachian Trail Advisory Council, and the states. Major decisions are coordinated with the Appalachian Trail Conference, an organization of satellite trail clubs. According to Edgar L. Gray, Chairman of the Appalachian National Scenic Trail Advisory Council, "this arrangement for deriving guidance for and with the other governing bodies has made a very compatible arrangement."<sup>26</sup>

As spelled out in the National Trails System Act, membership on the Advisory Councils of both the Appalachian and the Pacific Crest Trails cannot exceed 35 in number, and each appointee serves a five-year term without compensation from the federal government. The councils review and provide advice on policies and procedures for the administration of the trails and contribute administrative expertise for the resolution of particular problems. Representation on each of the councils is as follows:

- (i) A member appointed to represent each Federal department or independent agency administering lands through which the trail route passes and each appointee shall be the person designated by the head of such department or agency; (The Departments of the Interior and Agriculture and the Tennessee Valley Authority are represented on the Appalachian Trail Advisory Council.)

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<sup>25</sup>Public Law 90-543, 90th Congress.

<sup>26</sup>National Park Service, U.S. Department of the Interior, *Appalachian Trail Guidelines*, 1971, pp. 10, 27 - 29.

(ii) 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;

(iii) One or more members appointed to represent private organizations, including landowners and land users, that, 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

(iv) The Secretary shall designate one member to be chairman and shall fill vacancies in the same manner as the original appointment.<sup>27</sup>

Thus the Appalachian Trail Conference, a private federation of hiking and trail clubs, is legally recognized as having a significant role in the management of the trail. Established as a permanent body in 1925, this organization coordinated the work of volunteer groups and individuals who had begun the task of constructing trails in New England. Through the efforts of the Conference, the Appalachian Trail was initially completed in 1937. Its designation as a National Scenic Trail came after many years of interaction between the Conference and various government agencies. A Memorandum of Agreement between the National Park Service and the Appalachian Trail Conference spells out the responsibilities of the Conference and its affiliate clubs:

1. Continuation of its work in developing, operating, and maintaining all sections of the trail and related facilities.
2. Coordination with the Park Service of all trail activities and programs, including mapping, relocation of routes, and the preparation of development plans and of guidelines for trail maintenance, interpretation, and overall management.
3. Erection and maintenance of uniform trail markers provided by the Forest Service.
4. Assisting in land acquisition and negotiation of agreements with landowners.
5. Encouraging counties, towns, and other governing bodies to adopt land use regulations in order to protect lands adjacent to the trail that are not publicly owned.<sup>28</sup>

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<sup>27</sup>National Trails System Act, Public Law 90-543, Section 5(3).

<sup>28</sup>*Appalachian Trail Guidelines*, pp. 30, 40 - 45.

During the initial two-year period, the Secretary of the Interior is required to encourage states and local governments to enter into cooperative agreements and engage in negotiations for land along the official trail route. The Park Service may then proceed with establishing cooperative agreements or acquiring land or interest in land for those trail segments not preserved through state action; states and others will still be encouraged to continue their acquisition programs. Moreover, the Park Service is charged with the following responsibilities: (1) providing official trail markers to cooperating organizations and agencies for their erection and maintenance; (2) preparing information and materials, including press releases, for public dissemination; (3) assisting the states and the Appalachian Trail Conference and clubs; and (4) implementing the provisions of the National Trail System Act as described in the *Appalachian Trail Guidelines*.<sup>29</sup>

The National Forest Service was authorized by the National Trails System Act to collaborate with the Park Service in the development of trail regulations and to acquire lands within its boundaries that are included in the Appalachian Trail corridor. Sections of the trail on its lands are administered and maintained by the Forest Service, in cooperation with the Regional Trail Project Coordinators and local trail clubs. Furthermore, the Forest Service is responsible for developing connecting trails and facilities within its boundaries according to established guidelines.<sup>30</sup>

The states administer and develop the Appalachian Trail on lands under their ownership and control, in cooperation with the Regional Trail Project Coordinator and the Appalachian Trail Conference, and are required to adopt and enforce regulations and guidelines similar to those employed by the National Park Service. In addition, the states are expected to encourage local governments to do the same for portions of the trail within their domains. The states also carry on land acquisition programs, assist local governments in their acquisition efforts, establish cooperative agreements, and erect and maintain trail markers. About 22.6 percent of the Appalachian Trail passes through state-owned lands devoted to a variety of uses -- fish and game reserves, parks, forests, water districts, and highways. In certain instances, conflicting management principles have interfered with trail interests.<sup>31</sup>

### Pacific Crest Trail

The Pacific Crest Trail is managed in much the same way as the Appalachian Trail according to the provisions of the National Trail System Act. The Forest Service administers the Pacific Crest Trail in consultation with the Park Service. A notable difference is the lack of a group in the

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<sup>29</sup>*Appalachian Trail Guidelines*, pp. 28 - 29.

<sup>30</sup>*Appalachian Trail Guidelines*, pp. 29 - 30.

<sup>31</sup>*Appalachian Trail Guidelines*, pp. 11, 30.

private sector with a strong role comparable with that of the Appalachian Trail Conference. The Pacific Crest Trail Conference was organized to promote the trail soon after the concept was first proposed in 1932,<sup>32</sup> but this body is not guaranteed by law sufficient representation on the Advisory Council. In fact, the Conference is not even mentioned in *The Pacific Crest Trail Guide for Location, Design, and Management*.<sup>33</sup> Decisions regarding trail matters are not necessarily made in consultation with the Conference. A 1971 Memorandum of Agreement between the Forest Service and the National Park Service does not acknowledge cooperation with the Pacific Crest Trail Conference, whereas a Memorandum of Agreement in reference to the Appalachian Trail insures the participation of the Appalachian Trail Conference in the administration of the trail.<sup>34</sup>

Eighty percent of the Pacific Crest Trail, compared with 34.1 percent for the Appalachian Trail, is on federally held lands, encompassing 23 national forests, 7 national parks, 18 national forest wilderness areas, and 8 Bureau of Land Management districts. The Forest Service administers the bulk of these federal lands. Approximately 450 miles of the trail crosses private property.<sup>35</sup>

### Oregon Coast Trail

A project that appears to have relevance to Ala Kahakai is the Oregon Coast Trail, which is still in the planning phase. This trail system would enable hikers to enjoy the scenic and recreational attractions of nearly 95 percent of Oregon's coastline. Most of the state's 261 miles of ocean beach would be utilized as a hiking route. A preliminary study conducted by the State Parks and Recreation Section concluded that a sectionalized trail would be more feasible than a continuous border-to-border coast trail, for a number of reasons:

1. To cross the 20 major water barriers that interrupt the route would necessitate long detours or crossing by boat.
2. There is private ownership of upland areas where no beach is available for hiking, and residential and other developments preclude trail construction.
3. Obstacles to safe beach hiking (high tides, storm waves, drift logs, steep, slippery banks) cut off escape from some beaches.

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<sup>32</sup>Proceedings: *National Symposium on Trails*, p. 14.

<sup>33</sup>Forest Service, U.S. Department of Agriculture, *The Pacific Crest Trail Guide for Location, Design, and Management*, May 1971.

<sup>34</sup>*Appalachian Trail Guidelines*, pp. 39 - 42.

<sup>35</sup>Proceedings: *National Symposium on Trails*, p. 15.



4. The cost of developing a continuous trail is disproportionately high, relative to the few people who may take advantage of such a route for a border-to-border hike.<sup>36</sup>

According to Jack Remington, Recreation Trails Coordinator, the Parks Section of the Oregon State Highway Division, in coordination with others in the Division, would be the central administrative body for the trail. "Wet sand" beaches, all of which are publicly owned, are regulated for recreational use by this agency. Construction and maintenance would probably be supervised by the Parks Section and by the U.S. Forest Service, which manages about 18 percent of the Oregon shoreline as part of the Siuslaw National Forest. The Oregon Recreation Trails Advisory Council, composed of eight citizen members appointed by the Governor, would also be involved in the project. It serves in an advisory capacity to the Highway Commission, which is responsible for implementing the provisions of the Oregon Recreation Trails System Act of 1971. This task is carried out through the Parks Section of the Highway Division. Likewise, the Oregon Coastal Conservation and Development Commission would participate in the development of the trail. Made up of six members appointed at large by the Governor and 24 elected city, county, and port district officials, the Commission was charged by a 1971 act to study coastal natural resources and recommend their highest and best use through a comprehensive development plan.

Mr. Remington expects participation in planning from local residents, landowners, and hiking groups through the Advisory Council and the Coastal Conservation and Development Commission and through public hearings which are required prior to official designation of any Oregon Recreation Trail. He does not know whether participation by property holders in the actual management of the trail, other than through the present organizations, will become a factor. However, some arrangement may become necessary to insure acquisition of public rights-of-way through some of the private land.<sup>37</sup>

### Washington State Recreation Trails System

The 1970 Washington State Recreation Trails System Act (amended in 1972) authorized the Interagency Committee for Outdoor Recreation to develop a state trail plan and designate a state trail system. Composed of five citizen members and the directors of seven state agencies,<sup>38</sup> the Committee has completed an inventory of potential routes for all types of trails and is currently preparing the state trail plan. A shoreline trail system such as the one proposed by Oregon is being seriously considered

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<sup>36</sup>State Parks and Recreation Section, "Summary of Oregon Coast Trail Feasibility Study".

<sup>37</sup>Jack Remington, letter to the author, November 30, 1972.

<sup>38</sup>Department of Commerce and Economic Development, Department of Ecology, Department of Fisheries, Department of Game, Department of Highways, Department of Natural Resources, State Parks and Recreation Commission.

for inclusion in this plan. It is hoped that by May 1973 the first formal steps will be taken to establish a state trails system.<sup>39</sup>

The Washington State Interagency Committee for Outdoor Recreation (IAC) was created with the passage of Initiative 215 (State Marine Recreation Land Act of 1964), a measure which established a state outdoor recreation account in the state general fund to be administered by the Committee. Unclaimed marine fuel taxes and receipts from sales of bonds are deposited into this account. During the initial phase, the IAC could allocate funds directly to state and local agencies for approved projects and acquisition programs. Since June of 1967, the Committee has been required to recommend projects to the Governor for inclusion in the state budget. Moreover, the IAC participated in the preparation of the *Washington Statewide Outdoor Recreation and Open Space Plan*.<sup>40</sup>

Planning for the State Trails System is the responsibility of the Interagency Committee, but acquisition, development, and management will be entirely up to the operating agencies, such as the Department of Natural Resources and/or agencies at the county and municipal levels. In cases where multiple authorities exercise jurisdiction over segments of the trail, the IAC will act as the coordinating body. Richard A. Costello, Recreation Resource Specialist for the IAC, offers an opinion as to how this administrative organization might work:

As to how this arrangement facilitates decision-making and policy implementation, we can only speculate, based on experience in developing the Plan, that performance by a single responsible agency might be more expedient but its policies would possibly not be as sound as those emanating from the composite judgment of an Interagency Committee.<sup>41</sup>

Section 100 of the Washington Trails Act outlines the role of non-governmental interests:

67.32.100 Guidelines. With the concurrence of any federal or state agency administering lands through which a state recreation trail may pass, and after consultation with local governments, private organizations and landowners which the IAC knows or believes to be concerned, the IAC may issue guidelines including, but not limited to: encouraging the permissive use of volunteer organizations for planning, maintenance standards, a trail use reporting procedure, and a uniform trail mapping system.<sup>42</sup>

<sup>39</sup>Richard A. Costello, Interagency Committee for Outdoor Recreation, State of Washington, letter to the author, January 5, 1973.

<sup>40</sup>Department of Commerce and Economic Development, State of Washington, *Washington Statewide Outdoor Recreation and Open Space Plan* (Olympia, January 1967), p. 11.

<sup>41</sup>Richard A. Costello, letter to the author, January 5, 1973.

<sup>42</sup>Washington State Recreation Trails System Act, Chapter 67.32.

According to Mr. Costello, a Trails Advisory Committee representing trail user organizations, private landowners, and land management agencies has provided assistance and guidance in the establishment of the State Trails System and will continue to participate in its development and maintenance.<sup>43</sup> It should be noted that formation of this advisory committee was not a requirement of the Trails Act.

### Tennessee Trails System

With the passage and signing of the Tennessee Trails System Act of 1971 (Public Chapter No. 103), Tennessee became one of the few states in the union with a legal framework for a comprehensive trail system. The Department of Conservation has been charged with implementation of the Act, and it is presently in the process of fulfilling this responsibility. Three types of state trails are provided for: (1) long scenic trails traversing mostly scenic and natural areas (including trails of historic significance) and restricted to foot travel; (2) shorter urban recreation trails which may be of three types -- foot, horse, or non-motorized bicycle trails; and (3) connecting or side trails to furnish access to or connections between State Recreation or State Scenic Trails. Included as initial components of the system are seven State Scenic Trails: the Natchez Trace, The John Muir Trail, The Trail of Tears (each of these memorializes a vital historical event or events), the Cumberland Trail, The Chickasaw Bluffs Trail, The Trail of the Lonesome Pine, and the Appalachian Trail. Additional state scenic trails shall be authorized and designated only by an act of the Tennessee General Assembly. Subject to certain conditions outlined in the Act, the Department of Conservation may designate and establish state recreation trails on lands under its administration and/or on lands under the jurisdiction of a state department or political subdivision. Moreover, such trails may be established by the Department on private and federal lands. The Department may also designate connecting or side trails within park, forest, recreation, or natural areas.<sup>44</sup>

Most of the state-owned lands through which the trails pass are under the jurisdiction of the various divisions of the Tennessee Department of Conservation. The trails cross federal lands managed by the National Park Service, the Tennessee Valley Authority, and the U.S. Army Corps of Engineers, and these agencies have all cooperated with the state in the establishment of the system.<sup>45</sup>

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<sup>43</sup>Richard A. Costello, letter to the author, January 5, 1973.

<sup>44</sup>Tennessee Trails System Act, Public Chapter No. 103, Public Acts of 1971 (May 4, 1971), Sections 4 - 7.

<sup>45</sup>Donald E. Todd, President, Tennessee Trails Association, letter to the author, January 9, 1973.

Participation of private organizations in the implementation process is provided for in Section 9(c) of the Trails Act, which is very broad in scope and allows for all kinds of arrangements between the state and citizen groups:

(c) In selecting routes and implementing this Act the department is encouraged to confer with the recognized and established organizations primarily interested in trail development, conservation and outdoor recreation. It being the intent of this section to recognize the efforts and work already completed on such scenic trails as the Appalachian and Cumberland Trails by such organizations. Furthermore, the General Assembly encourages citizen participation in trail acquisition, construction, development, and maintenance where such activities will not conflict with the purpose of this Act.<sup>46</sup>

The state is currently working with the Tennessee Trails Association, the group primarily responsible for the passage of the Trails Act. Other organizations are also involved, and their efforts are coordinated through the TTA. As was the case with the Appalachian Trail Conference, the TTA took the initiative several years before the state entered the picture and began the preliminary work of selecting routes, clearing trails, and securing landowners' permissions. The trail bill was drafted by a working committee brought together by the TTA and the State Department of Conservation, and when it was introduced in the General Assembly, the Association actively lobbied and organized support for the measure.<sup>47</sup> According to Donald E. Todd, President of the Tennessee Trails Association, the committee specifically avoided naming any group with which the state would confer because organizations often lack permanency; it was thought desirable that the state be in a position to cooperate with the most active citizen group at any time in the future.<sup>48</sup>

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<sup>46</sup>Tennessee Trails System Act, Section 9(c).

<sup>47</sup>*Proceedings: National Symposium on Trails*, pp. 73 - 75.

<sup>48</sup>Donald E. Todd, letter to the author, January 9, 1973.

## San Mateo County Hiking and Riding Trail Project<sup>49</sup>

California's "Riding and Hiking Trails Law", enacted by the State Legislature in 1945, provided for a 3000-mile loop trail from San Diego to the Oregon border. In 1966, the San Mateo County Board of Supervisors authorized its Parks and Recreation Department to establish and maintain feeder trails to the State Trails System. In San Mateo County the State Trails System extends southward from San Francisco to Santa Clara and Santa Cruz Counties, and passes through, or closely adjacent to, state and county parks. The county feeder trails link congested urban areas with these parks, other rural areas, scenic and historic points, and interesting, short loop trails. Twelve miles of feeder trails complement the existing 58 miles of trails in San Mateo County.

Two riding and hiking paths give city dwellers convenient access to the countryside: the Lake Trail and the Portola Valley Trail. Originating in the middle of the city of Belmont, the four-mile-long Lake Trail enters a beautiful natural park featuring a small lake, crosses San Francisco Water Department lands and a wooded valley, and finally connects to the State Trail at a point where waters from the Sierras which serve San Francisco converge with the Spring Valley Lakes. The Lake Trail is located on easements acquired by Belmont; the city, in turn, gave the county the right to construct the trail on these easements. Acceding to a request by the city, San Mateo County agreed to maintain trails within the corporate limits of Belmont. The county was granted a permit by the City and County of San Francisco to construct the trail through its watershed property.

The Portola Valley Trail extends for eight miles from the city limits of Menlo Park through a relatively undeveloped region and connects with the State Trail via an existing county footpath. It is constructed entirely within an existing road right-of-way, part of which lies within the boundaries of the Town of Portola Valley. San Mateo County received permission from the town to establish the trail and assurance that in case the road is widened at some future date, a replacement trail will be provided by the town. Portola Valley also assumed responsibility for maintenance of the trail within its corporate limits and agreed that the level of maintenance would be least equal to state and county standards. The balance of the Portola Valley Trail traverses unincorporated areas, and the County Engineer approved the implementation of the trail over these lands.

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<sup>49</sup>The source of information for this section is written material prepared by San Mateo County, including copies of interdepartmental correspondence from the County Engineer and Road Commissioner to the Director of Parks and Recreation (July 7, 1966), and correspondence between the county and the City of Belmont (July 5, 1966), the Town of Portola Valley (July 8, 1966), and the State Land and Water Conservation Fund Program (December 28, 1967).

Responsibility for the development of the feeder trails project, including the tasks of constructing trails, fencing, and signs, was delegated to the San Mateo Parks and Recreation Department. The Board of Supervisors directed the Building Construction and Engineering Departments to prepare the plans and specifications. The construction of any major bridges is to be undertaken by the Engineering Department.

### England and Wales

The casual observer might question the relevance of the English experiences in recreation and land-use planning to the Hawaii situation and to Ala Kahakai in particular. However, upon closer examination, certain parallels are suggested. England and Wales compare with the State of Michigan in land area, but their combined population in 1968 of 48.5 million is six times that of Michigan. Although Hawaii's population is not as high nor as dense, the state is undergoing strains associated with the marked increase in population. As Oahu reaches its "saturation point", more and more people are looking toward the open spaces of the neighbor islands. England and Wales are facing problems familiar to Hawaii which are creating pressures on the countryside: a decrease in agricultural lands, a sharp increase in the number of automobiles, and an acute housing shortage.<sup>50</sup>

As discussed earlier, Ala Kahakai could not succeed without the existence of wise land-use planning which recognizes the values of the trail and its surrounding resources. Walter L. Criley, Director of the Division of Development Planning, Tennessee Department of Conservation, warns that we will fall short of a full implementation of the National Trails System Act's provisions unless we develop and adhere to a national land-use planning policy.<sup>51</sup> The same sentiment is expressed with regard to state trail systems by Stanley A. Murray, Chairman of the Appalachian Trail Conference:

All trails probably need some kind of environmental protection, but this is implicitly true of the natural environment trails. If the country through which the trail goes -- or is to go -- is not protected, then some provision will have to be made to control the land use within that distance that can affect the experience. This may be expensive, but it is at the heart of establishing nearly all State trail systems. It is something that should be thought about early and faced realistically.<sup>52</sup>

Thus, in addition to studying how England and Wales manage recreational resources, including a system of footpaths, it would be useful to look into their land-use program.

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<sup>50</sup>Warren Johnson, *Public Parks on Private Land in England and Wales* (Baltimore and London: The Johns Hopkins Press, 1971), p. 1.

<sup>51</sup>*Proceedings: National Symposium on Trails*, p. 18.

<sup>52</sup>Johnson, p. xi.

The importance of land-use policy is highlighted by the fact that in England virtually all land, including those areas designated as National Parks, remains in private ownership. Similarly, much of Ala Kahakai would cross private lands. In the United States, where land is plentiful, large sums of money are spent by the government for acquisition and development of recreational areas, but little or no public control is exercised over the use of a vast percentage of the land in the country. On the other hand, intensive recreational developments in rural areas of England and Wales are rare, and land is controlled by public authorities in ways that contribute to its amenity values.<sup>53</sup> British parks are simply designated areas in which ordinary rural life is carried on in towns and on farms within the boundaries of the park. The land is not nationalized, and there is no change in ownership. This multiple-use aspect is necessary because of the scarcity of land; huge tracts cannot possibly be set aside solely for recreation purposes.<sup>54</sup> 25.3 percent of the land in England and Wales carries some national designation or is proposed for designation, either as a National Park or an Area of Outstanding Natural Beauty. Local governments are also allowed to use designations in their development plans.<sup>55</sup>

The National Parks and Access to the Countryside Act of 1949 assigned the major planning responsibilities for recreation to local planning authorities. Every county was required to survey footpaths and prepare maps; these were subject to challenge and revision, after which an official map of rights-of-way was published. The 1949 Act created the Countryside Commission, an ad hoc organization empowered to designate long-distance hiking routes by obtaining rights-of-way and funding their improvement and maintenance. However, the Commission's role is predominantly advisory, and its planning powers and financial resources are severely limited, thus leaving the powers for achieving objectives to the local planning authorities.<sup>56</sup>

Local authorities provide recreation opportunities by: (1) directly providing facilities to which the public has free access; (2) supporting voluntary organizations, such as youth clubs and community associations; and (3) exercising their planning powers. Proposals for recreational facilities must be considered in the context of a broad recreation policy. Moreover, the need for regional planning demands that the determination of this overall policy cannot be conceived of solely in local terms.<sup>57</sup>

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<sup>53</sup>Thomas L. Burton, "Chapter 9: The Organization of Recreation Planning", *Recreation Research and Planning: A Symposium*, ed. Thomas L. Burton. (London: George Allen and Unwin Ltd., 1970), p. 189.

<sup>54</sup>Johnson, p. xii.

<sup>55</sup>Johnson, p. 28.

<sup>56</sup>Burton, pp. 190 - 191.

<sup>57</sup>Burton, pp. 205 - 206.

Virtually all development was brought under the control of local planning officials by the 1947 Town and Country Planning Act, which required that planning permission must be obtained before any development could be undertaken. Each county and county borough (cities within counties with autonomous governments) is required to prepare a development plan which serves as a partial basis for making land-use decisions. Unlike the county general plans in the State of Hawaii which establish official policy, the English county plans provide general direction only. The planning authorities are able to exercise a great deal of discretion, but development plans must ultimately be approved by the Minister of Housing and Local Government, who coordinates planning on a regional and national scale and who has the power to overrule local decisions.<sup>58</sup>

Since British national parks are comprised largely of private landholdings and may encompass several autonomous local jurisdictions, their administration differs from that of national parks in the United States. The Peak Park Planning Board administers a national park on a regional basis. As provided by the National Parks and Access to the Countryside Act, two-thirds by the Minister of Housing and Local Government. The full Board meets only four times a year; most work is done by committees, which is common in English local government. A staff headed by a director and a planning officer fulfills dual functions:

1. Development control is the Board's major task. Under the provisions of the Town and Country Planning Act, it receives and decides on applications for planning permission. A development plan prepared by the Board is the primary document which guides its activities. Public and private bodies are given an opportunity to review this plan before it is forwarded to the Minister for approval.
2. The Board also implements national park legislation through positive planning and management. For this function 75 percent of the cost is paid by the central government.<sup>59</sup>

In 1967 - 1968, 71.8 percent of the revenues spent by the Board came from the constituent counties and 28.2 percent from the central government.<sup>60</sup> The Board has limited funds for improving the physical environment of Peak Park. By using its power to grant or deny planning permission, it fights what is essentially a rear guard action against physical changes in the landscape, while at the same time allowing for legitimate social change.<sup>61</sup>

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<sup>58</sup>Johnson, p. 15.

<sup>59</sup>Johnson, pp. 49 - 51.

<sup>60</sup>Johnson, p. 50.

<sup>61</sup>Johnson, p. 98.



In summary, recreation decisions of the planning authorities in England and Wales are made within the context of general land-use policies enforced and administered on the local or regional level and subject to the concurrence of the central government. Money and effort are expended less on actually developing amenities than on regulating the quality of the land on which recreational activities are carried out. Ala Kahakai's administration would not have direct control over the use of land and water adjacent to the trail. Its degree of control over land use in the area might have more impact on Ala Kahakai than any other factor, thus necessitating the creation of some mechanism to insure that the trail constituency can provide regular input into the land-use planning process.

### Napatree Point, Rhode Island

As some of Rhode Island's features and experiences appear to parallel those of Hawaii, it is fitting that we observe what is happening at Napatree Point, a narrow barrier beach located at the southwestern tip of the state. Rhode Island is smaller in size than Hawaii, and virtually half of its border touches the ocean. Although statistics indicate it as a densely populated state (second only to New Jersey), the bulk of its population is concentrated in Providence and its suburbs in the northeastern corner of Rhode Island. This urban center is highly industrialized, but much of the remaining land in the state maintains a rural atmosphere, at least during the fall, winter, and spring months. During the summer, the resort trade dominates the coastal areas, as refugees from New York, Boston, and other eastern cities flock to Rhode Island's beaches. Commercial fishing is an important marine industry. Rhode Island's economy is heavily dependent upon military spending and is currently threatened by federal cutbacks. Sections of the state outside the Providence area may be described as "economically depressed" due to the seasonal aspect of both tourism and fishing, the lack of significant manufacturing and commerce, the unsuitability of the land for large-scale agriculture, and other factors. Like the Hawaii situation, the state government is operating under tight fiscal constraints. Thus, pressures for economic growth are being exerted and are bringing about changes in the landscape and affecting the quality of recreational opportunities. More and more homes and shopping centers are being built as the suburbs expand into the countryside. Pro-development forces still have to contend with an attitude which values tradition highly, but, as in Hawaii, the problem of achieving controlled growth is a very real one.

Napatree Point is one of the last undeveloped barrier beaches in the state, a result of ancient glacial deposition. Although it is only a mile and half long and about 100 yards wide, Napatree's beach, dune, salt marsh, and high-ground areas support a variety of wildlife and plant species, including 125 species of birds, many of them considered rare.<sup>62</sup> The tip of the Point is a favorite spot for bluefish and striped bass fishing. On a summer weekend an average of 500 people visit Napatree, and almost 200

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<sup>62</sup>For an account of Napatree's wildlife, see: Richard P. Holloway, "Napatree Point", *Pequot Trails*, Vol. I, No. 1 (Fall 1972), pp. 28 - 31.

boats tie up within its sheltered anchorage. Houseboats often remain for the entire summer. Raw sewage, garbage, and discharged fuel from boats have caused a serious water pollution problem. This heavy usage has contributed to a marked decrease in the crab, scallop, lobster, and clam populations; remaining shellfish are unsafe to eat.<sup>63</sup> Ronald L. White, a biologist who has been observing bottom conditions in the bay, stresses that unless action is taken, eutrophication, silting, and bacterial decay will not only cause the pollution or killing of all shellfish but also cause plant material to clog presently open water, thus diminishing the attractiveness of recreational beaches and the suitability of the bay for boating.<sup>64</sup>

The quality of Napatree Point's land is also being threatened. Beach erosion is a critical problem. Vehicular traffic, which tramples dunes and destroys the grass that anchors them, is currently prohibited by the Watch Hill Fire District, a quasi-municipal corporation located in the town of Westerly, Rhode Island. The first 900 yards of Napatree is in private ownership. Only three of the owners of 21 undeveloped lots on the Point failed to grant permission to the Fire District to administer their land. Thus, 96 percent of the privately held land is administered as a conservation area, and remaining land is owned entirely by the Fire District.<sup>65</sup>

Several years ago it became apparent to the Fire District's Park Commission that a comprehensive plan for protecting Napatree's environment was imperative if its recreational uses were to be continued. In cooperation with the Napatree Point Conservation Committee, a private body of Watch Hill residents formed primarily to raise money, the Fire District initiated a program to evaluate and hopefully solve the Point's problems. The goal of the Napatree Point Conservation Area Project is "to institute and maintain a privately owned conservation area open to the public, to serve as an outdoor classroom for students and a refuge for those seeking solitude in natural surroundings." During 1971 - 1972, approximately \$8000 in private contributions was used for an inventory and management study, underwater photographs, a report of boat damage to the environment, snow fencing and posts, signs, bumper stickers, hand-out pamphlets, wages for a ranger program, etc.<sup>66</sup> Snow fences were erected to help build up the dunes in beach areas particularly subject to erosion and to divert people away from places where beach grass had not yet taken firm hold. Complementing this project was a program to transplant and fertilize beach grass. Conservation signs spell out the simple conditions under which the public is permitted

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<sup>63</sup>"Plan for Protecting a Natural Resource", *New England Marine Resources Information* 41 (Narragansett: New England Marine Resources Information Program, October 1972), no page numbers.

<sup>64</sup>Ronald L. White, *A Statement of General Bottom Conditions off the Bay Side of Napatree Point*, June 15, 1972.

<sup>65</sup>Clement A. Griscom, Park Commission, Watch Hill Fire District, letter to the author, March 20, 1973.

<sup>66</sup>Clement A. Griscom, letter to the author, March 20, 1973.

access through private land, and signs indicate bird-nesting areas which are protected by wire. A wildlife management specialist and an assistant were hired to patrol Napatree Point on a regular basis, explain basic conservation concepts to the public, keep a tally of people and boats, and collect refuse.<sup>67</sup>

In addition to implementing the ranger program, the Fire District and the Conservation Committee have embarked on numerous public relations efforts: mass mailings to Rhode Island and Connecticut schools inviting science classes to explore Napatree on field trips, lectures and seminars, radio and newspaper coverage, coordination of clean-ups, and distribution of literature, bumper stickers, and petitions. Several students from nearby universities are currently involved in thesis work. Support and cooperation from the Audubon Society, Boy and Girl Scouts, and other citizen groups have been helpful. Moreover, public agency support has been provided: volunteer workers and supplies were transported by Coast Guard trucks, the State Department of Natural Resources has helped by enforcing existing laws, and the Westerly Town Council will invoke harbormaster laws to control boats.<sup>68</sup>

Although Napatree Point does not have an actual network of trails, it is reserved exclusively for pedestrian traffic. Here we have an example of an interesting coastal environment providing excellent recreational and educational opportunities and requiring an organized management program to protect its natural resources. According to Clement A. Griscom of the Park Commission, the "imagination and efforts of a couple of people rather than legislation and formalized planning have been responsible for the transformation of Napatree to date." The Conservation Committee was established because the Fire District considered it not politically feasible to solicit funds directly as well as unwise, until proven, to include Napatree as a line item in the annual budget. In this case the best strategy seemed to be to "work with individuals and the lowest level of government" and to "short-circuit intermediate-level government while communicating with state government so the latter would apply pressure downwards on intermediate government, which was hostile." Future projects will include looking into conservation easements and developing a land-use and coastal-zone plan.<sup>69</sup>

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<sup>67</sup>"Plan for Protecting a Natural Resource", *New England Marine Resources Information* 41.

<sup>68</sup>Clement A. Griscom, letter to the author, March 20, 1973.

<sup>69</sup>Clement A. Griscom, letter to the author, March 20, 1973.

## SUGGESTED ADMINISTRATIVE ARRANGEMENTS

### State and National Systems

The foregoing survey reveals four types of arrangements for the management of state and national trail systems:

1. Pacific Crest Trail and Oregon Coast Trail

Primary responsibility for these trails is assigned to an already existing governmental unit which is directed to coordinate all trail activities in cooperation with other concerned agencies. The governmental unit directly manages trails on lands under its ownership and control. Trail segments which fall under the jurisdiction of other agencies are developed and administered by those agencies in cooperation with the governmental unit. Guidelines are provided by a legally authorized body of appointed public officials and private citizens which serves in an advisory capacity only (advisory council or committee).

2. Appalachian Trail

Same as #1 above; in addition, a private organization is legally authorized to participate actively in the management of the trail system in a capacity above and beyond membership on the advisory council.

3. Tennessee Trails System

Same as #1 above, except that no official advisory council or committee is provided for. However, the legislation encourages participation of citizen groups in the development and management of the trail system.

4. Washington State Recreation Trails System

Responsibility for acquisition, development, and management of the trail system is assigned to the appropriate operating agencies within the various levels of government. In cases where multiple authorities exercise jurisdiction over trail segments, an already established state interagency committee composed of citizen members and directors of certain state agencies acts as the coordinating body. This committee also fulfills the initial planning function. Although not legally required, an advisory body does provide assistance and guidance in the establishment, development, and maintenance of the system.

## Local Systems

San Mateo County, England and Wales, and Napatree Point, Rhode Island represent three administrative approaches at the local level.

### 1. San Mateo County Hiking and Riding Trail Project

The county manages all sections of this system of feeder trails except those within the boundaries of one town which has agreed to assume responsibility for trail maintenance within its corporate limits.

### 2. England and Wales

Local planning authorities manage trails within their jurisdiction, primarily through their powers over land use. Relatively little attention is devoted to physical development of these trails, most of which lie on private property.

### 3. Napatree Point, Rhode Island

A special-purpose local governmental unit manages this conservation area, much of it in private ownership, in conjunction with a citizen committee. To date, more reliance has been placed upon informal, individual arrangements, volunteer efforts, and private monetary contributions than on direct government action.

## Designing Hawaii's System

Whatever administrative arrangement is selected for Hawaii, it will have to be able to fulfill certain criteria. A list of such criteria, started on page 11, can now be expanded further. This list is not meant to be all-inclusive; as planning progresses for Ala Kahakai, and eventually for a statewide trail system, the criteria may be amended. The determinants listed below, which outline the political climate and relevant environmental conditions and intervention objectives (governmental roles), must be considered by the planners who will decide the scope of the trail agency's powers, as well as its linkages with other agencies, its geographic jurisdiction, and its organizational form.

### Determinants

1. Existence of marine and pond ecosystems with varying levels of tolerance.

### Criteria

1. Trail agency should be able to protect areas with fragile ecosystems; restrict certain areas for scientific study only; educate hikers on the ecology of these features.

### Determinants

2. Historic significance of the area; existence of archaeological sites, petroglyphs, etc.
3. Existence of coral reef and other shoreline areas suitable for fishing.
4. Existence of natural areas: bird refuges at Opaeula, Kaloko, and Honokohau (Aimakapa).
5. Existence of certain endemic plant species, some of them rare.
6. Ala Kahakai is a *pilot project* for an eventual statewide system of trails; it is not just a local facility.
7. Water pollution, a consequence of increased usage of the shoreline: e.g., at small boat harbors.
8. Problem of users littering portions of trail *not on public land*.

### Criteria

2. Trail agency should have an interpretive program; help to coordinate education/research efforts; establish links with DLNR's Parks Division, UH, Bishop Museum, Hawaiian culture groups, DOE, etc. Provide for protection and maintenance of valuable archaeological sites.
3. Trail agency should provide for enforcement of fishing regulations; need to cooperate with DLNR's Fish and Game Division.
4. Trail agency should include this aspect in its interpretive program; need to cooperate with federal and state wildlife agencies.
5. Trail agency should include this aspect in its interpretive program; establish links with UH, Bishop Museum, etc.
6. Trail agency's role in designating and/or planning for additional trail segments should be delineated. Agency's structure should be designed keeping in mind the fact that the system may be expanded.
7. Trail agency should establish links with State Departments of Health and Transportation to assure that water quality degradation doesn't decrease recreational value of marine environment.
8. Trail agency should designate responsibility for maintaining segments of trail system between public parks; work out efficient maintenance program for *entire* trail network.

### Determinants

9. Certain segments of the trail may present hazards; need for caution especially when walking over lava; also need for water-safety measures.
10. Situation in which segments of the trail are on private land.
11. Pressures to develop West Hawaii's coast, especially shoreline resort and residential developments.
12. Provisions of the State Land Use Law which delegates zoning authority to the State Land Use Commission, the counties, and the State Board of Land and Natural Resources. Much of the trail lies on conservation land under Land Board control.
13. Increase in local and tourist population of West Hawaii; increased demand for recreational facilities; pressure on existing facilities; heavier usage due to improved access from coastal highway.

### Criteria

9. Trail agency should provide safety instructions to hikers and be able to implement rescue operations if necessary. There should be some system of registering hikers so the agency knows where people are and when they are expected at their destinations.
10. Trail agency should have the authority to negotiate rights-of-way with private landholders and developers; assure public access to shoreline.
11. Trail agency should not only be able to protect features within its boundaries but also provide input to the decision-making process affecting use of land and water *adjacent* to the trail. Establish links with state and county planning bodies, Land Use Commission, Board of Land and Natural Resources. Trail agency should also strive to assure shoreline access.
12. Trail agency should establish operational linkages with these agencies.
13. Trail agency should cater to both resident and visitor needs; cooperate with county parks department, local schools and colleges, tourist industry, etc.

### Determinants

14. Existence of multiple constituencies: local residents, Hawaiian culture groups, private landowners and developers, hikers, conservationists, etc.
15. Jurisdictional conflicts; multiple agencies with overlapping responsibilities.

### Criteria

14. Trail agency should provide channels for active citizen participation in management and maintenance of system. Trail agency should have a built-in mechanism for representing the interests of those with limited capacity to compete in the political process and should provide for representation of the interests of groups and areas that will be disproportionately affected by a policy or action.<sup>70</sup>
15. Trail agency should have authority to coordinate multi-agency efforts. With regard to certain functions, it may have to be capable of acting as an autonomous body with definite responsibilities.

Determinants 14 and 15 pose the most difficult questions and demand that a decision be made on whether to centralize or decentralize authority and responsibility. This situation must be confronted by anyone involved in the public administration of recreational facilities and is aptly described below:

Those with a reformist bent or a directive to recommend policy are likely to look aghast at the chaos of services and facilities that exist for recreation purposes in the United States. There is no neatness in the situation. Responsibilities overlap. Concern and effort are widely shared and appear to be poorly coordinated. It is difficult even to describe who is accountable for what or to understand where one government's responsibility begins and another's ends. If for no other reason than to aid his understanding -- to bring some order out of apparent disorder -- the observer is tempted to recommend that the system be made more simple and therefore more rational.<sup>71</sup>

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<sup>70</sup>Robert Warren et al, *Designing Coastal Management Agencies: Problems in Allocating Coastal Resources* (Los Angeles: University of Southern California Center for Urban Affairs, 1972), pp. 47 - 48.

<sup>71</sup>Morton Grodzins, "The Many American Governments and Outdoor Recreation", *Public Administration: Readings in Institutions, Processes, Behavior*, ed. Robert T. Golembiewski, Frank Gibson, and Geoffrey Y. Cornog (Chicago: Rand McNally and Company, 1966), p. 205.



However, the author goes on to say that perhaps a lack of neatness in the allocation of government functions does not necessarily have to be a source of difficulty and that chaos may in fact have its virtues. It is his contention that complete direction from above may inhibit initiative. Overlapping concern of many agencies encourages the establishment of general goals by the central authorities and invites central authorities, usually through financial grants, to stimulate activity at lower levels. An open system is maintained if several entities operate freely in a program area; no single standard defines what is desirable and no one official has the power to determine what is appropriate. Furthermore, multiple power centers facilitate the accessibility of decision-makers to the public. If citizens are unable to exert influence at one point, they can resort to other channels which may prove to be more receptive.<sup>72</sup>

Therefore, in discussing alternative means of administering Ala Kahakai, one must not automatically think in terms of hierarchy and order. For example, a horizontal relationship may be better suited to the performance of certain functions than a vertical power relationship. As demonstrated in the case of Napatree Point, more can sometimes be accomplished through informal rather than formal arrangements; if the usual channels are blocked, others can be created. It may often be politically unwise to rule by fiat in one situation, while another demands nothing less than direct intervention.

It is suggested that when the planning for Ala Kahakai is under way, representatives from all concerned public agencies and private groups be consulted *before* the administrative structure is designed. An advisory body similar to those formed for other trail systems should be activated during the planning stage in order to pool ideas and create statewide interest. In cooperation with this advisory committee, the state might sponsor a seminar and invite interested people in the public and private sectors to present their views. Based on the information derived from such a session or sessions, the determinants and criteria listed above could be revised and an ordering of priorities established. Certain problems or political conditions will be of a more crucial nature than others. Decisions will have to be made regarding the relative priority of competing needs: for example, the need to preserve fragile ecosystems for scientific study versus the need to meet the demand for recreational opportunities.

Ultimately, the planners will have to decide whether or not Ala Kahakai can be administered through existing governmental units, given the nature of traditional interagency channels. Perhaps new relationships, both formal and informal, will have to be developed: for example, the formation of a coordinating body similar to that of the State of Washington, or the establishment of a State Trails Commission, serving in an advisory capacity or given the authority to set policy guidelines or actually dictate policy. It is hoped that this report can provide a base of information upon which such decisions can be made. In addition, the experiences of other states not covered in this report should be investigated. The Colorado State Legislature passed a state trails bill in 1971.<sup>73</sup> Numerous National

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<sup>72</sup>Grodzins, pp. 205 - 206.

<sup>73</sup>*Proceedings: National Symposium on Trails*, pp. 79 - 80.

Recreation Trails have been established throughout the country.<sup>74</sup> Hawaii could also look into the possibilities of urban trails and trails for the handicapped.<sup>75</sup> The West Hawaii shoreline trail can be the testing ground for exciting, innovative concepts that might be applied to *Na Ala Heʻe*, a unified network of trails which may someday be instituted on all the islands of Hawaii and enable people to enjoy the wonders of its lands and the surrounding sea.

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<sup>74</sup>Proceedings: *National Symposium on Trails*, pp. 81 - 88.

<sup>75</sup>Proceedings: *National Symposium on Trails*, pp. 40 - 45, 58 - 72.

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