

**A STUDY ON THE
FEASIBILITY OF ESTABLISHING
A KANEOHE BAY AUTHORITY**

A Report to the Governor and the Legislature of the State of Hawaii

**Submitted by the
Legislative Auditor of the State of Hawaii
Honolulu, Hawaii**

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FOREWORD

Senate Concurrent Resolution No. 135, House Draft 1, adopted by the Hawaii State Legislature during its 1987 Regular Session, requested the Legislative Auditor to conduct "a study on the feasibility of establishing a Kaneohe Bay Authority." This report constitutes the response to the legislative request.

In its final adopted form, this resolution encompassed both the urbanized portions of the land surrounding Kaneohe Bay and the bay water area itself. However, in interviews with affected legislators, it became readily apparent that the central and overriding legislative concern lay with Kaneohe Bay itself and not with the existing urban community surrounding the bay. Accordingly, the focus of this study is on matters relating to the use and management of the bay and its resources within the context of Hawaii's broader role as an island state in the middle of the Pacific Ocean.

We wish to acknowledge the cooperation and assistance extended to our staff by the University of Hawaii, the Hawaii Community Development Authority, and the Hawaii State Departments of Business and Economic Development, Health, Land and Natural Resources, and Transportation; by the Departments of General Planning, Land Utilization, and Public Works of the City and County of Honolulu; by the U.S. Coast Guard and the U.S. Army Corps of Engineers; by various coastal and water related agencies of the states of Arizona, California, Florida, Louisiana, Maryland, Michigan, Minnesota, Mississippi, and Washington; by the Great Barrier Reef Park Authority of Australia; and by numerous state and county legislators and other members of the community concerned with maritime, environmental, and governmental affairs.

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Chapter 1

INTRODUCTION

Senate Concurrent Resolution No. 135, House Draft 1, adopted by the Hawaii State Legislature during its 1987 Regular Session, requested the Legislative Auditor to conduct "a study on the feasibility of establishing a Kaneohe Bay Authority." This report contains our study in fulfillment of that request.

Legislative Resolutions

The original version of SCR No. 135 closely followed the reasons cited by the Legislature in 1975 for establishing the Hawaii Community Development Authority (Section 206E-1, Hawaii Revised Statutes). They include findings of "underdevelopment and a potential need of renewal, renovation, or improvement to alleviate such conditions as dilapidation, deterioration, age and other such factors or conditions which make such areas an economic or social liability."

The Senate also adopted and sent to the House of Representatives Senate Concurrent Resolution No. 134, which called for a "Comprehensive Study for the Implementation of a Recreation and Conservation Pilot Project at Kaneohe Bay."

The final version of SCR No. 135, as amended by the House of Representatives and approved by both houses of the Legislature, incorporated elements of S.C.R. No. 134 by adding several statements of concern regarding the bay itself. These included findings that:

1. The continuing increase of Hawaii's population and the visitor industry has placed an environmental strain on many bays and beaches;

2. Problems have developed involving water safety, unrestricted commercial activities in recreational areas, and a lack of adequate public facilities due to mixed use of water resources;

3. These problems are reflected in Kaneohe Bay where the underwater coral groves continue to be admired and studied by scientists from around the world and where the outstanding research and teaching facility, the University of Hawaii's Institute of Marine Biology, is located on Moku O Loe Island, better known as Coconut Island.

SCR No. 135, H.D.1, then calls for an extensive, long-range master plan for Kaneohe Bay to be administered by an authority as a model of proper planning and development for other state ocean-based recreational areas. The resolution expressed the hope that such an authority could combine the strengths of private enterprise, public development, and regulation for improved community development. The Hawaii Community Development Authority (HCDA) was suggested as providing the model for such an authority at Kaneohe Bay.

SCR No. 135, H.D.1, apparently encompassed both the urbanized portions of the land surrounding Kaneohe Bay and also the bay water area itself. However, it quickly became evident through interviews with legislators who sponsored the resolution and chaired committees dealing with it that their central and overriding concern lay with Kaneohe Bay itself, not with the existing urban community surrounding the bay. Interviews with city officials and local community leaders reinforced that conclusion. Conditions in Kaneohe town are far different from those that had been evident in Honolulu's Kaka'ako district which prompted the creation of HCDA in 1975.

Consequently, we shifted from a combined focus on both the land and water aspects of the Kaneohe Bay region to a concentration on the bay itself. Our attention centered on those legislative concerns relating to the bay and how its resources are managed and used. This report reflects the decision to narrow the scope of our study to what legislators told us they most wanted studied and explored.

Study's Objectives and Scope

The objectives of this study are:

1. To review generally the circumstances and conditions of the Kaneohe Bay area so as to identify those issues and problems which should be addressed by government.

2. To review the authority concept, to analyze whether a public authority would be suitable for the conservation and development of the Kaneohe Bay region and, if so, whether a public authority model for planning and development would also serve appropriately for other regions of this state.

3. To analyze other alternatives if such alternatives appear to be more suitable than a Kaneohe Bay authority.

In carrying out this project, we interviewed legislators and public officials whose area of representation or whose committee or departmental responsibilities relate to the setting and implementing of policy for Kaneohe Bay. We explored pertinent publications that would throw light on conditions in Kaneohe Bay. Local community leaders were interviewed and inquiries were made of agencies in other jurisdictions which deal with coastal area management problems. And library sources were studied for information on the record of public authorities, their accomplishments, and their shortcomings.

Organization of Report

The overall organization of this report runs from consideration of generally applicable information to the more specific with each succeeding chapter. Chapter 2 presents information on how other jurisdictions (including the federal government, various other coastal states, and Australia) have approached the management of their coastal areas. Chapter 3 then reviews what agencies within the State of Hawaii (federal, state, and county) currently regulate and manage coastal areas including shoreline development, water quality, and uses of near-shore ocean waters.

Chapter 4 focuses on Kaneohe Bay, its history, its ecosystem problems and its current conditions and potentials. Chapter 5 examines the authority concept, how it has been used in Hawaii and elsewhere, and its strengths and weaknesses.

Based on the foregoing, Chapter 6 looks at the structural options that appear worthy of consideration by the Hawaii Legislature and the policy/priority choices that correspond to each of those options.

Chapter 2

SHORE AREAS AND COASTAL WATERS: THE GENERAL SITUATION

As we began to examine the question of an authority for Kaneohe Bay, it became clear that managing human activity, rather than managing natural processes, was the real issue at stake. It is human intrusions into natural systems, rather than particular natural conditions in themselves, which give rise to the need for management. Hence, governance (the manner and form of organizing, directing, and controlling human activities) becomes a matter of paramount importance when looking at problems and opportunities affecting coastal lands and waters.

It was in this light that we looked at how other jurisdictions with coastal and shore area difficulties have addressed challenges to their resources. In this chapter, we summarize information obtained regarding how both the federal government and a sample of other coastal states are coping with coastal problems. We also note what Australia has done to manage its world-famous Great Barrier Reef.

Coastal Concerns Nationwide

Coastal conditions have gained increasing concern in recent decades. Pollution, erosion, shore flooding, hazards to human health, along with loss of habitat for fish and wildlife, comprise a few of the more dramatic reasons for the heightened awareness that coastal management is a vital public responsibility.

As early as 1899, Congress assigned to the U.S. Army Corps of Engineers responsibility for managing rivers, harbors, and coastal encroachment. By 1956, Congress had acted to protect the habitats of fish and wildlife. Passage in 1969 of

the National Environmental Protection Act broadened the range of ecosystem concerns protected. Of most direct concern to this study is the 1972 legislation, the Coastal Zone Management Act. We look at how it functions when we sketch its importance to Hawaii in the next chapter. Great future importance lies in the federal government's 1983 proclamation extending national control 200 nautical miles to sea and creating the Exclusive Economic Zone.

Approaches at State Level

By the early 1970s, if not earlier, virtually all states with coastlines had enacted some kind of shore area protection program. Since congressional passage of the Coastal Zone Management Act in 1972, 29 of 30 states with shorelines have instituted programs that fulfill federal guidelines and hence may draw on federal funding. Although most of these states seem to share common problems and similar aspirations, they have adopted diverse strategies and priorities and have mobilized their managerial resources differently in their approaches to shoreline management.

We corresponded with officials in Washington, California, Louisiana, Mississippi, Florida, and Maryland with ocean shorelines and with officials in Arizona, Michigan, and Minnesota with shorelines on lakes and rivers. For comparison purposes, we reviewed Australia's experience with its Great Barrier Reef Marine Park Authority.

Obviously population sizes, coastal geography, susceptibility to flooding, tidal impacts, weather, and depth of coastal management area differ widely among the jurisdictions. Some concern fresh water bodies while others deal with ocean coastlines. Nearly all dwarf Hawaii's 750 miles of shoreline by several fold.

(Michigan has almost as many boats—700,000—as Oahu has residents.) Yet all share anxiety about dangerous interactions between humans and nature.

We can draw from these cases several conclusions about facets relevant to how Hawaii might best deal with Kaneohe Bay. These facets include: how a wide diversity of governmental agencies and processes are structured in sharing responsibility, how large a role local residents and the private sector are accorded, and how recreational activities on water areas are regulated and policed.

Governmental arrangements. How many agencies play a role in managing shore areas and coastal waters can become prodigious. As one observer noted: "The number of agencies, federal, state and local, involved in Oregon's coastal zone is overwhelming. Each has a different statutory authority, different planning responsibilities, different permitting requirements, and to a large extent, a different mechanism for appeals."¹

Minnesota cited the range of jurisdictions as running the gamut from "townships, cities, counties, soil and water conservation districts, watershed districts, regional development commissions, Department of Tourism (state), Department of Health (state), Pollution Control Agency (state), Environmental Quality Board (state), and various federal agencies including Corps of Engineers, Forest Service, National Park Service, Fish and Wildlife Service [to] the Federal Emergency Management Agency. Finally, for Lake Superior, the International Joint Commission, which includes several states and Canada."²

Florida reported three primary state agencies (the Department of Environmental Regulation, the Department of Natural Resources, and the Department of Community Affairs), five water management districts, eleven regional planning councils, counties, municipalities, soil and water conservation

districts, ports, beach and shore preservation districts, mosquito control districts, in addition to such federal agencies as the Corps of Engineers, Coast Guard, and Environmental Protection Agency.³

To overcome some of the managerial complications of so many diverse agencies, Maryland and California established commissions with direct regulatory powers. Michigan placed within its Department of Natural Resources those functional responsibilities for coastal management that are divided in Hawaii among the Departments of Health, Business and Economic Development, Transportation, and Land and Natural Resources. Washington and Florida stated their intention of working through local levels of government, limiting state action largely to technical and financial assistance. Creation of a Great Barrier Reef authority in Australia stemmed from conflict between federal and state level interests. An authority offered a compromise for effective cooperation.

Role for private sector. While most of the states made no mention of a specific role for citizen involvement, Maryland made it a major aspect of its extensive management program. A 100-member advisory committee meets regularly around the state, looking into the technical and political problems inherent in coastal zones and fielding citizen input to governmental agencies. Australia's Great Barrier Reef Marine Park Authority also lays considerable emphasis on relating to the general public and encouraging a sense of public participation.

Recreational user management. Management of coastal resources is not limited to beach erosion, habitat protection, and encroachment. There exists a growing problem everywhere of increased demands for access to and space on the waterways for recreational activities. How to ensure fairness and safety among such users--while also protecting beaches from erosion and habitats from

devastation by recreational activities—presents states with a burgeoning set of dilemmas. Yet none of the states in our sample could demonstrate an adoptable solution or strategy.

The states in our sample tend to leave it up to local counties and municipalities to police their own waterways. Even California, with a Department of Boating and Waterways, relies on local jurisdictions, preferring to work through them via financial assistance. In contrast, Australia's authority, responsible for an area larger than all of Great Britain and several times as long as the miles between Hawaii's main islands, has established a zoning program that forbids recreational activities in vast areas.

In Summary

No jurisdiction in America, it would appear, has achieved a really efficient system of governance for coastal management. Some states, such as Maryland and Louisiana, have had to resort to memoranda of agreement to iron out conflicts between state agencies. For the most part (again excepting Australia), the number of jurisdictions involved run far more than the number involved in Hawaii's coastal programs.

Perhaps the most noteworthy observations to emerge from our survey of other states are: (a) the conscientious awareness generally expressed by states for protecting the environment by managing land development, not just for better exploitation, but with at least the beginnings of sensitivity for natural systems; and in contrast, (b) their still relatively primitive approaches to managing recreational activities in coastal waters.

Chapter 3

SHORE AREAS AND COASTAL WATERS: THE HAWAII SITUATION

All signs point to increased use of near-shore marine areas as well as heightened competition for on-shore land. This national trend stands out dramatically in Hawaii with its year-round outdoor weather and large tourist industry. This chapter looks at the instruments of management of shore areas and coastal waters in Hawaii, including the responsibilities assigned to numerous federal, state, and county jurisdictions.

Resource Competition

Competition among people pursuing a wide range of activities on Hawaii's ocean waters has long existed. That is particularly true within the confines of the more popular, more picturesque, more protected bays. Paddlers and swimmers at Waikiki and Ala Moana beaches proved incompatible and had to be separated. Among other fatalities in recent years, a snorkler in Maunalua Bay was killed in an accident involving a pre-teen driving a jet ski. A large tour boat suffered a motor malfunction just when an unusually large wave hit it, pushing it into a group of surfers who had strayed too close to Kewalo Basin's entrance channel. The result was death to one of the surfers.

Growth of recreational uses. The 1950s saw the sudden popularity of water skiing where the skier is towed by a fast motor boat. Then came windsurfing, particularly popular in Hawaii and, more recently, jet skis with a self-contained power source.

New recreational vehicles, known as thrillcraft, keep appearing. These include surf-jets (15-horsepower surfboards), wetbikes (waterborne motorcycles), 36-mile per hour "waverunners," 40-horsepower "wetjets," 48-horsepower "hoverstars" weighing up to a quarter ton. Department of Transportation (DOT) officials acknowledge that these new kinds of thrillcraft are coming on the market faster than they can write regulations to handle them.

Commercial operators now offer parasailing—parachutes which fly up, instead of down, when pulled against the wind—on waters near most of Hawaii's major resort areas. All of these are in addition to the more traditional forms of water recreation, such as swimming, fishing, sailing, paddling, viewing undersea life and corals via glass-bottom boats, snorkling, and surfing on regular boards, boogeyboards or just body surfing.

Other developments. Recreation alone does not dominate marine affairs. With federal grants, Hawaii has taken a lead role in developing an energy source from thermal differentials between layers of ocean water. The process, known as ocean thermal energy conversion or OTEC, offers a byproduct in the form of pure water for mariculture. Growing interest in mariculture (aquaculture in salt water) prompted the 1986 Legislature to adopt what became Act 91, the Hawaii Ocean and Submerged Lands Leasing Act.

That legislation clarified the ownership and control of submerged lands by assigning responsibility to the Department of Land and Natural Resources (DLNR). But even before DLNR had rules written and adopted to govern the leasing of submerged lands—for such specified purposes as OTEC, mariculture, and "other energy or water, research, scientific, and educational activities"—one entrepreneur

sought to lease a water area off Lahaina or Kona to run a submarine tour as a permitted "educational" use.

There looms in the background, too, a potential new industry, that of sea mining for the abundant manganese nodules. Whether economic and political conditions worldwide would warrant their retrieval and what kind of on-shore processing facilities might become necessary are questions which are speculative at this time. The prospect at least holds a potential impact that cannot be overlooked.

A 1987 study by the Ocean Resources Branch, Department of Business and Economic Development (DBED), found a significant growth of six existing and two budding marine-related industries. The six well-established industries are: commercial fishing, aquaculture, recreation, research, seafood marketing, and shipping/repair. These have experienced a 13 percent annual rate of growth over the past five years. The DBED cites biotechnology and energy (OTEC) as the two additional new industries with great potential, in addition to sea mining with its more distant possibilities.¹

Exclusive economic zone. The importance of coastal/marine planning became increasingly evident as nations, including the United States, dramatically expanded their ocean jurisdictions. Implications for states such as Hawaii were sketched out by the Coastal States Organization in Washington D.C. in *Coastal States and the U.S. Exclusive Economic Zone*, April 1987. With international recognition that nations may exert control out 200 nautical miles, possibilities for economic development—and environmental responsibilities—greatly expanded. But as that publication is quick to point out, conflicts between coastal states and the federal government exist and could worsen unless concertedly resolved. At stake are profits

and taxes from—as well as a degree of control over—fishing, oil/gas, mineral, and energy resources.

State Responses to the Challenge

State responses occur at two levels: one, that of policy determination examined in this section; the other, operational management, examined in the following section.

In the last two decades, many policy statements have come from public officials in Hawaii concerning this State's coastal resources and how they should be managed. Many legislative acts and executive programs have occurred. A quick review of a range of them will set the stage for a look later at how they are implemented.

Marine affairs. In 1970 the State Legislature established the Office of Marine Affairs Coordinator within the Governor's Office. This move sought to promote the most effective and efficient use of resources in developing Hawaii's marine environment. A decade later that office was merged with the then Department of Planning and Economic Development (DPED)—now renamed the Department of Business and Economic Development (DBED)—in support of marine research and development. The Marine Coordinator post was further downgraded, by Act 281 of 1982, to branch level as DPED's Ocean Resources Program.

Meanwhile, DPED was given responsibility in 1979 for the Natural Energy Laboratory of Hawaii which pursues ocean thermal energy conversion technology on the Big Island. The director of DPED also took charge of the state's Manganese Nodule Project with its promotion of sea mining. Overseeing Hawaii's Coastal Zone Management program, established in 1973, became another DPED responsibility.

That program gained approval from the Office of Coastal Zone Management, U.S. Department of Commerce, in September 1978.

Environmental affairs. Act 132 of 1970 created an Office of Environmental Quality Control within the Office of the Governor. The same act also established a 15-member advisory council and an environmental center at the University of Hawaii (UH). Underlying this legislative action was a realization that an optimal balance (rather than conflict) should be sought between the State's dual desires for economic development and environmental quality. By 1971, that council was successfully negotiating and resolving conflicting interests between industries (such as cane processors) and environmentalists concerned about pollution in shore waters. Meanwhile, the UH environmental center conducted extensive exploration into simulation models using Kaneohe Bay for specific analysis. Then, as part of a general executive branch reorganization in 1980, the environmental quality control office and council were transferred to the Department of Health.

Water study. Between 1974 and 1976, the Hawaii Water Resources Regional Study—conducted with federal, state and county participation—brought together, in the first concerted planning effort, the full set of agencies concerned with water resources. Their interests ranged from fresh to salt water, recreation to native flora/fauna, health to agriculture and their interrelated impacts. The resulting publication, *Hawaii Water Resources Plan*, was published in 1979.

Policy planning. The Legislature in 1975 called for the creation of a State Plan for policy coordination. Assigned responsibility for it, DPED drafted a long list of broad statements and titled it a plan. Section 100-11, for instance, called for the "prudent use of Hawaii's land-based, shoreline, and marine resources" and "effective protection of Hawaii's unique and fragile environmental resources." Although it did

not cover all of the functional areas prescribed in Act 189 of 1975, a state policy plan was eventually adopted as Act 100 in 1978. Within this framework, DPED in 1985 published its *Ocean Management Plan*.

Recent legislative actions. Beside clarifying the authority of the Board of Land and Natural Resources to lease submerged land, the Legislature in 1986: (1) sought progress from DOT on finalizing statewide rules governing recreational boating, (2) requested the Legislative Reference Bureau to compile a full compendium of official state policies related to ocean uses, and (3) clarified shoreline setbacks. In 1987, it: (1) legislated controls on thrillcraft, (2) acted to preserve environmental quality in harbors, and (3) established an ocean resources tourism task force, among other actions.

Governmental Efforts at Management

Public action in coastal matters at an operational level looks in two directions. One focuses on how people develop "shorelands" and encroach upon the water area with fixed facilities; the other, on what activities happen in the water and hence on their management. We examine these under the subtopics of shoreline management and water users.

Shoreline management. An outgrowth of the environmental movement which spawned clean air and clean water legislation at federal and state levels, Coastal Zone Management sought to establish a coordinated effort by all involved agencies at every appropriate level of government. In the years since passage of Public Law 92-583 in 1972, every affected state except one has established such a program.

Hawaii began its Coastal Zone Management program (CZM) by directing DPED in 1973 (Act 164) to formulate an operational plan. After sharply divided debate

over creating a Hawaii Coastal Zone Conservation Commission (similar to California's), the Legislature in 1975 under Act 176 assigned interim responsibility to the counties to establish and administer Special Management Areas (SMAs). A superagency conservation commission never was enacted, and later legislation (Act 188 of 1977) set permit administration firmly in SMAs at the county level.

Shore area management, however, involves numerous agencies as well as three levels of government and entails some rather specialized expertise. This program is inherently complicated. We summarize the program's more significant aspects: (1) its objectives, (2) its structure, (3) its consistency provisions and subsequent "networking" process, and (4) its self-checking provisions of legal standing to sue.

1. *Objectives.* Act 188 of 1977, as contained in Chapter 205A, HRS, spelled out CZM objectives as focused on: recreational and historic resources, scenic and open space resources, coastal ecosystems, economic uses, coastal hazards, and developmental management. In implementing these objectives, "full consideration shall be given to ecological, cultural, historic, and esthetic values as well as to needs for economic development." Moreover, "the objectives and policies of this chapter and any guidelines enacted by the legislature shall be binding upon actions with the coastal zone management area by all agencies."² The public sector, as well as the private sector, appears to be bound by these provisions.

2. *Structure and scope.* As the lead agency for oversight review, DBED is expected to process federal funds under this program, review federal programs and permits, develop guidelines for counties and other state agencies, review progress, and promote public participation. DBED does not directly control the process nor does it try to pass judgment itself on how well applications meet CZM objectives. It

draws, instead, on the technical expertise available in other state agencies by routing applications to them for review.

County planning agencies act on requests for development within their SMAs. Although the State Land Use Commission designates which land is "conservation," DLNR's board determines which uses may actually happen in conservation areas. Conservation districts include submerged lands as well as watershed mountainous areas and other such open spaces, the very kind of resources CZM seeks to protect. By involving county planning agencies and various state agencies, local concerns and the concerns of health, economic conditions, environment, and resource management receive consideration. At the federal level, the Corps of Engineers continues its long-time assignment of controlling encroachments into navigable waters. Like DBED at the state level, the Corps routes applications to other federal agencies such as the Coast Guard and Environmental Protection Agency.

Initially, coastal zone management coverage was coterminous with county designated special management areas. It soon became apparent that compliance with federal stipulations would require some expansion inland for the area under control. That expansion was accomplished administratively by designating the entire state (except forest reserves) as Hawaii's CZM area. Consequently, Hawaii's program encompasses a large CZM, the more confined county SMAs, and DLNR's conservation lands.

3. *Consistency and networking.* Under federal requirements for "consistency," neither the county, nor state, nor federal level may give a green light by itself to an applicant for shore-area development. The appropriate agency at each level must approve; otherwise approvals from other levels are void. This means that the state can check federal actions. In turn, it gives county government

leverage over state agencies, too. (An example of what can happen occurred in 1987 when Honolulu objected to state plans for Kalanianoʻle Highway in the county's SMA.)³

Responsible agencies at each level found it mutually beneficial to join together in a cooperative strategy of serving the public. They established a "network" in which each agency provides the same information and assistance to applicants.

To illustrate: an applicant for development within an SMA applies for a permit from, say, the Corps of Engineers. Corps staff directs the applicant to DBED and the appropriate county planning department. Due to strict timeframe requirements on processing all applications, the Corps might complete its review and grant approval before the county and state have completed their process. But a Corps approval does not grant the applicant a license to proceed. Corps approval is made contingent upon state and county approvals. (Even work the Corps itself might undertake within a SMA is subjected to review and approval by the state and county.) Two items the Corps looks for most are a water quality permit from DOH and a consistency certificate from DBED.

4. *Legal standing.* Section 205A-6, HRS, grants standing to any person or agency to bring civil action for noncompliance. Courts may then grant injunctive relief and a restraining order. Until tested in court, however, it remains uncertain whether this standing to sue applies to the granting of permits only within a county SMA and state controlled ocean area or to any permit that someone might contend violated CZM objectives within the entire CZM.

Water users. Public concern about quality and uses has brought governmental efforts to regulate what happens *to* the water as well as what happens *on and in* the water. These primarily involve pollution control and recreational boating.

1. ***Pollution control.*** Two agencies hold particular responsibility for water quality in Hawaii: (1) DOH, and (2) the U.S. Coast Guard acting on behalf of the federal Environmental Protection Agency which has no enforcement office in Hawaii.

In the event of an oil or chemical spill anywhere (not just on the water), the Coast Guard is called in to investigate because the oil or chemical could flow into Hawaii's marine waters and such spills constitute a violation of federal law. In contrast, sewage spills violate state, not federal, water quality laws and so should rightly concern only DOH. In practice, the Coast Guard is routinely called in anyway along with the local civil defense agency.

2. ***Boating.*** The Coast Guard also has a responsibility for safety conditions in boats. This entails, among other aspects, grants-in-aid for safety enhancement and investigation of major boating accidents. Actual enforcement of federally prescribed "rules of the road" for small-boat operators, requirements for safety devices, and rules governing the behavior of persons on and in marine waters are left to the boating branch and harbor patrol of DOT's Harbors Division for direct action.

For lack of a concerted DOT plan for a small-boat program in Hawaii, the Legislature passed House Resolution No. 170, H.D.1, of 1986 requesting DOT to formulate a "recreational ocean motorcraft management plan" with statewide rules. The department responded that it lacked the staff to comply fully and cited its traditional policy called the "Public Trust Doctrine."

That policy supposedly would allow everyone free and equal access to and use of state waters. Restrictions should come only where absolutely necessary and then only after a clear need had been established, such as in the form of accidents. DOT's stated preference lies in what it calls self-regulation.⁴

As of mid-1987, DOT's Harbors Division had only three designated boat captains on Oahu and one each for the other counties, not all of whom were actually licensed. Only in the past two years have these harbor patrol captains had anything larger than an outboard motorboat with which to patrol. Oahu's harbor patrol finally had a previous pilot boat transferred to them. Maui and Kauai received 26-foot boats; the Big Island, a single 24-footer. These were purchased with federal funds provided by the Boating Safety Financial Assistance program under the Surface Transportation Assistance Act of 1982 (PL 97-424).

While one 40-foot boat makes a vast improvement in DOT's policing capabilities, one boat for the entire island of Oahu means that popular recreational areas such as Kailua, Kaneohe, Haleiwa, and Pokai Bays are seldom patrolled. Demand is simply too great in the Honolulu-Waikiki-Maunaloa area and the time lost travelling to other parts of the island too great for the harbor patrol to police them more than sporadically at best.

Unlike 23 other states and until recently, Hawaii had no minimum age for operating powered craft.⁵ Only in 1987 was a minimum age enacted--15.⁶ That same legislative act authorized DOT to restrict where thrillcraft may operate so as to protect wildlife, shores from erosion, and public safety. But Hawaii has yet to adopt a set of standards or requirements for testing boat and thrillcraft operators, including whether they are familiar with federal and state safety rules.

3. *Public concern.* Public dissatisfaction became abundantly evident when the House Committees on Ocean and Marine Resources and on Planning, Energy and Environmental Protection held hearings in Autumn 1987. Legislators heard a flood of complaints about water safety and a lack of either adequate DOT regulations or their inadequate enforcement. There was concern also about confusion over jurisdictional divisions between DOT and DLNR.⁷

Since both DOT and DLNR police are quite limited in number compared with the extent of territory to patrol, and since they do overlap in terms of territory, the 1987 Legislature authorized each department's police to enforce the other department's regulations when they happen to see obvious violations. Unfortunately, both departments' rules are so complicated that it may prove to be impractical for each separate police unit to learn two sets of rules thoroughly enough to enforce both accurately so long as the primary responsibility of each department rests only in one area.

In Summary

Competition for use of Hawaiian shorelands and near-shore waters is growing markedly, in some places to dangerous proportion with each new demand on those limited resources and space. Governmental activities relating to Hawaii's shorelands and coastal waters have proliferated over recent years. Programs and responsibilities are dispersed among a wide array of agencies, often uneven and uncoordinated in their coverage. Consequently, there emerges a less than clear expression of priorities relative to coastal concerns.

Although the coastal zone management approach promoted by the federal government did produce improvements in interagency cooperation and coordination

here, that program addresses only part of the problems. Especially needed is a more effective system for ensuring safety, fairness of access, and fulfillment of desired benefits in the utilization of Hawaii's shoreline and ocean resources while still protecting the environment.

Chapter 4

KANEOHE BAY'S PARTICULAR CHALLENGE AS A SHORE AND COASTAL AREA

Previous chapters examine coastal management as it might pertain to any shore area. Senate Concurrent Resolution No. 135, however, focuses specifically on Kaneohe Bay. This chapter reviews the geography, history, ecology, and potentials of Kaneohe Bay and the surrounding community so as to determine what about them might warrant either special treatment or allow them to serve as a prototype for comparable regions in other parts of Hawaii.

Geography and Early History

Located on the eastern (the windward) side of Oahu across the Ko'olau Mountains from Honolulu, Kaneohe Bay is Hawaii's largest enclosed body of water. Although it would appear on a map to lie almost totally open to the ocean, in reality a barrier reef effectively separates it from open ocean, thereby making it a lagoon with ecosystem characteristics of a lagoon. And since it is where the ocean tide meets the outflow of fresh water streams, it is at the same time an estuary containing estuarine ecosystems.

The bay, 2.6 miles wide and compassing 11,360 acres, runs for eight miles in a northwest-southeast direction. Only a channel, dredged in modern times for ships at the north end, and a small, ten-foot deep "sampan channel" at the south end allow passage between bay and ocean.

In addition to the barrier reef, two other kinds of coral formations occur within the bay. A fringing reef hugs much of the shoreline. Scattered throughout the area in between, coral heads (or patch reefs) have grown nearly to the surface.

Surrounding much of the bay only two to three miles away, nearly vertical cliffs (*pali*) rise dramatically 1000 to 2000 feet, thereby clearly delineating the Kaneohe Bay region. Facing the prevailing trades, these cliffs force the tropical winds to rise, cool, and drop their heavy loads of moisture on the mountain tops. Consequently, rain runoff on the windward side is short, swift, and laden with silt. More significantly, rains can fall in deluges of 8 and 10 or more inches within a single 24-hour period on a small segment of the bay area, yet drop barely an inch only a couple of miles away.¹

In pre-Western times, Kaneohe's fertile lands, good supply of fresh water, and abundant fish gave this enclosed region what appears to have been the largest concentration of population anywhere on this island. Windward Oahu could also boast the favorite residences of Hawaiian kings. All of that would change dramatically after the arrival of Westerners who preferred the drier Honolulu side for its fine harbor.

Kualoa, at the north end of Kaneohe Bay, enjoys the distinction as the place of initial landing and settlement on Oahu by exploring Polynesians. To Hawaiians, it retains particular historic and religious significance. With a spectacular panoramic sweep of the bay and mountains, it has become a popular park in recent years.

Other places in the bay region also hold high religious importance. It was at Kaneohe where Hawaiians believed their god of creation, Kane, taught humans to practice circumcision, hence the name Kaneohe. It was at Waikane—"the water of Kane"—where Kane struck the land with his staff and brought forth water. And the *heiau* on He'eia Kea Peninsula (now a state park) was dedicated to Kane, "the Giver of Life," the one god to whom human sacrifices were never made.²

Human Impact on the Land

Population growth among ancient Hawaiians was apparently slow, estimated at approximately a doubling each century. Even that rate eventually proved more than traditional methods of food production could support. Three centuries before Western contact, Hawaiians developed well-engineered drainage and irrigation systems in concert with terraced agriculture. With these, they could sustain larger populations, especially in a region with ample rain such as in Kaneohe. An acre in wet taro could feed 20 to 30 people annually and not require periods of fallow.³

Fish constituted ancient Hawaiians' prime source of protein. The chiefs developed the requisite innovations to ensure a fuller, more stable supply of food. Along the shore, they built ponds to store living fish. That meant engineering good enough to withstand storms and good enough to maintain proper levels of salinity.

Some two dozen such ponds have been identified in Kaneohe Bay, though most have long since been filled in. A few, most notably the one at Hakipu'u, are still maintained and used for raising seafood. The largest one, Loko I'a O He'eia with 88 acres halfway up the bay, was once slated to become a marina but was saved by placement on the national historic register. It is no longer in productive use due to repeated flooding during nearby urban development in the 1960s.

Population changes. The earliest census for the Kaneohe region recorded a population of 3000 in 1831–32. That number decreased by nearly half in the 1849 census. Population did not begin to increase until the 1870s and did not reach its 1830s' population until 1920. Rapid increases began in the 1940s and accelerated throughout the 1960s when two tunnels through the mountains to Honolulu made commuting practical for many more people. By 1980, population approached 60,000.

Land ownership. At the outset of historic times, all land belonged to the king who allocated it to his chiefs in sections known as *ahupua'a*. These sections typically ran from the ocean to the mountain top so that the community within each section would have access to a full range of nourishment, from seafood to taro to mountain fruits. Generally, residents drew on these resources communally, though some small parcels (known as *kuleana*) would be assigned to particular families to farm so long as they kept them in productive use.

Under Western influence, the king declared his Great Mahele in 1848 with the intention of distributing large portions of his lands on a permanent basis. Under it (and the Kuleana Act two years later), very little land actually reached commoner ownership. In the bay area, only 460 awards went to commoners, none of them for more than ten acres. Averaging only two acres, some were as small as .15 acres. Preponderantly, distributed land went to chiefs who tended to sell their holdings to foreigners. Three chiefs alone sold 29,700 acres; the government sold additional land, thereby dispossessing most Hawaiians.

Agriculture. Although Hawaiian families grew some sugar cane for their own enjoyment, it did not become a commercial crop until the 1860s. By 1865, three sugar mills had located in this region—at Kualoa, Waihe'e, and Kaneohe. Sugar gained major importance from the U.S. reciprocity agreement of 1876 as evident in eight plantations here at one time. That peak dropped to only two plantations by 1885; none beyond 1903. Grown largely by Chinese in former irrigated taro plots, rice became a commercial crop in the 1860s and lasted into the 1920s without inflicting detrimental impacts.

Not so pineapple production. Begun at the start of this century, it reached commercial significance in the Kaneohe area between 1910 and 1925, then declined.

In those few years, however, it wrought havoc with bay corals because the extensive straight-line plowing caused heavy runoff of topsoil and hence heavy sedimentation. No longer could the neglected ancient Hawaiian irrigation system check the abundance of silt.

By the 1840s, livestock raising had begun. Eventually some livestock got loose, turned feral, and contributed, along with overgrazing of domestic herds, to serious deforestation and thus to further sedimentation. Dairies made their appearance in the 1880s and remained to contribute fecal nutrients to the bay until forced out by urban development in the 1970s.

Water. Under natural conditions, the Kaneohe region had an abundance of fresh water, whereas the central Oahu plain had too little for profitable agriculture. Between 1913 and 1916, a system of 27 interconnected ditches and tunnels, 37 stream intakes, and a major tunnel through the mountains made agriculture flourish on the dry leeward side for the first time. After that, pineapple and sugar cane production on Oahu proved quite profitable.

But that act, and subsequent additional diversions of windward Oahu water, took a toll on traditional Hawaiian agriculture on the windward side. Waiahole Stream, for instance, would only receive two-fifths of its previous water flow, far too little for taro and rice. The Haiku tunnel in 1940 had a similar impact on Kahalu'u and Ioleka'a Streams. A tunnel at Kahalu'u in 1946 and another at Waihe'e in 1955 further reduced freshwater in the Kaneohe region with commensurate ecological stress.

Impact of Western Culture on the Waters

In pre-Western times, Hawaiians made respectfully optimal use of bay resources. The *ahupua'a* rimming the water extended across the bay to the barrier reef, thereby guaranteeing each local community a share of the protein supply contained in the estuary's then abundant fish life. Despite drastic changes on land (described in *Kaneohe: A History of Change*), the bay's resources continued to serve local people. When major changes did come, however, they were dramatic.

Ecosystem degradation. First came a neglect of fishponds and serious sedimentation from plowing for pineapple cultivation in the 1910s. Then large-scale dynamiting and dredging began in 1939 and increased with the approach of World War II. That was done to create a ship entrance and to clear a 38-foot deep lane down the center of the bay for ocean-going ships to reach the south end's military installation. Further blasting of coral heads sought to create landing areas for Navy seaplanes.

Some of the dredged materials went to fill what is now the runway portion of the Kaneohe Marine Corps Air Station on Mokapu Peninsula. Much of the fill, though, was simply dumped, thereby devastating those corals not removed. After the war, continued dredging provided materials to fill in ancient fishponds as sites for new homes. The first turnaround came in 1968 when tougher restrictions for Corps of Engineers enforcement brought an effective end to dredging.

With rapid urban development in the 1950s and 1960s, large stretches of land lay exposed by extensive bulldozing. Even small rains could turn the bay a thick red with silt. To compound matters, there came then a series of record-setting rainstorms. Previously, the corals had been able to shake off storm-created siltation; and traditional land-use practices by Hawaiians had absorbed rather than

aggravated flooding conditions. Now, bulldozing went on with few checks or controls. Nothing held back the silt, and the region's top soil flowed into the bay. It washed away in such quantities and frequency as to overwhelm the coral's recuperative capabilities.

Bay ecosystems suffered a second traumatic impact, that of high concentrations of nutrients in the form of sewage. Kaneohe Marine Corps Air Station began discharging untreated sewage into the bay in 1951. Increasing population in Kaneohe town generated a need for a wastewater plant with secondary treatment. Inadequate analysis of the bay's replenishment flushing capabilities led the City and County of Honolulu's Public Works Department in 1963 to construct an outfall into the bay at the southernmost end where the least amount of flushing is possible.

Within a short time, scientists at the Hawaii Institute of Marine Biology (HIMB) on Coconut Island grew alarmed at the rapid devastation occurring to the corals. Not only had the ecosystem undergone stress and change, *Dictyosphaeria cavernosa* (commonly known as green bubble algae) had increased in abundance and were devouring the corals.⁴ In response, DOH conducted a detailed study of Kaneohe Bay in 1969 but found no problem.

Corrective action. Concern over the degradation of Kaneohe Bay occurred at a time when Americans first became aware of ecology in their environment and to the dangers of pollution in general. Working together, various citizen groups (such as the Outdoor Circle, Kaneohe and Kahaluu Community Councils, Windward Citizens Planning Conference, along with numerous university professors) began to take action in the early 1970s by forming a united organization known as "Kaneohe Bay in Crisis."

First, they blocked construction of a planned power plant along Kaneohe Bay's shoreline that would have added thermal pollution on top of the other problems plaguing those waters. Then they undertook a project to draft a much needed grading ordinance for the city. Eventually such an ordinance was adopted and began to check what had been unrestrained disturbance of the lands.

In concert with this movement, Governor John A. Burns appointed a Kaneohe Bay Task Force in 1971. This task force, chaired by the director of the newly established Office of Environmental Quality Control, built a case for diverting the sewage outfall from Kaneohe Bay to open ocean. The Governor's Environmental Council proved effective in getting action started.

Eventually the state and city obtained the funding, the needed diversion was constructed, and the principal source of sewage ceased flowing into the bay in 1978. The Marine Corps continued to discharge for only a short time longer. Now, a small Ahuimanu treatment plant alone discharges into the center of the bay, and plans call for that, too, to connect soon to the ocean outfall off Mokapu Peninsula.

One key aspect of this improvement lay in convincing residents in Kailua that the outfall would go out far enough and deep enough so as not to pollute nearby Kailua Bay. Task Force members, along with public officials, proved useful in accomplishing that feat on a citizen to citizen basis.

In the decade since diversion, several breakdowns in the sewer system have dumped thousands of gallons of raw sewage into the bay. Many persons contacted in our study made mention of this as a problem even though a temporary one. According to the city public works director, a \$4 million program is now under way by a consultant to locate and assess problems over the entire islandwide system with its several thousand miles of sewer lines. Never done before, this extensive study

should provide both a firm basis and a method for eliminating these accidental malfunctions. Moreover, equipment changes will take any overflow raw sewage out to the ocean, rather than let it run into Kaneohe Bay.⁵

Research. Diverting sewage from Kaneohe's treatment plant away from the bay offered a unique opportunity for studying change in an ecosystem. HIMB scientists devised an experiment to learn more about the impact of sewage (even treated sewage which still contains a rich assortment of nutrients) on an estuarine ecosystem in Hawaii. Consequently, the outfall was diverted initially for only two weeks, then returned to Kaneohe Bay for a month before being permanently diverted to the ocean. Scientific measurements made during this period established what great significance those nutrients can exert on an ecosystem.⁶

Follow-up work conducted by Dr. Paul Jokiel, and his students and colleagues, as presented in *Coral Reef Population Biology*, determined that sewage definitely imposed a major stress on lagoon corals and stimulated green bubble algae growth. In addition, their studies found that within a surprisingly short time, bay corals showed signs of recovering and rejuvenating, once the abnormally heavy loads of sediment and nutrients imposed by humans were removed from their environment.

Bay waters have also begun to regain some of their earlier aesthetic appeal. Dr. Satoru Toguchi, a UH marine biologist, has shown that form of change through his data collected on chlorophyll. Highest readings after the sewage diversion did not exceed lowest readings prior to the permanent elimination of Kaneohe sewage treatment outfall.

Drastically altering the nutrient load did not, however, please everyone. Complaints soon arose that less nutrients meant less fishfood and hence a diminished

amount of certain fish and clams. On this aspect, however, scientific evidence is, apparently, less than definitive.

Clams grew there before any sewage outfall ran into the bay. Despite a lack of "hard" data, HIMB scientist Tom Clarke believes that the number of *nehu*—a fish caught in Kaneohe Bay for bait in ocean fishing—has not changed appreciably, with or without the presence of sewage. "The yield of bait fish caught per unit of effort (i.e., number of boat-days engaged in fishing) has remained consistent on an annual basis even though at various times during any given year there may be no *nehu* taken in."⁷

A lack of fish might stem from overfishing and have nothing to do with sewage. Yet proposals made by DLNR and by elected officials to remedy this condition have always encountered staunch objections from fishermen. Those proposals would institute roving *kapu* areas that would prohibit fishing in certain sectors until fish life can return to a condition of abundance, such as occurred in Hanauma Bay. Despite that opposition, legislators in 1986 enacted Act 256 appropriating \$50,000 for DLNR to begin a state-wide *kapu* program and to ban permanently all net fishing within harbors, except for *nehu*.

What stands out is that an estuarine/lagoon ecosystem, such as in Kaneohe Bay, is exceedingly complex. Removing sewage does reduce drastically the nutrient supply, and reducing nutrients does reduce food for fish. But reducing sewage also reduces turbidity. Too much turbidity cuts off sunlight which is essential for corals to thrive. And corals provide essential permanent habitats for some species of fish as well as habitats for several kinds of fish during some phase of their life cycle, most often during infancy. Too much phosphorous and nitrogen and too much biological oxygen demand from coliform are detrimental to fish life, as well as

aesthetically unpleasing to humans. On the other hand, clams and desirable seaweeds (*ogo*) might thrive in such an environment.

Currently Perceived Problems and Potentials

Recreation. The time may soon come when Kaneohe Bay, though large, will attract too many sail boats, thrillcraft, water skiers, commercial tours, parasails, commercial and recreational fishing boats—on top of snorklers—to permit all of them simultaneously to proceed unrestricted. That would most certainly jeopardize safety, particularly in the presence of hazardous coral heads lying just below the water's surface.

Water safety is already a serious problem. Nevertheless, DOT has no regular patrols for—only occasional visits to—such popular recreational areas as Kaneohe Bay, Kailua Bay, Pokai Bay, and Haleiwa.

Despite general opposition over the years from local residents against resort development around the bay,⁸ many individuals from diverse interests (not just developers) still cite Kaneohe Bay's dramatic beauty and bucolic atmosphere as neglected resources sure to prove a boon to both tourists and Hawaii residents alike if planned and promoted concertedly for recreational uses.

Education. A prominent obstacle to fulfilling Kaneohe Bay's potential in the field of education is the same as for recreation: a lack of access to bay waters. Other than via limited private yacht clubs, piers from private lots, and one small public marina, it is impractical for most local residents and students to reach the bay for any meaningful educational purpose or even for family recreation. King Intermediate School, for example, fronts directly onto the bay, yet its access remains badly limited by mudflats and brush. Ironically, visitors to Kaneohe Bay a

century ago reported sandy beaches along its shore where there is now only ugly oozing mud.

One idea for enhanced educational opportunities would involve a glass tube walkway from a shore pier out to Coconut Island. Not only could more people visit that island, they could walk between the coral heads and view marine life along the way. A test model by a University professor reportedly proved its feasibility.⁹ Other educational potentials exist in the form of He'eia Kea Park and fishpond. While private citizen efforts (through the Friends of He'eia Kea Park) try their best to promote those potentials, more seems needed.

Coconut Island's Hawaii Institute of Marine Biology constitutes a major research center of world renown. Indeed, its proximity to excellent research sites and year-round conditions for conducting scientific research are envied by marine biologists the world over. Coconut Island also serves as a teaching site for some 2000 students a year who visit it to get hands-on research experience. But its 64-acre sanctuary is threatened by overuse as commercial tour operators increasingly bring tourists in to gain a quick educational experience.

In Summary

Kaneohe Bay region, with this state's largest estuary/lagoon, holds considerable significance—for its historical and religious prominence as well as for its far better known beauty, recreational and research potentials. Especially since the arrival of Western culture, however, human activities have neither adequately respected the land nor always been compatible with the bay's ecosystem. And increased pressures to exploit its resources continue to create formidable challenges for sound management. Still, concerted private and public sector efforts did

demonstrate that mismanagement can be corrected, as exemplified in the ending of bay pollution.

Consideration of how to manage Kaneohe Bay does not happen in a vacuum. Many other coastal regions of the State offer much in the way of recreational, commercial, and educational potentials. For the most part, those regions have also suffered at times their share of exploitation, pollution, and neglect. Moreover, agencies regulating what happens in and to Kaneohe Bay also hold responsibilities for these other areas as well.

Except for its unique research conditions, Kaneohe Bay could probably serve as a prototype for management of issues in other coastal sectors of this state. But so too could many of those other sectors. The evidence is not overwhelming that Kaneohe Bay alone should be singled out for a unique system of governance. Problems of managing human behavior appear more common to coastal areas in general than limited to particular locales.

Chapter 5

AUTHORITIES

Senate Concurrent Resolution 135, H.D. 1, of 1987 requested the study to explore the prospects of creating an authority for the Kaneohe Bay region. This chapter focuses on that tool of governance most commonly (but not exclusively) known as an authority. We look at how it functions—its potentials and its problems—in other states as well as in Hawaii.

Mainland Experience With Authorities

Use of the term "authority" as a form of governmental structure has meaning distinct from its more common usage of "power to influence or command . . . behavior" attributed to leadership in an organization. Rather, it relates to administering "a revenue-producing public enterprise," according to Webster's Seventh Collegiate Dictionary of 1971. We note, too, that authorities are variously called public corporations, certain kinds of commissions, "banks," "services," or agencies.¹ Their distinction lies in their structure and powers, not in their name.

State and local governments create authorities to build and operate such facilities as bridges, ports, airports, tunnels, energy production and distribution facilities, water works, stadiums, convention centers, even cemeteries. Federal authorities cover an even wider range of functions. Some operate training programs, insurance companies, and provide mortgage financing. One was even established in Alaska to run a local railroad. Probably the most famous authorities

are the Port Authority of New York and New Jersey established in 1921 and the Tennessee Valley Authority in 1933.

A count in 1974 found 230 "public benefit corporations" in New York state; neighboring Pennsylvania had 1872 "municipal corporations." In New York, each such authority required separate legislative enactment whereas Pennsylvania, like more than two-thirds of the states, provided local jurisdictions with blanket-enabling legislation to create public corporations as needed. Annmarie Hauck Walsh cited a figure of "at least six thousand local and regional authorities and one thousand state and interstate authorities . . . operating" in America by the mid-1970s.² By 1983, that estimate had increased to some 10,000.³

Professor Walsh characterizes authorities in this way: "Public corporations are bodies authorized by legislative action to function outside the regular structure of state government in order to finance, construct and usually to operate revenue-producing public enterprises. Expanding from traditional public service toll facilities into increasingly complex lending, investment and enterprise functions, public corporations are consuming larger portions of total public borrowing and having greater impact on regional economies."⁴

Authorities normally differ from regular government in lacking police and taxing powers and in having only specific powers to conduct specified functions as cited in their enabling legislation. They differ from executive branch line departments in having a separate legal identity, in possibly being exempt from administrative procedures, in being allowed to retain their earnings, and in having independent borrowing powers.

Their attraction stems from their managerial and budgetary flexibility, their apparent speed and efficiency in major construction projects, their access to

long-term self-supported financing, and their ability to span several jurisdictions or levels of government. They are often touted as business-like and free of politics.

There are also drawbacks. *First*, even though authorities may borrow in their own name with supposedly no legal obligation to the state for those debts, in reality if a major public authority gets into financial trouble, it is quite difficult for a state not to come to its rescue with public funds. The state's own credit rating would otherwise stand in jeopardy. Yet the general citizenry would, in the meantime, have no voice in the authority's taking on so much debt—not even through their elected representatives. *Second*, important decisions in the narrow field of concern to the authority occur quite divorced from their implications and impacts on other important public areas of concern.

Third, the expected efficiency attributed to authorities can come largely from their by-passing normal financial and political/social processes that could otherwise ensure accountability and responsiveness to the full gamut of community concerns. Ironically, such by-passing can open the door to inefficiency, to control by special interests, and to corruption. It can also lead to "creaming"—dealing with only the most profitable public activities while leaving to regular governmental agencies the burden of handling less popular or non-selfsupporting functions.⁶

According to one study, "The present system of public authorities has been generally successful at producing good management and effective operations (with some glaring exceptions). It has been generally unsuccessful at planning and allocating resources equitably."⁷ Also: "Integrating financial planning is probably both the most important requirement of effective public enterprise and the most difficult to effect. Because major cities and nearly all states lack effective

long-range budgets and financial plans, there are no coherent targets or projections into which public authority financial plans can be integrated."⁸

Although supposedly taking the best of the worlds of business and public service, authorities are, according to Walsh, "corporations without stockholders, political jurisdictions without voters or taxpayers."

Lise Bang-Jensen, in a Rockefeller Institute Special Report Series that notes the hybrid nature of public authorities, poses three questions for governments to ask when contemplating creating an authority: "First, are public authorities necessary or desirable? Second, who should control their purse strings? Third, who should set public policy: the authority boards, the State Legislature, the Governor, or the public?"⁹ Walsh's book suggests that policies pursued by authorities may be more sensitive to banking institutions and bond holders, with their own concerns taking priority, than to the public in general.

She goes on to conclude that "improving management in government is likely to yield more practical results than proliferation of government-sponsored corporations."¹⁰ Not only are authorities not politics-free as claimed; authorities do "not contribute to the flexibility of government over time. On the contrary, the corporations form a rigid structure that becomes riddled with anachronisms."¹¹

Experience With Authorities in Hawaii

Under the Territory, a multiplicity of largely independent commissions, agencies, and authorities had sprung up over the decades. Some 100 separate entities all theoretically reported directly to the governor. Several of these were true public corporations or authorities as defined and examined in this report.

The constitutional convention of 1950, preparatory to statehood, took a serious look at the multiplicity of government units and decided to restrict the number of departments reporting to the governor to no more than 20.¹² Getting below that number involved amalgamating such erstwhile semi-autonomous authorities as the Aeronautics Commission, the Harbor Board, and the highway portion of the Department of Public Works into what became the Department of Transportation. The only state authority to retain most of its previous status was the Hawaii Housing Authority which became a public corporation within the Department of Social Services (later renamed Social Services and Housing and now Human Services).

The only other prominent authorities remaining at statehood were the boards of water supply at county level. And movements have occurred from time to time to transform them into county departments or to incorporate them with the sewers function into a single department of public works. While that change did occur on Maui in the mid-1970s, the largest such county-level authority, the Honolulu Board of Water Supply (BWS), has remained semi-autonomous since its inception in 1929.

Discussion among commissioners reviewing the Honolulu City Charter in 1972 did broach the question of where the water function belonged. They finally recommended transferring sewers from the city to BWS instead of the reverse. The 1982 Honolulu charter review commission did not address this issue.

Gradually since statehood, additional authorities have emerged in Hawaii at state level. First came the stadium authority in 1970 to build and operate a facility for sports events. In 1976, the Legislature created the Hawaii Community Development Authority to undertake major urban redevelopment, starting with the Kaka'ako district of Honolulu but potentially applicable anywhere in the state. Then

1981 saw legislation establishing an authority to deal with one small but historically significant parcel of land on Honolulu's waterfront, the Aloha Tower Authority.

Hawaii Community Development Authority (HCDA)

Act 153 of 1976 created HCDA as a self-governing instrument attached to the Department of Planning and Economic Development for administrative purposes only. Senate Concurrent Resolution No. 135, H.D.1, of 1987 suggested HCDA as a model for our consideration of an authority for Kaneohe Bay. Consequently HCDA, as one of only a few authorities in Hawaii with a sufficient track record to evaluate, receives particular attention here.

In the mid-1970s, the Legislature found "that many urban areas of the State are substantially underdeveloped or blighted, and are or are potentially in need of urban renewal, renovation, or improvement to alleviate such conditions as dilapidation, deterioration, age, and other such factors or conditions which make such areas an economic or social liability." The Legislature expressed concern for "unmet community development needs . . . suitable housing for persons of low income, insufficient commercial and industrial facilities for rent . . . the lack of planning and coordination in such areas . . . and that existing laws and public and private mechanisms have either proven incapable or inadequate to facilitate timely redevelopment and renewal."¹³

Chapter 206E, HRS, provides HCDA with standard powers of an incorporated entity. Section 4 also grants powers to condemn and acquire property and provide advisory service and training. The HCDA is responsible to plan and implement renewal within any district designated. According to Section 5, the Legislature retains the power to designate the boundaries for such a district, the first one being

Kaka'ako. The authority, in turn, is expected to coordinate fully with other state agencies and the affected county.

According to Section 3, HCDA is governed by an eleven-member board, seven of them appointed by the governor and four as ex officio state department heads. Three of those appointed are selected from a list of ten submitted from the county. This board has the power to select its executive director and to set salaries for its employees.

Financing comes from several sources. Section 6 specifies that the authority shall assess all real property for public improvements, either district-wide or where appropriate in relation to the benefit received. The authority may issue and sell bonds to finance such public facilities. Those bonds "shall be secured solely by the real properties benefited or improved." Section 21 also authorizes the use of funds from general obligation bonds by the state.

Chapter 206E also authorizes relocation assistance (Sec. 10.5), buy-back provisions for property resold within ten years (Sec. 14), and a housing loan program (Part III). As initially delineated, the Kaka'ako district was almost totally limited to inland redevelopment. Subsequently, the Legislature amended its boundaries to include an extensive waterfront area. The 1987 Legislature considered, but did not act on, incorporating the separate (now adjacent) Aloha Tower within HCDA rather than have it handled by a separate authority.

In these ways, HCDA has increased its relevance to the situation in Kaneohe Bay which is preponderately a water management and waterfront problem. However, because HCDA's Kaka'ako boundaries have expanded only recently, planning and development for waterfront property are not as advanced as in the area

mauka of Ala Moana Blvd, especially for that area nearest to Punchbowl Street where major public facilities are already well advanced in construction and large-scale private structures are nearing completion.¹⁴

According to statements by spokespersons for both HCDA and the Honolulu Department of Public Works, coordination between the two public agencies has proceeded with reasonable agreement for the most part.¹⁵ Since all public facilities designed and constructed by HCDA must eventually be dedicated to the city, it is imperative that they do coordinate. Disagreement has occurred mainly over such technical questions as the kind of paving materials to use on reconstructed streets: whether it should be concrete with higher initial expense but long-term economies as favored by the city, or be macadam which costs less initially (to HCDA's advantage) but with likely higher maintenance costs (to the city's disadvantage).

It took a decade of planning, designing, and financing; but HCDA unmistakably has improvements under way in its first designated district. Several questions, if not tangible problems, have emerged with relevance to the further use of an authority for accomplishing major changes in the Hawaiian context. These principally concern: (a) the interrelation between what is planned for and done in a contained HCDA district relative to the planning and developmental conditions and needs in the general community, and (b) the political ramifications of relocating long-time residents and businesses.

While the underlying concern for both Kaka'ako and Kaneohe Bay (which prompted legislative interest in creating authorities) lay in realizing their erstwhile neglected potentials, even more marked are their differences. One is a mostly inland urban district with a natural potential for high density development; the other is a body of water surrounded by land with at most a suburban level of development. In short, their characteristics differ markedly.

If the land surrounding Kaneohe Bay contained deteriorated infrastructure and dilapidated housing, then the Legislature could designate a second HCDA district for it. But we could find no one—in city or state government, resident in the Kaneohe region or elsewhere, in the legislative or executive branch—who even tried to make that case. The HCDA, then, is not directly applicable to the Kaneohe Bay situation. Instead, its experience (its successes and difficulties) primarily provides cautionary signals for both legislative and executive branch action for steps taken on the windward side of Oahu or anywhere else an authority is contemplated.

In Summary

The authority form of governmental structure has become widely used in America at federal, state, and local levels, preponderantly for handling "business-like" (revenue producing) activities under public auspices. While the authority form can bring advantages in terms of efficiency and expediency, it can also harbor potential disadvantages in the loss of democratic controls, short-circuited checks and balances, and lessened responsiveness to the full range of public interests.

Hawaii's experience with authorities is limited and differs somewhat from experience elsewhere. Statehood brought an abolition of almost all authorities. Only a few have been created since then, and those have less broad autonomy than frequently enjoyed by authorities on the mainland. At this time, the Hawaii Community Development Authority can serve, at most, in only a limited capacity as a model for dealing with Kaneohe Bay. Their respective needs, conditions, and functions diverge too much for direct comparisons to be made usefully.

Chapter 6

POSSIBLE FUTURE COURSES OF ACTION

In this chapter, we start by highlighting the major points contained in previous chapters. Then we address what would appear to be the more immediate questions legislators face in setting state policy and providing the tools for its implementation relative to coastal management. We then sketch the choices between options and their direct policy implications.

Highlights of Previous Chapters

Chapter 2 reviews a wide diversity of governmental structures and strategies by other jurisdictions in coping with coastal management problems. Most states seem to take seriously their responsibility as custodians of coastal ecosystems and other environmental resources, but their regulation of recreational users of water areas remains rather primitive.

Looking at Hawaii in Chapter 3, we learn that coastal zone management has improved in its coordination among various levels of government. But as elsewhere, management of water users leaves much to be desired. Many expressions of concern for optimally protecting and utilizing coastal resources exist. But the State's degree of commitment and its priorities remain uncertain.

We see some of Kaneohe Bay's rich history and look at its unique contribution to research in Chapter 4. We see, too, both how human activities seriously endangered the bay and then corrected such mismanagement practices. Although crises in the past have been worse than at present, the present problem of

conflicting uses and neglect could spell serious trouble, not only for Kaneohe Bay but for other popular water areas.

Chapter 5 finds that an authority can serve well under certain circumstances but that Kaneohe Bay does not necessarily fit those conditions.

Answering Basic Questions

Four questions, in particular, seem to be appropriate in legislative considerations.

1. Has any other similar jurisdiction found solutions or strategies that Hawaii might adopt? Unfortunately, we could find no readily transferable prototype, only options worth considering. Most states have remained with their ongoing structures and simply adjusted to accommodate increased responsibilities. Only a few (California, Maryland, and Australia) have innovated with regulatory commissions and authorities. All evidenced difficulties with coordination. None has found a suitable way to control recreational users.

2. Is it possible to greatly simplify governmental involvement and regulatory procedures in managing Hawaii's coastal resources? From what we could discover, no drastic shortcuts stand out. Improvements in coordination are, of course, possible as demonstrated by the level of coordination and networking achieved between federal, state, and county agencies in coastal zone management. But the technological complexity inherent in an effective program demands the review and input from too wide a spectrum of concerns and specialists to allow wholesale simplification. Concerted, integrated management, not shortcuts, offers the most likely route to pursue.

3. What does the public want? Although our study was too circumscribed to allow us to make a full, reliable survey of public desires, our interviews with knowledgeable people in leadership positions suggest that a public consensus on both current problems and preferred governmental action is far from as unified as it was at the start of the 1970s over the pollution crisis in Kaneohe Bay and in other popular water areas. Indeed, a consensus today may not yet have formed.

4. How urgent is a legislative decision? For lack of a clear public consensus on issues and objectives, consideration of urgency can readily become obscured. That fact does not in actuality, however, negate real urgency. Since human safety (as well as both economic and environmental ramifications) is central to present needs in coastal water management, postponing decisions could allow dangerous conditions to worsen and thereby bring more problems to the State.

Major Options

Given the situation where neither a clear-cut formula nor a consensus exists to point unmistakably which direction to go, this study explored alternative strategies and corresponding alternative governmental structures. After sorting through many possibilities, we narrowed the field down to three options.

In essence, these options are: (a) stay with the present system of governance and simply endeavor to make it function more effectively and responsively; (b) establish an authority for Kaneohe Bay to simplify regulation and promote certain developments; (c) create a consolidated state department for all coastal and ocean-related governmental functions. Each of these three options corresponds closely with an alternative set of strategies, priorities, and commitments.

Should Hawaii prefer a gradualist approach in dealing with shore-area problems and opportunities, then the first option appears to be the best choice. If the State should seek a concerted priority on enhancing and utilizing the resources of Kaneohe Bay (either for itself or as a prototype for other regions of the state), then the second option, that of creating an authority, holds promise. On the other hand, if the State were to decide to make a major commitment toward promoting Hawaii's role as a maritime state, then establishing a new department for coastal and marine affairs would make an undeniable statement to that effect.

We review these options and their implications for setting policy priorities and making commitments.

Improving the existing system. Improvement in the existing structure and process of regulating coastal area activities has been under way ever since the federal consistency provisions of coastal zone management brought about a cooperative "network" of federal, state, and county agencies.

While these changes offer hopeful signs, questions still remain—particularly those concerning coordination between state agencies. Can that coordination come soon enough and prove sufficiently effective to meet burgeoning needs? Can a gradualist approach optimally plan for and react rapidly enough to meet unforeseen challenges to Hawaii's limited resources? Can both developmental and conservationist goals be met this way? At least two modest changes within the present structure do appear to offer some benefits.

1. *A watchdog commission.* Within the framework of this option, one device might be instituted to enhance the responsiveness of relevant agencies. That device is the creation of a citizens' watchdog commission for Kaneohe Bay which could monitor public programs and provide advice to the governor, legislature, and public

agencies. A successful precedent exists in the Kaneohe Bay Task Force appointed by Governor Burns in the early 1970s. That body advised and assisted pertinent agencies in determining what action was needed and in getting remedial programs financed and sold to the public.

The advantage of such a body is that it can be instituted without the turmoil of a major restructuring of the existing governmental apparatus. It can promote higher priorities for needed projects, serve as a go-between or buffer among different agencies or different levels of government, and can channel citizen anxieties into constructive input. A further advantage is that a similar watchdog commission or task force with recognized status can be established for each region of the state where (and only if) local sentiment favors one.

2. *Boating program.* Another improvement might be made in the existing system with only minimal change. This would transfer the Boating Branch of the Department of Transportation (DOT) to the Department of Land and Natural Resources (DLNR). Several factors point to that possibility.

In passing Act 364 in 1987, the Legislature recognized both overlapping jurisdiction and inadequacies in policing capabilities by DOT and DLNR. It therefore authorized each department's police to enforce the other's set of regulations. However, as we note in Chapter 3, that measure seems not to go far enough to meet enforcement needs, especially on coastal waters where the only ongoing police force is DOT's miniscule harbor patrol. Another consideration: small recreational boats and large commercial ships have little in common other than floating on water. And even then, they are generally kept separated. Their shoreside requirements differ sufficiently to necessitate distinct facilities and different treatment.

On the other hand, recreational boating is likely to relate more to other recreational activities that occur in public parks and recreational waters. For this reason, other states tend to group their small boating programs with park and recreational activities under departments having fairly broad responsibility for natural resource management.

Transferring the Boating Branch from DOT to DLNR would eliminate one major area of jurisdictional overlap between at least two key state agencies for places like Kaneohe Bay. At the same time, it would integrate the police of the two departments into a single force. The DOT would continue to operate the State's commercial harbors, including Kewalo Basin for large commercial tour operations, but it need not be concerned with such marinas as He'eia in Kaneohe Bay that lie in space controlled by DLNR.

This distinction between commercial and private recreational boating parallels the pragmatic delineation made by the Coast Guard. That federal agency exercises direct inspection of commercial tour ships but allows an appropriate state agency to oversee compliance with safety regulations by owners and operators of small recreational craft.

Establishing a Kaneohe Bay Authority. Authorities are most often created to carry out some developmental program or to reach some tangible objective other than exercising ongoing regulation of private sector activities. That fact does not necessarily preclude setting up an authority primarily for the purpose of achieving more effective regulation of water area users, perhaps akin to zoning of land uses or policing highway users but on water rather than land. However, an authority whose primary purpose centers on regulation would, in effect, constitute either another layer of bureaucracy or a consolidated replacement of several existing regulatory

entities which would continue to function everywhere else. It could increase the complexities of coordination.

Authorities, whether to construct and operate a project or to conduct a program, can attain public acceptance where multiple jurisdictions converge and cannot otherwise coordinate satisfactorily among themselves. In the case of Kaneohe Bay, shoreline management is already an ongoing cooperative effort between federal, state, and county governments. The water area is governed by two state agencies: the DOT for activities on and in the water, and DLNR for permanent development (such as piers) and leasing submerged land. Whether or not there is a state authority, the U.S. Coast Guard and U.S. Army Corps of Engineers will continue to exercise their federally prescribed regulatory responsibilities.

What seems lacking is a shared sense of priority by state agencies for Kaneohe Bay's potentials, both as to resources and as to conflicts. Despite official pronouncements about the State's concern for such coastal resources, the degree of tangible commitment in that direction falls short of that for land-based programs.

For example, concerted interaction between state agencies and local communities appears minimal in this field. Public access to the bay has improved little in decades, except for the purchase of Kualoa by the City and County of Honolulu for a park at the northernmost end of the bay. The situation is similar for Kaneohe Bay's often touted educational potential. Substantial progress remains to be achieved. Preliminary planning for greatly expanding public marina capacity has so far neither satisfied boaters nor pacified local residents who fear more noise pollution and congestion on "their" bay. Despite a burgeoning of water activities, it remains seldom policed.

With an authority of its own, Kaneohe Bay would presumably receive priority attention from at least one governmental entity. Whether or not such an authority could stimulate similar priorities and achieve effective coordination with and among other public entities remains unpredictable. Then, too, an authority would probably encounter many of the same fiscal and statutory constraints which affect existing instruments of government.

That probable condition derives from the fact that there appears little likelihood for a Kaneohe Bay Authority to develop activity centers capable of making the authority financially self-supporting in the expected mode of an authority. As a result, an authority there would be as dependent on taxpayer support statewide and legislative appropriations as are existing agencies. It would have to operate like any other arm of government rather than in the "business-like" manner that provides a principal argument for creating authorities.

A new consolidated department. Although Hawaii is an island state surrounded by vast stretches of ocean, its state governmental structure reflects a land orientation similar to inland states on the mainland. Like such states, it has major departments focused on such important land concerns as agriculture, natural resources, and transportation. Almost all units dealing with coastal and marine affairs in Hawaii rank no higher than branch level, two rungs below departmental level. Moreover, they are scattered among several different departments and are frequently in divisions concerned with land-related programs.

At one time there was a Marine Affairs Coordinator in the Governor's Office, but it was transferred to the Department of Planning and Economic Development as the Ocean Resources Branch where it now operates as just one of several branches

promoting local industry. A separate branch in a different division of that department (now DBED) oversees the State's coastal zone management program.

Primarily concerned with building and operating port facilities, DOT's Harbors Division has traditionally and preponderantly focused on commercial harbors. Its Boating Branch, responsible for various small craft facilities and the State's small boat program, has always constituted a minor function within that department.

The DLNR has a wide diversity of functions and responsibilities. These are evident in its separate divisions for: aquatic resources; conservation and resources enforcement; forestry and wildlife; land management; state parks, along with outdoor recreation and historic sites; and water and land development. Scattered through these divisions are various branches that deal with both land and ocean related matters, including fish (both freshwater and saltwater fish), leasing of public lands (including submerged), and parks located both inland and adjacent to the ocean.

The Department of Health is another large department with a myriad of responsibilities, a number of which relate to shorelines and coastal waters. In carrying out its various health and environmental protection responsibilities, this department makes no organizational delineation between what are land, as against what are ocean, related concerns.

In addition to the foregoing, various research and educational activities are carried out by the University of Hawaii and, to a much lesser extent, by the Department of Education. Just recently, the university has given serious attention to how it might better bring together and coordinate its widespread ocean-related activities. But it faces the absence of any consolidated, high-level, executive entity to work with, a function apparently lying well beyond the purview and leverage of the several recently established coordinating advisory councils.

Assuming that the ocean and coastal areas should be a subject of prime importance to Hawaii and so should receive careful attention by state government, the question arises as to whether a high priority can be accorded to ocean matters and how concerted action can be taken when responsibilities in this field are so widely dispersed. This, in turn, leads to the question of whether there should be a single department concerned primarily with marine and coastal affairs: a governmental instrument to interrelate potentials and problems with programs and costs, an agency to effectively represent marine and coastal affairs to a degree impossible when dependent on land-related divisions in land-oriented departments.

Trying to answer those questions raises a host of difficulties regarding how to separate functions and reorganize divisions and branches between what is land related as against what is coastal when in so many instances linkages are quite important. It was largely due to factors such as these that a 1982 study by the Legislative Reference Bureau, entitled *Marine Resources and Aquaculture Programs in the State of Hawaii*, recommended against creating a new department specifically for marine affairs, having concluded that the idea at that time was still "premature."

With interest in oceanic resources continuing to grow, the Legislature has again returned to these questions. At its 1987 session, it requested DBED's Ocean Resources Branch to take another look at this matter and to report back to the Legislature in 1988. In effect, the Legislature has asked whether the time has now come for a consolidated department for marine and coastal affairs. How it will be answered remains a critical issue of policy and priority.

Choosing Among Options: Policy Considerations

Which of the foregoing options would best serve the needs and aspirations of Hawaii depends in a very basic sense upon what general policy position—and hence what priority and commitment level—the State wants to pursue with regard to coastal and marine resources. Given the inevitability of budgetary limits, governance frequently comes down to difficult choices between desirable goals: a weighing of tradeoffs.

First option: improve existing system. If Hawaii prefers a gradualist approach or is not yet certain what it wants to have happen to Kaneohe Bay (and by extension, to other important coastal regions), then the first option would seem preferable. Not only would this provide time for testing more options, it would avoid making commitments and carrying out bothersome governmental restructuring which might conceivably prove flawed and difficult to reverse.

Moreover, this option does allow significant improvements to be made in the management system without drastic surgery or long-term commitments. Giving official status to citizen advisory commissions for places like Kaneohe Bay might be enough to encourage the desired level of cooperation and coordination among agencies and to achieve priorities commensurate with the potential resources and problems. Similarly, transferring the boating program from DOT to DLNR might eliminate one of the more serious areas of jurisdictional overlap and enable more effective utilization of available agency resources.

One view might argue that interagency cooperation and coordination have already improved for shoreline and coastal matters and, at least insofar as Kaneohe Bay is concerned, that no current crisis demands urgent action such as occurred back in the early 1970s. Indeed, the successful alleviation of that earlier crisis

demonstrates that the existing system can and does work. Accordingly, no major overhaul is needed at this time, only the two readily achievable changes suggested here.

The counter argument is that a gradualist, dispersed approach tends to mask problems and allow them to reach a crisis stage before being recognized and dealt with effectively. Then successful solutions can become more difficult and costly to attain. In some instances, emerging problems can become irreversible unless dealt with expeditiously and concertedly early enough. As a consequence, without early and concerted action, the resource potential of Kaneohe Bay and other popular water areas around the state may never be fully and properly realized, much to everyone's disadvantage.

Second option: create an authority. If, however, state leaders are anxious and ready to proceed expeditiously toward developing Kaneohe Bay (either for its own sake or as a prototype for similar developments around the state), the second option—that of establishing an authority—has some merit as well as several problems. The effectiveness of such an authority would likely depend to a considerable extent on the mission and priority assigned it and on the powers granted it.

An authority expected simply to regulate would probably just duplicate regulatory functions already conducted by federal, state, and county agencies. To do more than that would require financial support which would likely have to come from appropriations otherwise accorded to established state agencies. Not certain is whether the public (locally and statewide) would or would not derive better services from funds assigned to an authority. This issue would take on increasing significance if other regions of the state demanded similar local authorities for their

coastal areas. The governance structure could become fragmented if authorities proliferate.

On the other hand, a developmentally oriented authority (modeled after the Hawaii Community Development Authority) might have sufficient power to get marinas built, research sanctuaries established, beach parks acquired, and educational programs inaugurated in an expeditious manner. Even so, the authority would still require funding from the State's general revenues or bond funds because it would, unlike most authorities, probably have little revenue of its own to draw on.

That situation would raise other questions: Would this authority really have more freedom to act than other agencies equally dependent on legislative appropriations? Whose priorities should prevail regarding the types and extent of development: those of the State or those of the affected local community? Further, would taxpayers elsewhere in the State willingly accept such a special status for Kaneohe Bay when it results in channeling of funds to this one area alone?

In short, an authority is not an automatic solution to difficulties in governance and public programming. Under some circumstances it may be a quite useful tool, but only if it is carefully conceived, properly endowed, given a clear and attainable objective, and is accepted by the public at large. Kaneohe Bay would appear a questionable candidate.

Third option: create a department of coastal affairs. A central argument for the third option is that it could offer the tool for Hawaii to enhance and fully utilize its ocean resources, not only in Kaneohe Bay but throughout the state and over that vast Exclusive Economic Zone surrounding Hawaii. By creating a department concerned specifically with coastal and marine matters, the State can focus attention on, and more effectively assist with, the economic development of its

ocean resources. It could concertedly work for optimal resource management in marine and coastal concerns.

Instead of having coastal and ocean-related regulatory and promotional programs scattered among numerous land-oriented entities, they would be pulled together from their present host departments so that they can be coordinated more effectively and so that their various areas of expertise can fit together in a more integrated, mutually supportive manner for better environmental protection and resource enhancement. In addition, creating a new department would clearly demonstrate to the world (especially to federal agencies and potential investors) that Hawaii is committed to the optimal development and utilization of its ocean resources and that it really does place a high priority on its unique ocean relationship.

The counter argument would contend that both what should be done and what can be done with Hawaii's ocean resources can come about through the existing structure and system. Hawaii need not undergo the trauma of a major administrative reorganization in order to carry out effectively an expanded role as a maritime state; a clear statement of policy is enough. There is, moreover, always a danger that administrative formalities and structural adjustments will substitute for substantive action or even interfere with what action is really needed. In that case, creating a new department could cause so much distraction and disruption as to impair, rather than enhance, Hawaii's ambitions regarding its ocean resources.

Support for different options and policies. In the course of our study, support for all three of these options was heard. Endorsement of an authority or a new department came most often from certain legislators, university professors, and a few departmental employees who have direct involvement in ocean-related program

operations. Opposition to these two options and support for continuing to work through the existing system were set forth by other legislators and by state and county department heads. Various community leaders whom we contacted either took no stand or remained ambivalent.

In Summary

The entire issue comes down to what priorities the Legislature wants the State of Hawaii to pursue and promote for shore and coastal areas. Each of the options would realize more advantages than disadvantages for a certain priority direction but generate more difficulties than benefits for some other priority direction. Moreover, these options (in the order listed) grow progressively more difficult to carry out as they open more possibilities. Each one will, quite possibly, leave some segment (perhaps a significant segment) of the public dissatisfied, either because too much has been done or not enough, depending on each person's limited set of interests.

A fundamental—and difficult—decision on commitments and priorities, then, is needed. And it should provide the basis for any decision: (a) to create or not create an authority, (b) to establish or not establish a new department, and even (c) whether or not to continue with a modestly modified present system. Too much is at stake to let a determination of organization precede a clarification and determination of basic strategies.

Which route the State chooses will, inevitably, determine public priorities in dealing with coastal resources, problems, and programs. Thus far, attention has customarily centered on land-based issues to the consequent low priority for coastal and marine affairs. And the present structure of government accords no recognized

voice to champion priorities for a major commitment to coastal and marine planning and implementation.

All manner of public statements may exist on the importance of Hawaii's coastal areas. But their true significance as policy is only as real as the State's commitment in organizational structure, in budgetary priorities, and in concerted efforts to translate those policy statements into tangible results. Once the State determines an optimal direction to pursue, selecting the best instrument of implementation can more readily follow.

NOTES

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6. *Ibid*, p. 6-7.
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