

State of Hawai'i Office of Planning Hawai'i Coastal Zone Management Program

Sustainable Management of the Islands

December 2011



**State of Hawai'i
Office of Planning
Hawai'i Coastal Zone Management Program**

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On the cover: Photos are courtesy of the Hawai'i CZM Program,
Wai'anae Ecological Characterization project.

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Aloha,

The national Coastal Zone Management Act (CZMA) of 1972 had its roots in the 1969 “Report of the Commission on Marine Science, Engineering and Resources.” This commission, chaired by Julius A. Stratton, was popularly known as the Stratton Commission. The report portrayed coastal areas – along oceans, lakes, and major rivers – as the backbone of the nation’s economy, but the report also concluded they were not being properly managed. Throughout the nation, as populations were increasingly attracted to coastal areas, conflicts for resources and degradation resulting from multiple, uncoordinated management regimes heightened.

The U.S. Congress concurred with the report’s call for a national policy and management system, through a federal-state partnership dedicated to assuring well-coordinated policies for *using* the marine environment without *abusing* it.

Hawai‘i was one of the first states to participate in the national CZM program. The Hawai‘i Program weaves together all the national, state, county, and private organizations whose actions affect the Islands’ coastal resources into a single network. The overarching goal is to maintain the needed communication and coordination so that these different stakeholders all act within the same policy framework. This is particularly important in a state where the bulk of economic, residential, and recreational development occurs close to the water... and where no point on land is greater than 29 miles from the ocean. For that reason, the entire state is designated the “coastal zone.”

This document is intended to describe for the general public the Hawai‘i CZM Program as it exists in 2011– its specific purposes, the technical framework, and the laws, rules, and regulations that comprise it. The document explains what the CZM Program does and does not do. However, this is not the authoritative “program document” which was approved by the National Oceanic and Atmospheric Administration (NOAA) and published in 1990. This document has been reviewed for accuracy by NOAA but not approved as the formal state of the federally approved Hawai‘i CZM Program. Unlike the official “Program Document” this document does not contain the authoritative listing of Hawai‘i’s enforceable policies to be used for federal consistency reviews under the Coastal Zone Management Act. For authoritative information on Hawai‘i’s “enforceable policies,” please contact the Hawai‘i CZM Program office.

Our objective is to ensure that, in the next 30 years as in the past 30 years, the Hawai‘i CZM Program remains committed to the high standards that Hawai‘i residents demand. With great honor and pleasure, we dedicate this document to the people of Hawai‘i, whose zeal and commitment to coastal resource management have been the inspiration of this program.

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ACRONYMS

APC	Area of Particular Concern
CDD	Community Development District
CFR	Code of Federal Regulations
COEMAP	Coastal Erosion Management Plan
CZM	Coastal Zone Management
CZMA	Coastal Zone Management Act
DBEDT	Department of Business, Economic Development, and Tourism
DLNR	Department of Land and Natural Resources
DOD	Department of Defense
DOFAW	Division of Forestry and Wildlife
DOH	Department of Health
DOT	Department of Transportation
DPED	Department of Planning and Economic Development
EA	Environmental Assessment
EIS	Environmental Impact Statement
ERWS	Estuarine Reserve and Wildlife Sanctuaries
FEMA	Federal Emergency Management Agency
GIS	Geographic Information System
HCDA	Hawai'i Community Development Authority
HOCC	Hawai'i Ocean and Coastal Council
HRS	Hawai'i Revised Statutes
HSEAC	Hawai'i State Earthquake Advisory Committee
LUC	Land Use Commission
MACZAC	Marine and Coastal Zone Advocacy Council
MLCD	Marine Life Conservation District
NARS	Natural Area Reserve System
NERRS	National Estuarine Research Reserves System
NFIP	National Flood Insurance Program
NOAA	National Oceanic and Atmospheric Administration
OCRM	Office of Ocean and Coastal Resource Management
OEQC	Office of Environmental Quality Control
OMP	Ocean Management Plan
OP	Office of Planning
ORMP	Ocean Resources Management Plan
PIFSC	Pacific Islands Fisheries Science Center
RPC	Routine Program Change
SCF	Statewide Citizens Forum
SEAOH	Structural Engineers Association of Hawai'i
SLH	Session Laws of Hawai'i
SMA	Special Management Area
SPA	Shoreline Protection Act
SSA	Shoreline Setbacks Area
TTRC	Tsunami Technical Review Committee

UNESCO	United Nations Educational, Scientific, and Cultural Organization
USGS	United States Geological Service
USC	United States Code
WEC	Wai‘anae Ecological Characterization

NOTES ON STYLE AND CAPITALIZATION

- (1) In this report, the word “state” is capitalized (as “State”) when it is a proper noun which refers to the Hawai‘i State Government. It is not capitalized when it means any state in the country or when it is used as a synonym for “this place.” Thus, “State law” means “State of Hawai‘i” law, while “state laws” refer to generic legislation at the state level throughout the country. Similarly, the phrase “State agencies” means “agencies of the State of Hawai‘i Government,” while “state agencies” would refer to agencies of any state. If something happens “throughout the State,” it means “throughout the State Government.” If it happens “throughout the state,” it happens throughout the islands of Hawai‘i.
- (2) In the same fashion, the word “program” is capitalized (as “Program”) when it is a proper noun which refers to the Hawai‘i CZM Program.
- (3) However, for both “program” and “state,” these rules are not applied when quoting a law or other source which does not use the same rules for capitalization.
- (4) We have attempted to use correct Hawaiian spelling for words and place names, including the ‘okina and macron – e.g. the island of Lāna‘i has a macron over the “a” and an ‘okina before the “i.” However, when a Hawaiian name is changed to reflect an English usage that does not exist in the Hawaiian language, the ‘okina and macron is dropped. We write “Hawaiian” rather than “Hawai‘ian.”

EXECUTIVE SUMMARY

Stretching 1,700 miles across the Pacific Ocean, the Hawaiian archipelago consists of 132 islands and over a thousand miles of coastline. The coast is a source of economic growth, recreational and leisure activities, and cultural and spiritual renewal. Most of the economic activity in the State occurs along the coasts of six major islands, and almost half of the peak weekend recreational activity occurs at offshore or shoreline areas. From wildlife habitats to harbors, fish ponds to five-star resorts, these coastal resources are integral parts of the lives of the people of Hawai'i.

Hawai'i has long recognized the importance of coastal zone management, enacting the nation's first statewide land use law in 1961. Among the four land use districts created by this law, the conservation district includes lands necessary for protecting watersheds and water sources; preserving scenic and historic areas; providing beach reserves; and conserving threatened or endangered species. In 1970, the Shoreline Setback law provided the framework upon which Hawai'i could respond to the 1972 federal Coastal Zone Management Act. After extensive public participation, the state CZM law was passed in 1977, and Hawai'i's CZM Program received federal approval in 1978.

Hawai'i's CZM law establishes ten objectives for coastal zone management:

- **Managing Development** – Balancing economic and environmental concerns through a good system of technical review and public participation.
- **Economic Uses** – Choosing appropriate places for needed facilities and development.
- **Public Participation** – Promoting involvement and education about coastal issues.
- **Coastal Hazards** – Minimizing threats from tsunami, storm waves, pollution, and other dangers to human health.
- **Beach Protection** – Assuring that development does not erode beaches or interfere with public access.
- **Recreational Resources** – Providing coastal recreational activities for the public.
- **Historic Resources** – Preserving and sometimes restoring significant sites.
- **Scenic and Open Space Resources** – Preserving and sometimes improving treasured view-planes and open spaces.
- **Coastal Ecosystems** – Protecting reefs and other coastal habitats.
- **Marine Resources** – Sustaining marine and coastal resources through good decisions about development, use, or protection.

Together, these objectives comprise a vision of careful *balance* and *management* of coastal resources.

Given that the entire state is included in the coastal zone, the Program faces many challenges: ever-increasing demands for development, shoreline erosion, environmental and habitat vulnerability, and ensuring public access. Hawai'i's CZM

law addresses these challenges by establishing a network of agencies and authorities involved in coastal resource management with the Hawai'i CZM Program serving as the State's coastal resource management policy umbrella. The Program balances these demands with its responsibilities to preserve and protect the coastal zone through its partnerships with over 30 federal, state, and county agencies, as well as private, non-profit organizations, and through public outreach and education.

The complex character of Hawai'i's coastal zone – as an area where people live and work and play – is more efficiently managed through an ecosystems approach which includes interrelated land and water zones. It is a management system which must address often competing demands which have only increased in an era of tremendous growth in both population and visitor counts. Through a coastal management system which takes into account land and water uses together, and which realizes that activities in upland (*mauka*) areas have an effect on *makai* areas, sustainable balance in the coastal zone becomes achievable.

Among the resource management tools available to it, the Program works with its partner agencies through the Special Management Area permit process, setting Shoreline Setback Areas, reviewing the siting of energy facilities, and managing the federal consistency process. "Areas of Particular Concern," including the Natural Area Reserves Systems, Marine Line Conservation Districts, Estuarine and Wildlife Sanctuaries, and Community Development Districts, focus on ecosystem protection in the coastal zone. Hanauma Bay Marine Life Conservation District on O'ahu, Molokai's Kalaupapa Lighthouse, and the Hono O Nāpali Natural Area Reserves System on Kaua'i are just a few examples of Hawai'i's commitment to preserve its coastal habitats and sites of cultural and historical significance.

These programs alone cannot ensure the health of Hawai'i's coastal resources. Information, education, and outreach campaign efforts of the CZM Program have been successful in changing the way the people of Hawai'i think about and appreciate the importance of the coastal zone. These efforts have focused on: public stewardship and attitudes toward the coastal zone; public access; hazard mitigation; and citizen participation, outreach, and education.

To provide strategic guidance for the complex challenges for Hawai'i's coastal zone – now and in the future – the State's Ocean Resources Management Plan (2006) charts a new direction by focusing on integrated and area-based approaches to natural and cultural resources management, greater collaboration among agencies, and increasing community involvement and stewardship. The ORMP establishes management priorities for the next five years including improving coastal water quality by reducing land-based sources of pollution, enhancing public access, and promoting responsible ocean recreation and tourism. Working towards these goals, the Hawai'i CZM Program looks forward to improving and sustaining the ecological, cultural, economic, and social benefits of Hawai'i's coastal resources.

CHAPTER I: BACKGROUND

CHAPTER SUMMARY

As an island state with limited land resources, the majority of economic and recreational activities in Hawai'i occurs along its coasts and shoreline. Hawai'i's coastal areas are the center of the recreational, cultural, commercial, residential development and subsistence activities of the State.

Hawai'i residents and visitors make extensive use of its coastal resources, especially its beaches, reefs and surfing sites. Data from the Hawai'i CZM Program show that almost half of the peak weekend recreational activity occurs at off-shore or shoreline areas. In addition to their scenic beauty, these coastal resources – from wildlife habitats to harbors, fish ponds to five-star resorts – are integral parts of the lives of the people of Hawai'i.

Given the growing demand for resources and economic opportunities along its coasts and shoreline, it is no surprise that the State of Hawai'i has been at the forefront of balancing economic and development activities with the creation, protection, restoration, and enhancement of its coastal ecosystems. Long before Congress passed the national CZM Act (CZMA) in 1972, Hawai'i led the nation in the sustainable management of its coasts and shoreline. Hawai'i is acknowledged nationally as a pioneer and leader in land use and state planning. In 1961, Hawai'i enacted the nation's first land use law, and in 1978 the first state plan law. Even before then, concerned about the development of Hawai'i after World War II, the Territorial Legislature mandated in 1945 the preparation of a master plan for the physical development of the islands. The plan addressed land use, recreation, parks, water supply, flood control, forest reserves, and other coastal zone management related interests which impact on the nearshore areas and ocean.

The CZMA was established to “[p]reserve, protect, develop, and where possible, to restore or enhance the resources of the Nation's coastal zone for the present and succeeding generations.” As a voluntary program, it provided states with the basic principles for coastal zone management as well as the flexibility to respond to their own values and needs. After unprecedented public input, the Hawai'i CZM Law (Chapter 205A, HRS) was passed in 1977. The following year, Hawai'i's CZM Program received federal approval.

The story of the birth of the Hawai'i CZM Program and the State's response to the national CZMA demonstrate the State's commitment to ensuring that its coastal areas remain a valued and treasured part of Hawai'i.

The Hawai'i CZM Program is a recognized leader in perpetuating the quality of life in Hawai'i. The perpetuation of the island's historical and cultural heritage, its recreational

resources, and the vitality of the local economy all depend on a vibrant coastal zone area.

BACKGROUND

Hawai'i's island chain is part of a submerged volcanic mountain range spanning 1,700 miles across the north Pacific Ocean. The eight major Hawaiian islands – Ni'ihau, Kaua'i, O'ahu, Moloka'i, Lāna'i, Kaho'olawe, Maui, and Hawai'i— make up 99% of the state's land area and all development activities are concentrated here. Northwest of Kaua'i, a string of small islands, atolls, shoals, and banks make up the newly-established Papahānaumokuākea Marine National Monument.

Hawai'i is also one of the few states where no point in the entire state is more than 29 miles from the shore (State of Hawai'i, 1990). As a result of this land-sea linkage, the Hawai'i CZM area encompasses all lands (except lands under federal jurisdiction) in the state. This presents the opportunity to conduct a comprehensive resource management plan which reflects a view of the ecosystem as an interrelated whole, where the impact of inland activities upon the coast must be taken into account.

Historically, coastal resources have been, and continue to be, a source of food, recreation, and livelihood for the people of Hawai'i and its visitors. Data from the Hawai'i CZM Program show that almost half of the peak weekend recreational activity occurs at off-shore or shoreline areas. In addition to their scenic beauty, these coastal resources—from wildlife habitats to harbors, fish ponds to five-star resorts—are integral parts of the lives of the people of Hawai'i.

The health of Hawai'i's economy is equally dependent on healthy coastal and ocean resources. The visitor industry, a growing aquaculture sector, and potential alternative energy sources, to name just a few, all have a stake in making sure that these resources are managed sustainably.

Residents and visitors are not the only ones who live and play in ocean and coastal environments. Hawai'i's endangered birds depend upon habitats and plants along the coastline. Four of the seven existing species of sea turtles can be found in the waters of Hawai'i (Earth Trust, 2007). Green sea turtles, which are on the International Union for Conservation of Nature's red list for threatened species, need clean beaches during their nesting season. Healthy coral reefs provide a necessary source of food for endangered Hawaiian monk seals.

As long-time advocates of environmental stewardship – particularly, coastal area stewardship, Hawai'i's residents recognize the importance of a well-managed coastal area to the economic viability of its industries and the safety of its residents. Still, the State faces many challenges due to its growing population and finite land and freshwater resources.

Often competing demands on the use of current land, coastal and ocean resources pose significant challenges to maintaining a healthy ocean environment. Declines in the sugar and pineapple industries left large agricultural districts open to development, which has contributed to increased urban sprawl. A growing population and visitor industry put pressure on the limited resources of an island state. While the responsibility for these resources are shared across federal, state, and county agencies, Hawai'i's CZM Program provides guidance as the State's coastal land and water uses resource management policy umbrella.

Understanding how the CZM Program began - how it developed into a program with one of the most comprehensive sets of CZM objectives and policies to receive federal approval, where the coastal zone is, and who the stakeholders are – provides the context for understanding how the CZM Program administers the State's coastal program and implements its objectives.

A LEADER IN COASTAL ZONE MANAGEMENT

While the establishment of the Hawai'i CZM Program began in 1974, earlier planning and legislative efforts had placed Hawai'i at the forefront of coastal zone management. In 1961, just two years after statehood, the State Legislature passed the nation's first statewide land use system, the State Land Use Law (Chapter 205, HRS).

The passage of the Land Use Law and its role in managing the state's land and coastal resources led to the publication of the 1965 report, *Hawai'i's Shoreline*. The report provided the technical basis for legislative action establishing boundary and resource definitions for the Hawai'i CZM effort. In 1969, the Legislature commissioned an innovative study, *Hawai'i and the Sea*, which recommended programs and actions to enhance shoreline use.

Because of key findings in the two studies, the former Hawai'i State Department of Planning and Economic Development (DPED) held statewide community meetings to generate public feedback on exactly what the coastal problems really were, and how they could be solved. The previous studies and community input together resulted in the enactment of the State Shoreline Setback Law (Section 205-31, HRS) in 1970, which prohibited the development of any structure within 40 feet of the point of high tide.

The Shoreline Setback Law provided the structure for the comprehensive development of a coastal zone policy in Hawai'i. It served as a framework upon which the State of Hawai'i based its response to the CZMA and paved the way for Hawai'i's participation in the national CZM program.

THE NATIONAL COASTAL ZONE MANAGEMENT ACT

The United States has more than 95,000 miles of coastline encompassing 35 coastal states and territories. Over half of the nation's population resides within the coastal zone, and the population shift to the coast has accelerated. Coastal zone areas in the U.S. and its resources have played a key role in the nation's commerce, navigation, national security, and power generation.

"The key to more effective protection and use of the land and water resources of the coastal zone is to encourage the states to exercise their full authority over the lands and waters in the coastal zone (16 USC 1451, 2005)."

Recognizing the importance that coastal zone areas play in national development, Congress expressed a ***"national interest in the effective management, beneficial use, protection, and development of the coastal zone"*** (16 USC 1451, 2005). The increasing and competing demands for natural, commercial, recreational, ecological, industrial, and aesthetic resources in the coastal zone, which stress ecologically fragile coastal areas, led the 1972 Congress to formulate the Coastal Zone Management Act (CZMA). The CZMA provides guidance to coastal states and territories, federal agencies, industries, and the public to ***"balance the protection of coastal resources with coastal development."***

The CZMA encourages states to be proactive in managing the nation's coastal

National CZM Vision and Mission:

VISION

The nation's coasts and oceans, including the Great Lakes and island territories, are healthy and thriving for this and future generations.

MISSION

To ensure the conservation and responsible use of our nation's coastal and ocean resources.

resources for the benefit of the state as well as the whole country. The Act provides incentives to coastal states to coordinate coastal zone management programs and to help balance development with coastal protection. Congress designed the CZMA as a flexible, voluntary national program in recognition of the different values and needs among coastal states. For example, while Hawai'i and Florida have designated their entire states as the coastal zone, some states, like Mississippi, have designated only a part of their coastline as the coastal zone area. The CZMA allows states to develop their own mechanisms to manage their coastal resources in accordance with the broad national CZMA requirements.

States exercise discretion in establishing use policies in coastal lands and hold claim to the waters and submerged lands in the territorial sea.

As previously noted, the CZMA is a voluntary program. Congress recognized that states had different values and needs – thus, a flexible national program was established. It identified the basic components a program must contain, but left the substance to the states. Although, the Congress identified the following six-point policy to address the changes taking place in many of the nation's coastal areas, it determined that the states rather than the federal government were in the best position to manage the zone connecting land and sea.

- “Preserve, protect, develop, and where possible, to restore or enhance the resources of the Nation's coastal zone for the present and succeeding generations;
- “Encourage and assist state and local governments in the effective development and implementation of management programs, plans and strategies to achieve wise use of the land and water resources in the coastal zone;
- “Prepare special area management plans;
- “Participate and cooperate with public, state and local governments as well as Federal agencies in carrying out the provisions of the CZMA;
- “Coordinate and cooperate with and among appropriate Federal, State, local agencies, other countries and international organizations in the collection, analysis, synthesis and dissemination of coastal management information, research results and technical assistance; and
- “Respond to changing circumstances affecting the coastal environment and coastal resource management.”

The national coastal zone management program is administered by the National Oceanic and Atmospheric Administration's Office of Ocean and Coastal Resource Management (OCRM). OCRM is responsible for providing leadership in advancing national coastal management objectives and maintaining and strengthening state and territorial coastal management capabilities. It supports states through financial assistance, mediation, technical and legal services and information, and by participation in state, regional, and local forums. More information on CZMA cooperative agreements and grants can be found in **Appendix I**.

HAWAI'I'S RESPONSE

The State of Hawai'i welcomed the enactment of the CZMA. It recognized that voluntary participation in the national coastal zone management program would help strengthen its efforts in managing Hawai'i's coastal resources.

Building on the Hawai'i Shoreline Setback Law of 1970, the Hawai'i Legislature passed Act 164, Session Laws of Hawai'i (SLH) in 1973. The Act mandated the preparation of

a statewide CZM Program in Hawai'i that conformed to the national CZMA. The proposal gave the State the opportunity to share with the rest of the nation its years of experience in managing Hawai'i's coastline even before the enactment of the CZMA.

In 1974, Hawai'i received its first planning grant which allowed the small, local CZM staff to start designing and implementing one of the most distinctive CZM programs in the country. Public participation in developing the Program was the most extensive in the nation at that time involving citizens across the state, county and State directors, members of the Legislature, as well as federal input.

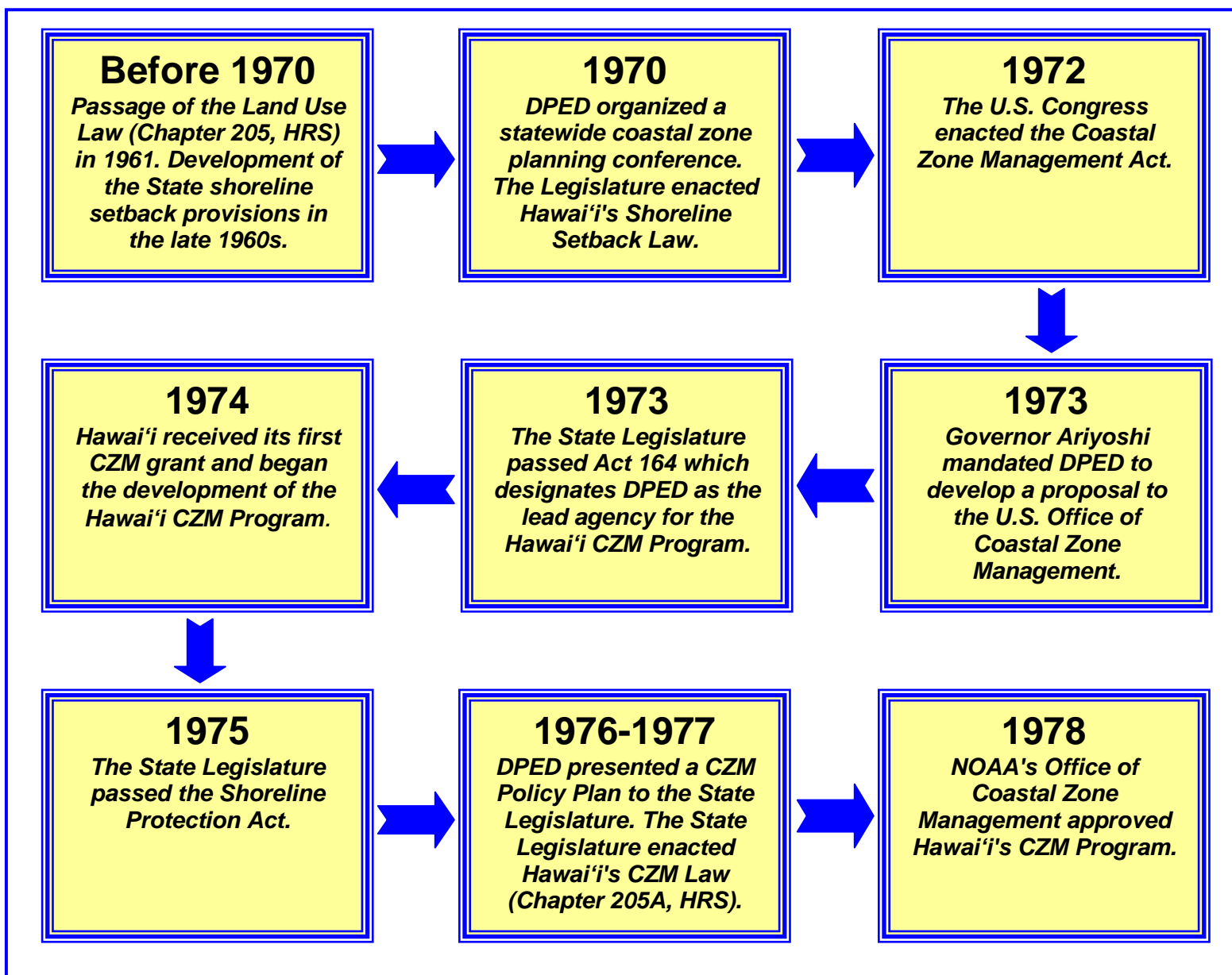
In 1975, the Shoreline Protection Act (SPA) was passed by the State Legislature. A coalition of environmentalists and community leaders lobbied for its passage as an interim program until a comprehensive statewide CZM was developed. The Act instituted checks and balances on development in the nearshore coastal zone, including more public involvement, and local county-level control.

Also in 1975, Governor Ariyoshi formed the Statewide Citizens Forum (SCF), a group of individuals was chosen from the environmental, development, tourism, and general business sectors. The Forum was established to provide a statewide perspective in developing the CZM Program. The SCF assisted the Department of Economic Development (DPED) in formulating the State CZM Plan. In addition to the state-level group, regional citizen committees on each island were established to provide comments on the State CZM plan. The chair of each regional committee also sat on the SCF. A Policy Advisory Committee comprising State and county directors having responsibilities related to CZM and two members of the Legislature provided the statewide policy perspective, and a Federal Advisory Contact Group provided federal input. In 1976, DPED presented a CZM plan to the State Legislature, based on the cumulative input and comments of the various community and other groups.

The CZM plan led to enactment of the 1977 Hawai'i CZM Law (Chapter 205A, HRS). At the insistence of the county governments, the Legislature incorporated provisions of the 1975 SPA. It also included policies and objectives formulated by the SCF and county citizen committees for all State and county agencies to comply with.

The Hawai'i CZM Law originally designated DPED as the **lead agency** responsible for the implementation of the Hawai'i CZM Program. Through its leadership, DPED actively participated in the implementation of the CZMA at both state and national levels. Four years after the initial grant and after a thorough evaluation of its role in the nation's coastal zone management, the NOAA Office of Coastal Zone Management (now known as NOAA's Office of Coastal Resource Management) approved the State of Hawai'i's Coastal Management Program. Hawai'i became one of the first 12 coastal states, commonwealths or territories with a federally- approved and recognized CZM Program.

Figure 1. Historical Timeline of Hawai'i's Response to the Coastal Zone Management Act of 1972.



(Today, there are 34 throughout the country.) In 1988, CZM and the planning functions were organized in the Office of State Planning in the Governor's Office. In 1996, the office was renamed the Office of Planning and assigned to the Department of Business, Economic Development, and Tourism, formerly the DPED, for administrative purposes.

Since its approval, Hawai'i's CZM Program has demonstrated its leadership in coastal zone management through its network of State and county agencies and authorities. Citizen participation continues to be a hallmark of the Program and a foundation for achieving its objectives.

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CHAPTER II: THE HAWAI'I CZM PROGRAM

CHAPTER SUMMARY

This chapter presents the legal basis and overall structure of the Hawai'i CZM Program, in five sections:

THE HAWAI'I CZM PROGRAM

In 1972 the US Congress enacted the Coastal Zone Management Act. Soon after, the Hawai'i Legislature passed Act 164, Session Laws of Hawai'i (SLH) in 1973, which mandated the preparation of a statewide coastal zone management program conforming to the national act. However, the Legislature identified a somewhat different set of issues than were discussed in the national act. The Hawai'i issues – for example, pressure on and loss of valuable and vulnerable coastal habitats, beaches, open space, and cultural resources – are similar in many ways to the broad national concerns, but reflect the specific problems of an island state.

Act 164 resulted in several years of careful planning and widespread citizen input. During this time, lawmakers and the public became more and more aware of increasing pressure on, and competing demands for, the State's valuable and vulnerable coastal resources – such as living marine resources, wildlife, marine habitats, beaches, coastal open space, and scenic areas.

The Hawai'i Legislature eventually enacted Act 188, SLH, in 1977, and this Act established the Hawai'i CZM Program as described in Chapter 205A, Hawai'i Revised Statutes (HRS).

The Legislature determined that the State's coastal resources were “over regulated” but “under managed.” In other words, there were many rules and prohibitions about human use of coastal areas, but an unreflective, across-the-board application of such rules did not always ensure good outcomes. Still, there were many previously existing “authorities” – agencies with responsibility for the coastal zone – and the Legislature decided to preserve these authorities but weave them together under the umbrella of CZM objectives and policies and managerial leadership of what is now the State's Office of Planning. Therefore, CZM today represents one of the most important functions of the Office of Planning.

One of the most critical decisions the Legislature made was how to define the “coastal zone” here. In 15 CFR Part 923.30, the federal government says island states and territories should include all the islands' land areas as part of the coastal zone – at a minimum. But it also gave some flexibility to state programs, allowing them to include the appropriate ocean waters around the islands. The Hawai'i Legislature decided to include “the area extending seaward from the shoreline to the limit of the State's police

**IN HAWAI'I, THE "COASTAL ZONE"
MEANS ALL LAND AND ALL SEAS
AROUND THE ISLANDS**

Chapter 205A, HRS defines the "coastal zone" in Hawai'i as:

"...the entire state and the area extending seaward from the shoreline to the limit of the state's police power and management authority, including the United States territorial sea."

power and management authority, including the United States territorial sea." The United States territorial sea extends 12 nautical miles from the shoreline. See Chapter III for a detailed description of the coastal zone.

However, Chapter 205A, HRS also codified "special management areas" (SMAs) – predominantly shoreline

areas needing particularly careful management. Chapter 205A, HRS establishes minimum guidelines and a permit procedure for the counties to follow, but each county designates its own SMAs (as well as shoreline setbacks and enforcement). The SMA system is discussed at more length in both Chapters III and IV.

In 1978, the US Department of Commerce officially approved the Hawai'i CZM Program. The federal approval allowed Hawai'i to receive administrative grants and to administer the **federal consistency review program**, which assures that federal activities and projects actions are consistent with the Hawai'i's federally approved enforceable policies. The federal consistency program is further discussed in Chapter IV.

OVERVIEW OF HAWAI'I CZM LAW

The Hawai'i CZM law, Chapter 205A, HRS, is the legal foundation of the Hawai'i CZM Program. It is the State's policy umbrella for designing and carrying out land and water uses and activities, recognizing the needs for economic development and resource conservation. The statute has five parts. Part I defines the overall CZM Program. Part II describes the special management area (SMA) and its permit system, Part III describes the shoreline setbacks; Part IV addresses marine and coastal affairs; and lastly, Part V includes other provisions such as the prohibition of artificial lights on the shoreline and ocean.

Part I of Chapter 205A, HRS is important because it defines the CZM Program--it sets the context for the other parts. As described in the previous section, Hawai'i's coastal zone definition was crafted to reflect the State's longstanding claim to the broader expanse of archipelagic waters based on ancient Hawaiian transportation routes.

Part I also identifies the objectives and policies of the CZM Program and the organizational structure of the CZM Program necessary to implement them.

HAWAI'I CZM OBJECTIVES AND POLICIES

Hawai'i has long been recognized as a frontrunner in the development of programs to enhance and protect coastal resources. The overall goal for the CZM Program, both nationally and locally, is to **properly manage** coastal areas – to assure a good balance between economic or other human uses, including resource protection that could only be fully achieved by banning human activity altogether.

CZM principles are intended to promote well-planned development along with preservation of many resources for future generations – what is increasingly known as “**good stewardship**.” However, the CZM philosophy is the true “stewards” are the citizens of Hawai'i, and the Program is intended to encourage and support that stewardship.

Specific Chapter 205A, HRS, objectives discussed in this section are broad, but they are not all-encompassing. They do not give the CZM Program total management authority over all uses of land or bordering ocean waters. There must be a clear linkage – what planning lawyers call a “rational nexus” – between CZM objectives and government conditions or restrictions on development. For example, the CZM objectives below do **not** clearly address what are arguably otherwise worthy societal goals such as:

- Minimizing traffic congestion;
- Promoting energy conservation;
- Controlling sound levels;
- Discouraging population growth or density as an end in itself;
- Determining basic land use – that is reserved for the State Land Use Commission and for county governments.

Rather, the ten CZM objectives (summarized previously and discussed below) address issues that originally drove the creation of the national and Hawai'i CZM laws. Each of these objectives has supporting policies that guide the CZM Program. They direct the management process towards consistency, predictability, and compliance with the law.

In the following discussion, language in the summary boxes is taken directly from Chapter 205A, HRS.

Recreational Resources

Over the three decades of the CZM Program, there has been a great change in the nature and magnitude of coastal recreation activities in Hawai'i. In the 2000 National Survey on Recreation and the Environment, the State of Hawai'i consistently ranked among the top ten coastal states for various coastal recreational activities (Leeworthy, 2001). These surveyed activities included both “consumptive” recreation (hunting, fishing, shell fishing, shell collection, and the like), and also “non-consumptive” uses (swimming, surfing, sun-bathing, boating, wind-surfing, jet skiing, bird watching,

snorkeling, diving, glass-bottom boating, and many more). As coastal recreation activities have proliferated, the need for active coastal zone management has increased as well.

The demand for Hawai'i's limited recreational resources affects all sorts of coastal settings – parks, near-shore waters, surf sites, and beaches. Since both the resident and visitor population is expected to increase further, Hawai'i is on the verge of shortages in its supply of boat launching and mooring facilities, beach parks for swimming, picnicking, and camping.

Recreational Resources

Objective:

Provide coastal recreational opportunities accessible to the public.

Policies:

- (A) Improve coordination and funding of coastal recreational planning and management; and
- (B) Provide adequate, accessible, and diverse recreational opportunities in the coastal zone management area.

In addition to supply and demand concerns, Hawai'i also faces other concerns related to coastal recreation activities – environmental and resource constraints, amenity concerns, and safety concerns. “Environmental and resource concerns” include water quality and healthy habitats for coral reefs, shellfish, etc. “Amenity concerns” include adequate controls on congestion, noise, landscape degradation, and the like. “Safety concerns” include adequate lifeguard systems, first aid facilities, telephones, codes of conduct for beach users, and notice systems for beach and water hazards (such as jellyfish, underwater obstructions, etc.) Safety issues also include weather-related risks (such as high waves, undertows, dangerous currents, etc.) (NOAA, 1998).

To address these concerns, one policy is to “provide adequate, accessible, and diverse recreational opportunities” by:

- “Protecting coastal resources uniquely suited for recreational activities that cannot be provided in other areas;
- “Requiring replacement of coastal resources having significant recreational value including, but not limited to, surfing sites, fishponds, and sand beaches, when such resources will be unavoidably damaged by development; or requiring reasonable monetary compensation to the State for recreation when replacement is not feasible or desirable;
- “Providing and managing adequate public access, consistent with conservation of natural resources, to and along shorelines with recreational value;
- “Providing an adequate supply of shoreline parks and other recreational facilities suitable for public recreation;
- “Ensuring public recreational uses of county, state, and federally owned or controlled shoreline lands and waters having recreational value consistent with public safety standards and conservation of natural resources;

- “Adopting water quality standards and regulating point and nonpoint sources of pollution to protect, and where feasible, restore the recreational value of coastal waters;
- “Developing new shoreline recreational opportunities, where appropriate, such as artificial lagoons, artificial beaches, and artificial reefs for surfing and fishing; and
- “Encouraging reasonable dedication of shoreline areas with recreational value for public use as part of discretionary approvals or permits by the land use commission, board of land and natural resources, and county authorities; and crediting such dedication against the requirements of Chapter 46-6, HRS.”

The responsibility for implementing these policies is shared by the Hawai‘i CZM Program and its State and county partners through different “legal authorities and enforceable policies,” as further explained in the next section of this chapter “Organizational Structure”.

Historic Resources

Hawai‘i is blessed with a wide diversity of historic and cultural resources which reflect the cosmopolitan character of its population. A large number of sites remain which relate to the approximately 1,700-year occupation of the islands by the Native Hawaiians. Sites range in character from agricultural fields and temporary habitations, to residential complexes, fishponds, and *heiau*. Other types include trails, petroglyphs, and burials. In addition, traditional cultural landscapes – such as the extensive wetland agriculture fields of Hanalei on Kaua‘i and Ke‘anae on Maui, and the sacred summit

region of Mauna Kea – have received attention in more recent years (State Historic Preservation Division, 2001).

Historic Resources

Objective:

Protect, preserve, and, where desirable, restore those natural and manmade historic and prehistoric resources in the coastal zone management area that are significant in Hawaiian and American history and culture.

Policies:

- (A) Identify and analyze significant archaeological resources;
- (B) Maximize information retention through preservation of remains and artifacts or salvage operations; and
- (C) Support state goals for protection, restoration, interpretation, and display of historic resources.

The ongoing use of many of Hawai‘i’s historic and cultural resources is a testament to their value in modern times. These resources contribute to public understanding of the multi-cultural heritage of Hawai‘i. They also provide a source of intense pride for all residents.

Despite the well recognized values of these historic resources, there are several threats which hamper their protection, preservation, and restoration. The State Historic

Preservation Division (2001) lists the following:

- “Ongoing cultural use of traditional native Hawaiian sites;
- “Decline of plantation economy;
- “Dwindling religious congregations that create preservation challenges for religious buildings;
- “Need to retain historic character of small towns and residential neighborhoods;
- “Reduced state fiscal capabilities to support historic preservation;
- “Decreased involvement of Native Hawaiian community in historic preservation processes and in protection of their own cultural sites;
- “Challenge of assessing post-World War II properties; and
- “Increasing concerns about federal highway policies and standards for historic bridges and roads.”

To ensure that Hawai‘i’s historic and cultural resources will be available not only to present but also to future generations, the Hawai‘i CZM Program conducts and supports public education activities to help preserve, protect, and restore historic resources. The CZM Program is also responsible for ensuring that State agencies, county governments, and the public comply with laws and policies aimed at historic and cultural resource preservation and protection in the context of the CZM Program.

Scenic and Open Space Resources

Given Hawai‘i’s demand for various uses of its limited land supply, the State government faces the ongoing challenge of protecting or restoring scenic and open space resources. According to Hawai‘i’s CZM law, coastal scenic and open space resources serve the following functions:

- “Provision of active and passive recreation amenities such as parks and beach parking areas;

Scenic and Open Space Resources

Objective:

Protect, preserve, and, where desirable, restore or improve the quality of coastal scenic and open space resources.

Policies:

- (A) Identify valued scenic resources in the coastal zone management area;
- (B) Ensure that new developments are compatible with their visual environment by designing and locating such developments to minimize the alteration of natural landforms and existing public views to and along the shoreline;
- (C) Preserve, maintain, and, where desirable, improve and restore shoreline open space and scenic resources; and
- (D) Encourage those developments that are not coastal dependent to locate in inland areas.

- “Protection and enhancement of the state’s natural base in the form of forest reserves, water areas, natural area reserves, and watersheds; and
- “Designation of demarcation boundary of areas vulnerable to natural hazards.”

The constant demand for development has resulted in the loss of open space in Hawai‘i. The degree to which lands are officially designated as “open space” is influenced by the authorities and enforceable policies that the Hawai‘i CZM Program implements together with its State and county partners.

Coastal Ecosystems

Hawai‘i’s coastal ecosystems are comprised of rocky tidal and intertidal zones, coral reefs, and nearshore and offshore pelagic environments. Shoreline intertidal communities – which include volcanic rock, hao trees, mud, sand, and seagrass – span the area between the mean high water line and lowest spring tide level (Hawai‘i CZM Program, 2007). In Hawai‘i, this zone is typically narrow due to a small tidal range of approximately one meter.

Coral reefs are another integral and valuable component of the Hawai‘i’s coastal environment. The value of Hawai‘i’s coral reefs cannot be overstated. They provide shoreline protection from waves and storm surge and a supply of fresh fish and other basic food for the people of Hawai‘i for the past thousand years. There are 557 documented species of reef and shore fish in Hawai‘i, of which 135 are endemic (Hawai‘i CZM Program, 2007). In addition, coral reefs are an integral aspect of Hawai‘i’s multi-billion dollar tourist industry, providing countless snorkeling, diving, surfing, and fishing opportunities. In 2003, a study estimated that Hawai‘i’s coastal reefs generate

Coastal Ecosystems

Objective:

Protect valuable coastal ecosystems, including reefs, from disruption and minimize adverse impacts on all coastal ecosystems.

Policies:

- (A) Exercise an overall conservation ethic, and practice stewardship in the protection, use, and development of marine and coastal resources;
- (B) Improve the technical basis for natural resource management;
- (C) Preserve valuable coastal ecosystems, including reefs, of significant biological or economic importance;
- (D) Minimize disruption or degradation of coastal water ecosystems by effective regulation of stream diversions, channelization, and similar land and water uses, recognizing competing water needs; and
- (E) Promote water quantity and quality planning and management practices that reflect the tolerance of fresh water and marine ecosystems and maintain and enhance water quality through the development and implementation of point and nonpoint source water pollution control measures.

\$364 million annually in added value, with 84 percent of this money coming from snorkeling and diving activities (Cesar and van Beukering, 2004).

Hawai'i's coastal ecosystems face a wide variety of threats from natural disturbances and human activities. Global climatic and oceanographic events contribute to sea-level rise, severe storm events, coastal erosion, and sea surface temperature. All of these can harm marine ecosystems (Hawai'i CZM Program, 2007). Pollution from point and nonpoint sources threatens water quality and the health of coral reef ecosystems, as well as the health of large marine animals. Non-native and often invasive marine species establish themselves and proliferate when they find degraded coastal and marine ecosystems (Hawai'i CZM Program, 2007). Keeping a balance between human use of the state's coastal resources and the health of the Hawai'i's coastal ecosystems has been a perennial challenge to the Hawai'i CZM Program. At present, the CZM Program and its State and county partners deal with a variety of threats to coastal ecosystems – land-based pollution, lack of public awareness, recreational overuse, climate change, and coral disease.

To combat the detrimental impacts of natural and man-made disturbances to coastal ecosystems in Hawai'i, the CZM Program supports a myriad of federal and State programs which cooperate to protect coastal ecosystems. Through its partnership with the Hawai'i State Department of Land and Natural Resources (DLNR), the CZM Program also recognizes and supports the establishment of Natural Area Reserves System and Marine Life Conservation districts. To deal with the impacts of land-based pollution to coastal ecosystems, the authorities and policies enforced by the CZM Program include regulations that address point and nonpoint sources of coastal water pollution.

Economic Uses

Hawai'i's economic growth and development have long been anchored to the management of its coastal zone area. The economic importance of coastal areas is enormous – as a basic source of productivity, as a waste disposal sink, as a stock of mineral and aquatic

Economic Uses

Objective:

Provide public or private facilities and improvements important to the State's economy in suitable locations.

Policies:

- (A) Concentrate coastal dependent development in appropriate areas;
- (B) Ensure that coastal dependent developments are located, designed, and constructed to minimize adverse social, visual, and environmental impacts in the coastal zone management area; and
- (C) Direct the location and expansion of coastal dependent developments to areas presently designated and used for such developments and permit reasonable long-term growth at such areas, and permit coastal dependent development outside of presently designated areas given certain restrictions.

resources, and as a location for industry, trade, transport, and tourism (IHDP, 1999). In Hawai'i, shoreline sites are essential for economic uses such as harbors, sewage treatment plants, energy facilities, resorts, fisheries, and oceanographic research operations.

In over three decades since the Hawai'i CZM Program began, the coastal zone has suffered various adverse physical, social, and economic impacts. These have altered, disturbed, and at times destroyed the character of the coastal zone areas. In most cases, the detrimental impacts fell heavily on residents of the immediate coastal areas or on people who do not directly benefit from such uses.

To ensure that impacts from human uses of Hawai'i's coastal zone are minimized – and also that protective actions are balanced with the State's economic goals and objectives – the Hawai'i CZM Program and its county partners implement the special management area (SMA) permit process that is further discussed in Chapters III and IV. The Hawai'i CZM Program has also incorporated statutory rules and regulations related to energy facility siting to its list of CZM authorities and enforceable policies. These regulations provide valuable guidelines on how to properly locate, design, and construct development facilities that minimize adverse social, visual, and environmental impacts in the coastal zone management area.

Coastal Hazards

Coastlines are nature's great laboratory of equilibrium (Fletcher, et al., 2002). They have the capacity to undergo swift and powerful changes in response to natural, meteorological, and oceanographic forces – such as storms, beach erosion, and rising or falling sea levels. These natural processes also pose a hazard to the human use of coastal resources.

Hawai'i residents live and play along island shores. However, the coasts can be a hazardous environment with a capacity for swift change that can threaten life and property. All parts of the Hawaiian coast have some history of vulnerability to hazards such as tsunamis, stream flooding, high waves, storms, erosion, sea level rise, volcanic and earthquakes. The Hawai'i CZM Program has identified prevention and minimization of threats to life and

Coastal Hazards

Objective:

Reduce hazard to life and property from tsunami, storm waves, stream flooding, erosion, subsidence, and pollution.

Policies:

- (A) Develop and communicate adequate information about storm wave, tsunami, flood, erosion, subsidence, and point and nonpoint source pollution hazards;
- (B) Control development in areas subject to storm wave, tsunami, flood, erosion, hurricane, wind, subsidence, and point and nonpoint source pollution hazards;
- (C) Ensure that developments comply with requirements of the Federal Flood Insurance Program; and
- (D) Prevent coastal flooding from inland projects.

property from such coastal hazards as a priority for research (Fletcher, et al., 2002).

In addition to enforcing general requirements of the state shoreline setback provisions through its county governments, the Hawai'i CZM Program has supported the National Flood Insurance Program (NFIP). The NFIP is a joint program of county agencies, the Federal Emergency Management Agency (FEMA), and the US Army Corp of Engineers. The NFIP places conditions on development in areas with high vulnerability to tsunami and stream flooding hazards if they are to qualify for federal flood insurance. In the last decade, the Hawai'i CZM Program has vigorously integrated coastal hazard awareness into its educational campaigns and programs. The Program developed and distributed materials to the public and decision makers about coastal hazards, including information on what the public should do at the time such hazards strike.

Managing Development

The Hawai'i CZM Program has long promoted multiple uses of coastal resources. It encourages adequate economic development while minimizing detrimental impacts of one resource use upon another.

In over three decades, the CZM Program has worked to improve the development review process, communication, and public participation in the management of coastal resources and hazards. In particular, the CZM Program has provided much needed technical assistance to streamline the development process permits in Hawai'i, because development is often subject to regulation by multiple public agencies.

To help ensure the management and reasonable use of the state's coastal resources, the Hawai'i CZM Program monitors State and county actions to assure existing laws are enforced to the maximum extent possible in managing present and future coastal zone development.

Managing Development

Objective:

Improve the development review process, communication, and public participation in the management of coastal resources and hazards.

Policies:

- (A) Use, implement, and enforce existing law effectively to the maximum extent possible in managing present and future coastal zone development;
- (B) Facilitate timely processing of applications for development permits and resolve overlapping or conflicting permit requirements; and
- (C) Communicate the potential short and long-term impacts of proposed significant coastal developments early in their life cycle and in terms understandable to the public to facilitate public participation in the planning and review process.

Public Participation

The Hawai'i CZM Program is a strong advocate of public participation in coastal resource use decision-making. From the formative planning period, the CZM Program recognized that public participation is necessary to increase legitimacy of CZM-related decisions. For this reason, the Hawai'i CZM Program is advocating community-based coastal resource management to actively engage the public in the:

- Identification of key CZM issues of concern to the public as well as possible solutions, alternatives, or options; and
- Promotion of local expertise and traditional knowledge.

Through its educational campaigns and training programs as well as its collaboration with a wide array of stakeholders – individuals, public, and private organizations – the Hawai'i CZM Program integrates public participation in the implementation of the Program's statutory, institutional, and technical mechanisms.

At present, public participation in the Hawai'i CZM Program can be done **formally** through the SMA permit and federal consistency processes, or **informally** by public attendance at neighborhood board or other meetings in which CZM staff usually participate as well.

The Hawai'i CZM Program also operates with an open door policy for the public. At any given time, an individual interested in learning more about the CZM Program or coastal issues may drop in at the CZM office (or call or e-mail), and necessary information will be provided. Occasionally, the CZM Program may also visit and meet with communities and interest groups to discuss the CZM Program and solicit their concerns and ideas.

Public Participation

Objective:

Stimulate public awareness, education, and participation in coastal management.

Policies:

- (A) Promote public involvement in coastal zone management processes;
- (B) Disseminate information on coastal management issues by means of educational materials, published reports, staff contact, and public workshops for persons and organizations concerned with coastal issues, developments, and government activities; and
- (C) Organize workshops, policy dialogues, and site-specific mediations to respond to coastal issues and conflicts.

Beach Protection

According to Section 171-151, HRS a “***beach or beach land***” in Hawai‘i is defined as “all lands in the shoreline area including sand, rocky, or cobble beaches, dune systems, landward and seaward sand reserves, and all such lands subject to the natural processes of erosion and accretion.” Hawai‘i has 230 miles of beach, of which 56 miles are sandy. Twenty-four miles of the 56 miles of sandy beaches are accessible for swimming, surfing, and other water sports (Surfrider Foundation, 2007).

The people of Hawai‘i have a very strong cultural attachment to the beach. In addition, Hawai‘i’s multi-billion dollar tourism industry depends on the health of its beaches. Given the role that beaches play in Hawai‘i, it is important to ensure that protection of these resources from impacts of natural and human activities remains a priority.

The beaches in Hawai‘i derive most of their sand from the surrounding reefs. Factors that negatively affect the growth and health of living reefs – such as deterioration in water quality or severe storms – ultimately threaten the beaches as well (USGS, 1997).

At present, coastal erosion also threatens the majority of Hawai‘i’s beach areas. The loss of beach through erosion will definitely have a large impact on the economy of the state. The Hawai‘i CZM Program, in cooperation with county governments and other State agencies, has commissioned studies to document the magnitude and extent of beach loss in the state. These studies provide useful information to decision makers. More importantly, the studies help justify government policies and actions that safeguard against construction of seawalls, levies, and structures that temporarily halt beach erosion in one place but cause more damage in the long run and/or in other places.

Beach Protection

Objective:

Protect beaches for public use and recreation.

Policies:

- (A) Locate new structures inland from the shoreline setback to conserve open space, minimize interference with natural shoreline processes, and minimize loss of improvements due to erosion;
- (B) Prohibit construction of private erosion-protection structures seaward of the shoreline, except when they result in improved aesthetic and engineering solutions to erosion at the sites and do not interfere with existing recreational and waterline activities; and
- (C) Minimize the construction of public erosion-protection structures seaward of the shoreline.

Marine Resources

The Hawaiian archipelago is home to an array of large marine animals including whales, dolphins, the endangered Hawaiian monk seal, and several species of sea turtle. The islands serve as foraging, nesting, and birthing areas for these highly mobile marine animals (Hawai'i CZM Program, 2007). An estimated 24 species of whales and dolphins have been sighted around Hawai'i on a seasonal basis. Humpback whales appear in Hawaiian waters between November and April, when they socialize, mate, and give birth. Five species of sea turtles inhabit waters of the Hawaiian Islands – green, loggerhead, leatherback, hawksbill, and olive ridley (Hawai'i CZM Program, 2007). The Hawaiian monk seal, a federally listed endangered species, is endemic to Hawai'i. At present, a little more than a thousand of them are estimated to live in the islands. The National Marine Fisheries Service is currently conducting research to

determine the actual population of the Hawaiian monk seal.

The many diverse sea creatures within the territorial waters of Hawai'i are threatened by both land-based and sea-based activities. These threats include:

- “Entanglement and drowning in fishing gear
- “Incidental take in sport and commercial fisheries
- “Habitat degradation
- “Algal blooms
- “Sound pollution
- “Pollution, including oil spills and organochlorines
- “Competition for food sources, including changes in the balance of available prey due to commercial fishing or habitat disturbance
- “Vessel traffic and impact
- “Disturbance and harassment” (Hawai'i CZM Program, 2007)

In particular, land-based activities may affect nesting and foraging areas of sea turtles. As for monk seals, factors which

Marine Resources

Objective:

Promote the protection, use, and development of marine and coastal resources to assure their sustainability.

Policies:

- (A) Ensure that the use and development of marine and coastal resources are ecologically and environmentally sound and economically beneficial;
- (B) Coordinate the management of marine and coastal resources and activities to improve effectiveness and efficiency;
- (C) Assert and articulate the interests of the State as a partner with federal agencies in the sound management of ocean resources within the United States exclusive economic zone;
- (D) Promote research, study, and understanding of ocean processes, marine life, and other ocean resources in order to acquire and inventory information necessary to understand how ocean development activities relate to and impact upon ocean and coastal resources; and
- (E) Encourage research and development of new, innovative technologies for exploring, using, or protecting marine and coastal resources.

threaten the persistence and recovery of monk seal populations include disturbance by human activities, interactions with fisheries, mobbing of females by males, and shark predation. Human activities on beaches, even at low levels, can cause monk seals to abandon haul-out areas (FWS, 2007).

The Hawai'i CZM Program, in cooperation with the Department of Land and Natural Resources (DLNR), is promoting both protection and use of Hawai'i's marine resources. Through its policies, the CZM Program has improved the effectiveness and efficiency of coordinating the management of marine coastal resources. In particular, the CZM law prohibits artificial lights, with few exceptions, on the shoreline and ocean waters to prevent adverse impacts on nesting turtles and other marine and terrestrial life.

To acquire information necessary to understand how ocean development activities impact marine resources, the CZM Program has also promoted research and educational activities that increase understanding of ocean processes, marine life, and other ocean resources. For example, the Program has published brochures and bookmarks with information about coral reefs, and distributed them at various science fairs and conferences across the islands.

ORGANIZATIONAL STRUCTURE

This section describes the network of State and county agencies responsible for administering, enforcing, and/or monitoring actions that support the CZM law. In addition, it also describes the relationship of these administering agencies to the designated lead agency for CZM.

Designated State Lead Agency

The CZM law, designates the Office of Planning (OP) as the lead agency to oversee the implementation of the State's CZM Program. OP has been the lead agency since Hawai'i first voluntarily participated in the CZM Program (though the office itself has changed names and has been lodged in different departments over time).

The CZM law authorizes OP to accept and administer grant funds; enter into contracts and other legal mechanisms (such as pass-through grants) with participating agencies for the purpose of carrying out specific management tasks and procure services to help enhance understanding of resource issues and the development of management responses; and account for the expenditure of CZM funds. Pursuant to Section 205A-3, HRS, as the CZM lead agency, OP shall:

- "Receive, disburse, use, expend, and account for all funds that are made available by the United States and the State for the CZM Program;
- "Provide support and assistance in the administration of the CZM Program;
- "Review federal programs, federal permits, federal licenses, and federal "development proposals for consistency with the CZM Program;

- “Consult with the counties and the public in preparing guidelines to further specify and clarify CZM objectives and policies to be submitted twenty days prior to the convening of any regular session of the legislature for review, modification, or enactment by the legislature;
- “Conduct a continuing review of the administration of the CZM Program and of the compliance of state and county agencies with the CZM objectives and policies;
- “Facilitate public participation in the CZM Program, including the maintenance of a public advisory body to identify coastal management problems and to provide policy advice and assistance to the lead agency;
- “Prepare and periodically update a plan for use of coastal zone management funds to resolve coastal problems and issues that are not adequately addressed by existing laws and rules;
- “Advocate agency compliance with Chapter 205A;
- “Monitor the coastal zone management-related enforcement activities of the state and county agencies responsible for the administration of the objectives and policies of Chapter 205A;
- “Prepare an annual report to the governor and the legislature which shall include recommendations for enactment of any legislation necessary to require any agency to comply with the CZM objectives and policies and any guidelines enacted by the legislature; and
- “Coordinate the implementation of the ocean resources management plan.”

Although OP is the designated State lead agency that oversees the Hawai‘i CZM Program, actual implementation of the CZM Program involves a network of State agencies and county governments that have legal responsibilities or carry out critically important programs. The primary OP responsibility is to monitor and assure that State and county agencies’ actions comply with CZM objectives and policies.

Hawai‘i CZM Network Structure

In 1977, the Legislature determined the State already had sufficient agencies and authorities to carry out the CZM provisions. Therefore, the Legislature decided to weave these existing agencies and policies together in a network structure headed by OP and guided by the umbrella CZM objectives and policies.

As a network program, the Hawai‘i CZM Program relies not on a single centralized agency but on the state and county agencies that administer the authorities and enforceable policies that carry out Chapter 205A, HRS.

As previously mentioned, what makes the Hawai‘i CZM Program a network is not only the agencies attached to it, but also the interconnected authorities and enforceable policies that these agencies can implement to comply with objectives and policies of Section 205A-2, HRS and associated guidelines. That is, the network of State and

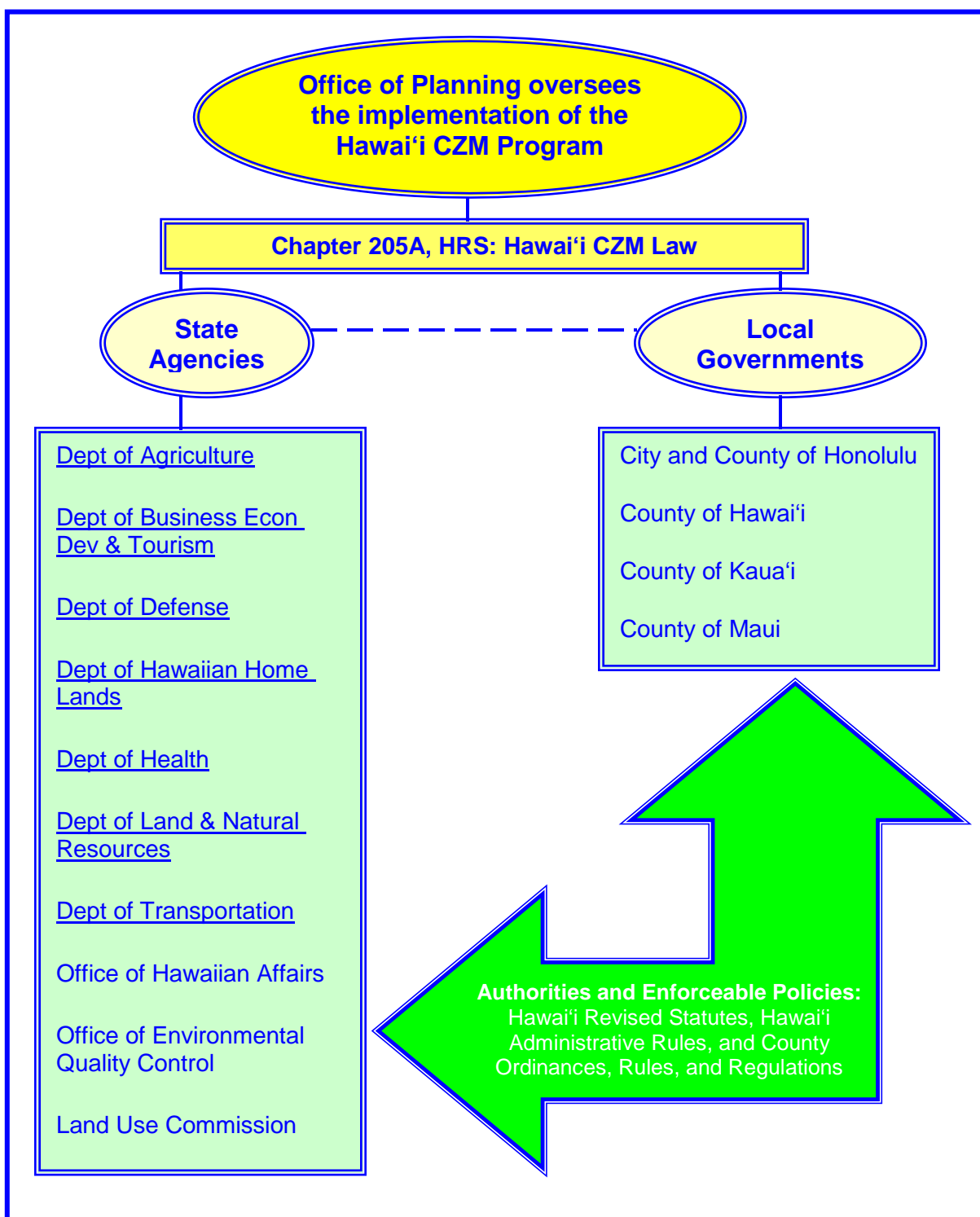
county governments and their statutes, ordinances, rules, and permits is legally bound to adhere to the objectives and policies of the CZM Program.

The overall network is shown in Figure 2 (next page). Authorities and enforceable policies are summarized in subsequent sections and a complete authoritative *list can be obtained from the Hawai'i CZM Program*.

The following are the State and county agencies with the greatest roles in the implementation and administration of the Hawai'i CZM Program, as well as major functions for each:

- **Department of Business, Economic Development, and Tourism (DBEDT):** This agency provides economic and statistical expertise that guides State economic development efforts. It generates important information for business and industry about their markets and the economic forces shaping Hawai'i's future. For more information, visit: <http://hawaii.gov/dbedt>.
- **Department of Defense (DOD):** The mission of the Hawai'i Department of Defense, which includes State Civil Defense, is to assist authorities in providing for the safety, welfare, and defense of the people of Hawai'i. The department continuously strives to maintain its readiness to respond to the needs of the people in the event of disasters, either natural or human-caused. For more information, one may visit: <http://www.dod.state.hi.us/>.
- **Department of Health (DOH):** DOH is the agency primarily responsible for air and water quality. The department monitors air and water quality, assigns priorities, and certifies sewage projects for construction eligibility. It also issues permits for sewage treatment facilities and effluent outlets. The Hawai'i CZM Program collaborates with DOH's Clean Water Branch to implement the Coastal Nonpoint Pollution Control Program. In addition, DOH's Office of Environmental Quality Control (OEQC) administers Chapter 343 of the Hawai'i Revised Statutes, better known as the Environmental Impact Statement Law. For more information, log on to: <http://hawaii.gov/doh/>.
- **Department of Land and Natural Resources (DLNR):** DLNR's Division of Aquatic Resources (DAR) monitors coastal ecosystems such as the state's coral reefs. The Division of Boating and Ocean Recreation (DOBOR) maintains safe and clean harbors, and monitors registration of Hawai'i's many thousands of recreational boats. The Division of State of Parks (DSP) maintains 25,000 acres of land comprising 52 State parks, while the Division of Forestry and Wildlife (DOFAW) administers the Na Ala Hele Trail and Access Program, which plays a vital role in preserving public access to historical trails. DLNR also regulates uses in certain Areas of Particular Concern – the Natural Area Reserves System (NARS) and Marine Life Conservation Districts (MLCD). More information is available at: <http://hawaii.gov/dlnr/>.

Figure 2. Hawai'i CZM Program Network Structure.



- **Department of Transportation (DOT):** DOT has three divisions covering all modes of transportation currently available in the state – airports, harbors, and highways. In particular, DOT equips and regulates the State government's system of harbors and related facilities. DOT is responsible for the design, construction and expansion of harbors and facilities. The department is also responsible for development of water transportation in the state, promotion of safety navigation, and control of all ocean shores below mean high water, shore waters, and navigable streams. DOT's management of roads and harbors plays a vital role in support of the CZM Program's ability to develop public access sites in Hawai'i. For more information, see: <http://hawaii.gov/dot/>.
- **Land Use Commission (LUC):** The LUC's primary role is to ensure that areas of state concern are addressed and considered in the land use decision-making process. The LUC establishes broad land use designations for the entire state (urban, rural, agricultural, and conservation), and counties then administer more detailed zoning appropriate to these categories except for the conservation district. The Commission acts on petitions for boundary changes submitted by private landowners, developers and State and county agencies. Hawai'i's CZM Program and the Land Use Commission are two important components of an extensive land use and environmental system for the State. The CZM Program focuses on land-based activities and its impacts to the coasts, while the Commission focuses on land use policies. More information is available at: <http://luc.state.hi.us/about.htm>.
- **County Agencies:** The counties of Hawai'i, Kaua'i, and Maui, as well as the City and County of Honolulu, play crucial roles in implementing the Hawai'i CZM Program by regulating development in geographically designated Special Management Areas (SMAs) and implementing the shoreline setback variance program. Counties receive direct financial and technical support from the CZM Program to implement the SMA use permits. Chapters III and IV discuss the SMA system in more detail.

The Land Use Commission is a networked entity whose actions are obligated to comply with the CZM objectives and policies described in the previous section.

To learn more how the counties implement the provisions of Chapter 205A, HRS, one may visit the following web pages:

<http://www.honolulu.gov/ppa/>,
<http://www.kauai.gov/planning/>,
<http://www.co.maui.hi.us/departments/Planning/>, and
http://www.hawaii-county.com/directory/dir_plan.htm.

Appendix II provides a list of Hawai'i CZM Program network agencies that support each of the objectives and policies of the Hawai'i CZM Law.

Other CZM Partners and Collaborators

To encourage extensive cooperation, collaboration, and partnerships in the implementation of CZM goals and objectives, the Office of Planning – as lead agency for the State CZM Program – has fostered institutional partnership and collaboration efforts with several federal, not-for-profit, and private entities.

Federal: Through the federal consistency review process (see Chapter IV), the Hawai'i CZM Program works with various federal agencies –such as the US Department of Defense, US Environmental Protection Agency, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, the Western Pacific Fishery Management Council, US Fish and Wildlife Service, and the US Army Corps of Engineers – to ensure that federal activities comply with the Hawai'i CZM law. The CZM Program also co-sponsors coastal-related educational campaigns and programs with the federal agencies.

Not-for-Profit and Private: Some of the groups with which the CZM Program has collaborated are the 'Ōhi'a Productions, the Ocean Conservancy, Maui Pacific Center, the Outdoor Circle, Moanalua Gardens Foundation, Sierra Club, and the Nature Conservancy. The partnership and collaboration come in different forms. The 'Ōhi'a Productions, for instance, worked with the CZM Program to produce a play that would raise students' awareness of the importance of responsible coastal resource use. In some cases, organizations such as the Ocean and Nature Conservancies support CZM activities by promoting and disseminating information related to the CZM Program.

It should be noted that federal, not-for-profit organizations, and private entities are not legally bound to comply with the CZM objectives and policies. Participation of these organizations with any of the CZM Program's activities is voluntary in nature.

PARTICIPATION, COORDINATION, AND CONSULTATION

Citizen Participation

Public participation is important to the CZMA as well as the State of Hawai'i. The Hawai'i CZM Program was the product of one of the most extensive citizen participation efforts in the history of state planning. Since the 1970s, public agencies, private interest groups, and individual citizens have been continuously encouraged to participate in CZM activities and help carry out the Hawai'i CZM Program through formal advisory committees, public information meetings (e.g. neighborhood board meetings), workshops, and public hearings. Participation that shaped the CZM Program is described in Chapter I. Because community involvement was so instrumental in its formation, public participation has been built into the Program as an integral way to achieve the CZM objectives and policies.

Participation built in to the Program: For over three decades, the Hawai'i CZM Program worked to encourage citizen participation, a hallmark of the Program.

Throughout its history, the CZM Program has incorporated public involvement elements in the design and implementation of CZM projects and activities. Through the county SMA permit and federal consistency review processes, the Hawai'i CZM Program has engaged statewide citizen and community participation in the form of public meetings, workshops, and hearings.

Pursuant to the Hawai'i CZM Law, the State Legislature established a public advisory body known as the ***Marine and Coastal Zone Advocacy Council (MACZAC)***. The Council provides input to the Hawai'i CZM Program regarding marine and coastal zone management planning, coordination, and facilitation of functions of the CZM Program. MACZAC is composed of 12 advisory members who are recruited statewide and who have diverse backgrounds in business, environment, Native Hawaiian practices, terrestrial and marine commerce, recreation, research, and tourism. MACZAC assists the Office of Planning to:

- Evaluate the State CZM Program, including activity of the network agencies, and make recommendations for improvements;
- Advocate for the CZM Program to the public and the executive and legislative branches of government; and
- Advocate, provide for, and act upon citizen input related to CZM.

MACZAC established five working groups to work toward an integrated and comprehensive management system for marine and coastal resources. Since 2001, MACZAC has maintained (1) a coastal parking access working group, (2) shoreline certification working group, (3) commercial boating regulations and harbor facilities working group, (4) ocean resources management working group, and (5) cultural resource management working group. These groups provide the public an opportunity to participate in activities and decisions affecting the coastal zone. The working groups have helped the CZM Program, stimulate public awareness of and involvement in coastal issues and the activities and accomplishments of the Hawai'i CZM Program.

In the update of the Hawai'i Ocean Resources Management Plan (ORMP), MACZAC members were active participants. Based on the feedback they provided from their constituencies – such as canoe clubs, divers, resorts owners, and many others – the final ORMP was able to address the concerns of a wide variety of stakeholders (see Chapter V for a more complete discussion of the ORMP).

Citizen involvement through advisory groups such as MACZAC is important since stewardship is essentially a community function, and success in resource planning and management is enhanced with community partnerships. For this reason, the CZM Program is currently moving toward incorporating a ***community-based approach*** to resource management. Alternatively referred to as the “place-based” approach, the idea is simple but significant: Replace standardized statewide regulations with resource management strategies tailored to the particular cultural and geographical attributes of individual communities – as determined in part through community input. Thus, the ocean management policies developed for the dry and largely Native Hawaiian rural

community of Wai‘anae in leeward O‘ahu may be quite different than those for bustling Waikīkī or the rainy Hilo town on the Big Island.

By employing this management strategy, the Hawai‘i CZM Program is providing a powerful set of broad, robust, and networking tools aimed at linking and empowering a wide array of stakeholders.

Coordination and Consultation

To avoid duplication, save taxpayer dollars and CZM activities, projects, and programs conducted or administered by the CZM Program are often coordinated with other parties – either agencies included in the CZM network or other CZM partners and collaborators. Given the nature of the Program’s mission, collaboration is usually not stirred by a system of regularly scheduled meetings or teleconferences, but a prescribed process triggered by a permit application, proposed law, planning initiative, or other specific event. The CZM Program attempts to make sure that all involved agencies appreciate the need to respond to the triggering event in a holistic and ecological way, not just from the “silos” of any one agency’s particular function.

Coordination and consultation among the CZM Program, its network, and partners involves a process of seeking concurrence from one or more groups, organizations, or agencies regarding a proposal or an activity for which they share some responsibility and that may result in contributions, concurrences, or dissents. The Hawai‘i CZM Organizational Structure section of this chapter explains the coordination and consultation that takes place within the Hawai‘i CZM Program.

AUTHORITIES AND ENFORCEABLE POLICIES

Management of the Hawai‘i coastal zone is directed by the states coastal policies, and is implemented through the coastal program authorities. The coastal policies include the broad policy objectives of the Hawai‘i CZM Law as well as the policies, standards and criteria included in the various authorities (laws regulations, etc.) that are networked into the program. The policies are implemented through the licensing, permitting and other administrative programs created by the Hawai‘i CZM law and other “networked authorities.”

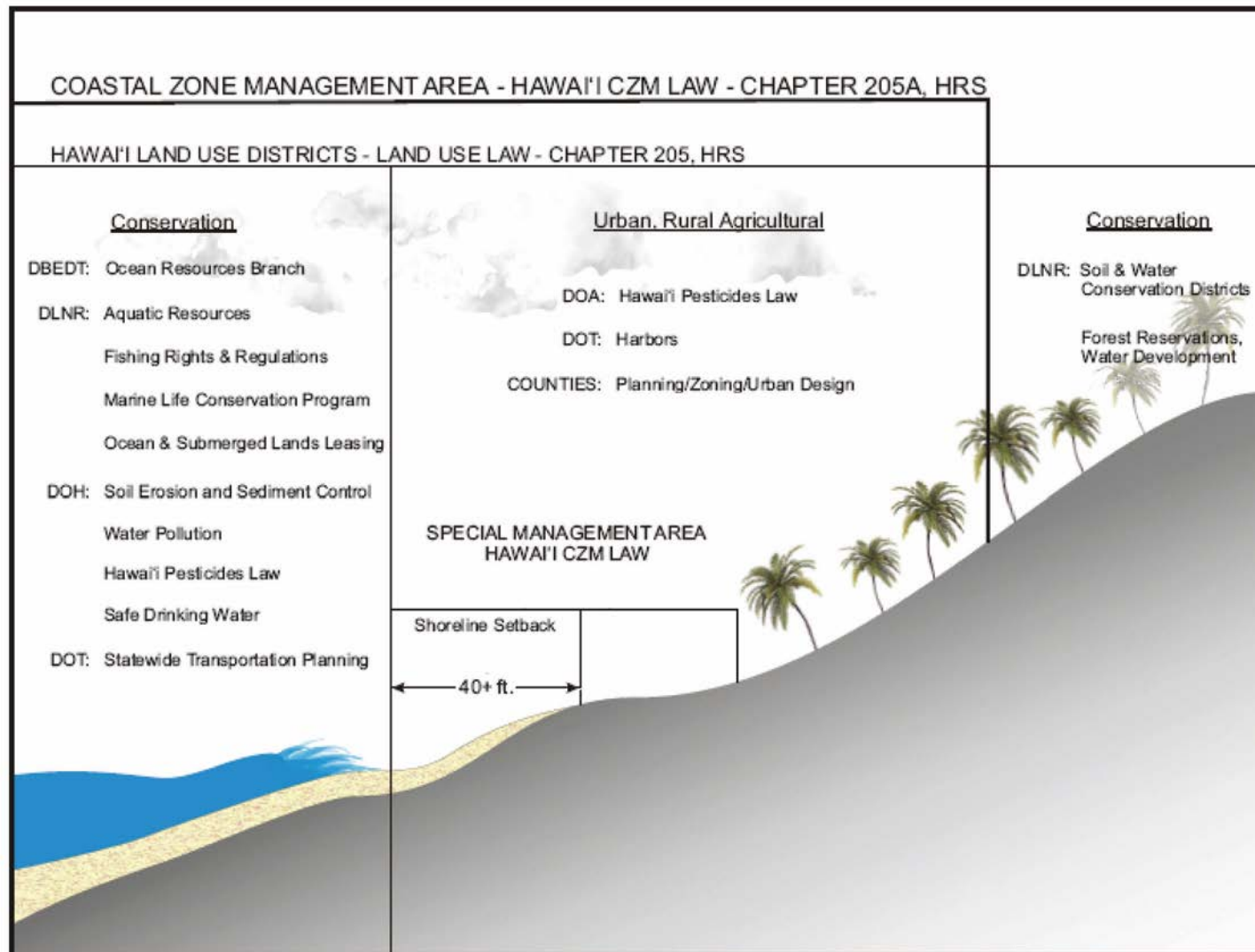
In the planning phase of the Hawai‘i CZM Program during the mid-1970s, the Legislature found that the State had adequate constitutional provisions, laws, and regulations to manage the coastal areas. Because the existing policies were deemed satisfactory, the Legislature decided that the Hawai‘i CZM Program should incorporate the State and county statutes, ordinances, and rules relevant to the CZM objectives and policies under its purview.

Since its approval in 1978, the Hawai‘i CZM Program has incorporated a wide array of State and local authorities and enforceable policies into its management framework.

Figure 3 provides a spatial perspective of the Hawai'i CZM Program network agencies primary areas of responsibilities

From time to time, changes are made to the State CZM Law or to other statutes, ordinances, and rules comprising the CZM legal network. When this occurs, the Hawai'i CZM Program submits the updated authorities and enforceable policies to NOAA to be formally incorporated into the Hawai'i Coastal Program. These changes helps the CZM Program maintain the current network of authorities and enforceable policies and provides notice to Federal agencies regarding the policies they must be consistent with. For more information regarding updates subsequent to this document, please directly contact the Hawai'i CZM Program in the Office of Planning.

Figure 3. Hawai'i CZM Program Network



Prepared by R.M. Towill Corp.

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CHAPTER III: HAWAII'S COASTAL ZONE

CHAPTER SUMMARY

Hawaii's coastal zone is a dynamic area where land meets sea. Incorporating all lands in the State, it encompasses 1,052 miles of shoreline and includes 100% of the State population (DBEDT, 2006 and NOAA, 2006). The State's coastal zone hosts a wide variety of fragile natural and man-made resources. Some resources – such as the Hawaiian stilt (*Himantopus mexicanus knudseni*), green sea turtle (*Chelonia mydas*), and the Hawaiian monk seal (*Monachus schauinslandi*) (PIFSC, 2007) – are vulnerable to loss from growth and development pressures. It also includes areas vital to the State's economy, including harbors and airports on six of the eight major islands.

Both resident and visitor populations have experienced tremendous growth - a 66% increase in resident population and a 500% increase in the visitor count since 1970. In recent years, these increases occurred more rapidly on the neighbor islands than on O'ahu. While the benefits of a growing economy include one of the lowest unemployment rates in the nation, such growth also places increased demands on the state's infrastructure and water and land resources.

To capture the complex character and demands within the coastal zone, the Hawaii CZM Program has drawn the coastal zone boundaries to include ecologically inter-related land and water zones as well as where people live and work. Hawaii's CZM and land use laws help direct development and conservation activities to appropriate areas so that Hawaii's limited resources can be used effectively. Through a coastal management system which takes into account land and water uses together and which realizes that activities up *mauka* have an effect *makai*, sustainable balance in the coastal zone becomes achievable.

Encompassing the entire state, the CZM area (coastal zone) is the site of all new development, and a significant portion of this occurs along or near the shoreline.

The CZM Program also works with the counties to establish special management areas (SMAs) and shoreline setback areas (SSAs) to assure serious consideration to coastal zone ecosystem protection as development occurs.

This chapter describes the characteristics of the coastal zone in Hawaii as well as the specific subsets of the zone which are important components of coastal zone management in Hawaii. It is a good source of information for residents, visitors, researchers, and students who have a desire to learn about the physical characteristics and boundaries of the coastal zone, as well as the different permissible land and water uses within the coastal zone.

HAWAI‘I’S COASTAL ZONE

According to federal guidance (see 16 USC 1453, 2005), states should include “coastal waters and adjacent shorelands, islands, transitional and intertidal areas, salt marshes, wetlands, and beaches” as part of the coastal zone. The coastal zone “area may extend seaward to the outer limit of state title and ownership under the Submerged Lands Act” (43 USC 1301 et seq.). The federal guidance also explains that “federal lands subject solely to the discretion of or which is held in trust by the Federal Government, its officers or agents are geographically excluded from the states’ coastal zones” (16 USC 1453, 2005).

As noted in Chapters I and II, Hawai‘i’s coastal zone includes the entire state and the area extending seaward from the shoreline to the limit of the state’s police power and management authority, including the United States territorial sea. To better understand the geographical boundaries of Hawai‘i’s coastal zone – landward and seaward – the following sections describe and explain the different land use districts, management areas, and Areas of Particular Concern across the state.

LOCATION AND TOPOGRAPHY

Described by Mark Twain as “the loveliest fleet of islands that lies anchored in any ocean,” 137 islands encompass a land area of 6,422.6 square miles in the north central Pacific Ocean approximately 2,400 miles from the west coast of the continental United States (DBEDT, 2006). Stretching from southeast to northwest, Hawai‘i has a general coastline of 1,052 miles consisting of eight major islands: ***Ni‘ihau, Kaua‘i, O‘ahu, Moloka‘i, Lāna‘i, Kaho‘olawe, Maui, and Hawai‘i*** (maps available at <http://hawaii.gov/dbedt/gis/>). The climate of the islands features mild temperatures, moderate humidity and cooling trade winds.

The islands are grouped into four counties: the City and County of Honolulu (O‘ahu and the Northwestern Hawaiian Islands excluding Midway), the County of Hawai‘i (Hawai‘i island), County of Maui (islands of Maui, Moloka‘i, Lāna‘i, and Kaho‘olawe – the latter uninhabited), and County of Kaua‘i (islands of Kaua‘i, Ni‘ihau, Lehua, and Kau‘la – the latter two uninhabited). With a geographical size of 596.7 square miles, the City and County of Honolulu is only third largest in size; however, it has nearly three-fourths of the State’s population (DBEDT, 2006). Although O‘ahu is the center of business and government for the State of Hawai‘i, it is also home to pristine coastal areas such as Hanauma Bay and the Waikīkī Marine Life Conservation Districts. Of course, the coastal zone also includes vital areas of commerce, such as harbors and the Honolulu International Airport.

With over 4,028 square miles, the County of Hawai‘i has the largest land area in the Hawaiian chain (DBEDT, 2006). The “Big Island,” as it is known to residents, was formed by five volcanoes, two of which are still active – Mauna Loa and Kīlauea. The Big Island is known for the Hawai‘i Volcanoes National Park, Akaka Falls, Pu‘uhonua o Honaunau National Historical Park (City of Refuge), Pu‘ukohola Heiau National Historic

Site, and Lapakahi State Historic Park. These historic resources are essential to the preservation of the Hawaiian culture and history. The island's primary residential and economic areas – such as the county seat of Hilo or the resorts along the Kona and Kohala coasts – also border the shoreline.

The County of Kaua'i includes the islands of Kaua'i, Ni'ihau, and uninhabited Lehua and Ka'ula. The islands have a combined land area of 552.3 square miles (DBEDT, 2006). Geologically, Kaua'i is the oldest of Hawai'i's main islands and the site of the first landing by Captain James Cook in 1778. Kaua'i is known for its scenic wonders, which includes Waimea Canyon, Hanalei Valley, Koke'e State Park, Fern Grotto, the Kalalau Valley, and many stunning beaches. The Hanalei Valley was the site of numerous traditional fishponds, important historical and cultural resources that need be preserved and protected. Again, most of the island's visitor, residential, and transportation activities are also concentrated along the ocean.

The islands of Maui, Lāna'i, Moloka'i, and the former US Naval bombing target Kaho'olawe, comprise the County of Maui. It is the second largest county in the state with a land area of 1,159.3 square miles (DBEDT, 2006). Maui, also known as the "Valley Isle," is the economic center and seat of county government. It has a land area of 727.2 square miles. Residents and visitors are drawn to the historic whaling town of Lahaina, the winding road to Hāna, and the beaches of the Ka'anapali coast. Maui also has a whale sanctuary that provides a safe haven for humpback whales which use Hawai'i's waters for birthing during the winter months. The designation of certain ocean waters around Maui as a whale sanctuary supports marine life conservation efforts at the local, national, and global levels. Much of Maui's residential growth and visitor industry resources are located along the leeward shores stretching from Mākena in the south to Kapalua in the north.

POPULATION

All of Hawai'i's population resides in the coastal zone. The State's residential population has grown from 771,600 in 1970 to an estimated 1,283,400 in 2007, a 66% increase. The average visitor census (i.e., number of tourists present on any day) in the same period grew from about 37,600 to 185,700, a 500% increase. Both visitor and residential growth have been occurring more rapidly on the neighbor islands than on O'ahu in recent decades. More detailed breakdowns of the state's residential and visitor populations are available at: <http://hawaii.gov/dbedt/info/economic/databook/>.

Although Hawai'i's growing economy and population are associated with a sustained and sometimes increased standard of living, they also bring increasing demand for development of coastal land. Such demand increases pressure on marine and coastal resources, existing infrastructure, and water and land use. As population density increases along shoreline areas, construction of seawalls and other structures to protect property has become one of the most serious coastal issues in the state. The level of resort development and influx of visitors in coastal areas have resulted in coastal water quality problems, as well as coastal erosion and beach loss.

These issues will continue for the foreseeable future. While the *rate* of growth in percentage terms is slowing, the *absolute amount* of growth is expected to remain significant. The Hawai'i State Department of Business, Economic Development, and Tourism (DBEDT) forecasts a year 2035 state residential population of 1,685,200. This is an increase of 400,000 people over the 2007 level, roughly the same absolute level of growth experienced in the preceding 28 years. The maturing visitor industry is projected to have less growth, reaching 245,765 in 2035. This 28-year increase of about 61,100 daily tourists is only about half the net change from the previous 28 years, but it is still very close to the total number of visitors present in the counties of Maui and Kaua'i on any given day in 2007. For more information about DBEDT forecasts, see: http://hawaii.gov/dbedt/info/economic/data_reports/2035LongRangeSeries/.

To address issues associated with increasing population, the Hawai'i CZM Program works with its partners to minimize the impacts of population growth on coastal resources to ensure that its multiple objectives – including responsible development, public access, public safety, and protection of recreational as well as marine resources – can be achieved. Because our coastal areas are places to live, as well as work and play, the Hawai'i CZM Program recognizes the role of residents as integral partners in the successful implementation of CZM projects and activities.

LAND USE AND ENVIRONMENTAL MANAGEMENT SYSTEM

To provide for the wise use of Hawai'i's resources and guide the future development of the state, the Hawai'i Legislature enacted Chapter 226, HRS, which set forth the Hawai'i State Plan. The plan identifies major statewide priority concerns. The plan seeks to direct efforts that support the prudent use of Hawai'i's land-based, shoreline, and marine resources and protection of Hawai'i's unique and fragile environmental resources. To achieve the plan's objective of protecting the State's natural resources, a number of State agencies and programs work together through an extensive land use and environmental management system. Two key elements of that system are Hawai'i's CZM and land use laws.

Both the Hawai'i CZM and land use laws provide guidelines on permissible land and water uses and appropriate activities in suitable locations. Permissible uses not only protect resources in the conservation district, but direct development, agriculture, and residential activities into appropriate areas. According to Chapter 205, HRS, lands in the State are designated into one of four districts: **urban, rural, agricultural, and conservation** (maps available at http://luc.state.hi.us/luc_maps.htm). The agency responsible for amending changes to the districts is the State Land Use Commission (LUC).

The urban district, which comprises about six percent of the State, includes areas with high concentrations of people, structures and services as well as vacant areas with potential for future development. Each county has jurisdiction over urban districts. County ordinances and rules cover permissible land uses in urban districts.

Small farms intermixed with low-density residential lots with a minimum size of one-half acre comprise the majority of land in the rural district. The counties and the LUC share

Conservation districts include areas necessary for:

- “protecting watersheds and water sources;
- “preserving scenic and historic areas;
- “providing park lands, wilderness, and beach reserves;
- “conserving indigenous or endemic plants, fish, and wildlife, including those which are threatened or endangered;
- “preventing floods and soil erosion;
- “forestry;
- “open space areas whose existing openness, natural condition, or present state of use, if retained, would enhance the present or potential value of abutting or surrounding communities, or would maintain or enhance the conservation of natural or scenic resources; areas of value for recreational purposes; other related activities; and other permitted uses not detrimental to a multiple use conservation concept.”

jurisdiction over land use in the rural district. Under broad guidance of the LUC, counties have the prerogatives to impose more specific and stricter requirements over rural lands. Currently, less than one percent (only 0.26%) of the lands in the State is classified as rural.

Agricultural districts include areas suited for cultivation of crops, aquaculture, raising livestock, wind energy facility, timber cultivation, and agriculture-support activities (i.e., mills, employee quarters, etc.). Although there has been a decline in pineapple and sugarcane production, 47% of the lands across the State are designated agricultural.

Lands with existing natural forests and water reserve zones are in the conservation district. This district helps protect watersheds and water resources, scenic and historic areas, parks, wilderness, open spaces, recreational areas, habitats of endemic plants, fish and wildlife, and all submerged lands. It encompasses nearly 48% of the land mass. The Department of Land and Natural Resources (DLNR) manages the conservation district and its uses.

Permissible uses in the district are further discussed in the ***Areas of Particular Concern and Priority Uses*** section of this chapter.

COASTAL ZONE BOUNDARIES

The CZMA requires each qualifying state to identify the inland and seaward boundaries of its coastal zone management area (15 CFR Parts 923.31 and 923.32). The Code of Federal Regulations specify that ***areas surrounded by water on all sides such as the Hawaiian Island chain must be included in their entirety as the coastal zone***, except when uses of interior portions of the islands do not cause direct and significant impacts to coastal waters. In particular, 15 CFR Part 923.32 specifies that the

seaward boundaries for states adjacent to the Pacific Ocean are the outer limit of state title and ownership under the Submerged Lands Act (48 USC §§1301, 2005). By these federal guidelines, Hawai'i's coastal zone management area includes ***all lands of the state and the area seaward from the shoreline to the limit of the state's police power and management authority, including the U.S. territorial sea.***

The federal regulations also state that boundaries of the coastal zone must "exclude lands owned, leased, held in trust or whose use is otherwise by law subject solely to the discretion of the federal government, its officers or agents." The exclusion of federal lands, however, does not exclude federal agencies from the obligation of complying with the consistency provisions of Section 307 of the CZMA when their actions produce impacts relative to the federally approved CZM objectives and policies in the state's CZM area.

Federally sanctioned activities, specifically those with spillover effects to the state's coastal zone, must conform to the state's federally approved enforceable CZM objectives and policies through the federal consistency review process discussed in Chapter IV.

Inland and Seaward Boundaries

Hawai'i is one of seven coastal states that have designated the entire state as a coastal zone. The federally-approved Hawai'i CZM Program boundary follows the three nautical miles limit for the coastal zone seaward boundary. However, as described in Chapter II, State law also includes the area extending seaward from the shoreline to the limit of the State's police power and management authority, including the United States territorial sea.

Boundaries of Federally-Excluded Lands

Lands controlled by a federal agency in Hawai'i are excluded from the coastal zone. While the federal government retains authority over these lands, that authority is not absolute. State and federal agencies collaborate through the federal consistency review process on any proposed activity or development project on federal lands which may have a substantial impact on the coastal zone. Chapter IV provides more discussion of the federal consistency review process.

The amount of federally excluded lands varies by county and controlling federal agency. For example, the U.S. Postal Service retains the most exclusion because it controls each and every post office in the state, totaling more than 100 individual sites. The Department of Defense, which oversees the different branches of the military in Hawai'i controls more than 200,000 acres of land in the main Hawaiian Islands. A list of the federal-excluded lands in Hawai'i by agency can be obtained from the Hawai'i CZM Program.

SPECIAL MANAGEMENT AND SHORELINE SETBACK AREAS

To avoid permanent losses of valuable resources and to ensure that adequate access to beaches, recreation areas, and natural reserves is provided, special management areas (SMAs) are designated on each island (Section 205A-21, HRS). Special management areas include lands extending inland as delineated on maps filed with the lead agency (see Figure 4). Initially established with a minimum of 100 yards inland from the shoreline, in some areas, the boundary was reduced to coincide with the nearest coastal road as a more reasonable and identifiable landmark. In the City and County of Honolulu, for instance, the SMA boundary is typically established one lot *mauka* (inland) of the coastal highway, rather than being aligned with the nearest coastal road. In many other areas, the boundary extends inland far beyond the minimum, up to several miles.

The SMA is a subset of the coastal zone area. Each county is responsible for establishing special management areas where current and future developments may have significant impact on coastal resources qualities (e.g., negative impacts on drainage, view planes, historic and cultural artifacts, coastal erosion, and shoreline access).

The SMA does not include any areas or waters seaward of the shoreline. Beyond the shoreline, the State has jurisdiction. In general, the shoreline on one side and the nearest State highway on the other side bound the SMA. In most cases, the SMA includes coastal roads, natural preservation areas, resort areas, residential areas, and seismic hazard areas.

The State has 230,433 acres of special management areas. The County of Kaua'i has the smallest portion – 19,212 acres of SMA. The City and County Honolulu and the County of Maui have 37,724 acres and 75,296 acres of SMA, respectively. County of Hawai'i has the largest special management area with 98,201 acres. The counties are empowered to expand their SMA boundaries at any point in time provided that they file the revised maps with the lead agency. However, boundary contractions require review and approval by the lead agency.

In support of the objectives of the SMA and to provide protection of life and property from coastal hazards, the shoreline setback area (SSA) was established under Section 205A-43, HRS, as a subset of the SMA. The shoreline setback line is established at a minimum of 40 feet from the shoreline, with allowances to 25 feet from the shoreline under certain circumstances. Similar to the SMA, each county may expand the setback area beyond the State's minimum requirements. The County of Maui, for example, expanded its SSA to foster greater protection from coastal hazards such as floods, storm surge, high surf and erosion. In the City and County of Honolulu, the minimum shoreline setback area has actually been 60 feet for subdivision lots created since 1994. For lots created prior to 1994, the setback is still 40 feet.

Significant restrictions apply to the types of activities, structures and developments permitted within the SSA. Only minor activities and removable structures of less than \$500,000 are permitted. The restrictions implemented in the SSA are intended to maximize protection from coastal hazards and erosion while preserving shoreline access, aesthetic, and coastal amenities for the public.

AREAS OF PARTICULAR CONCERN AND PRIORITY USES

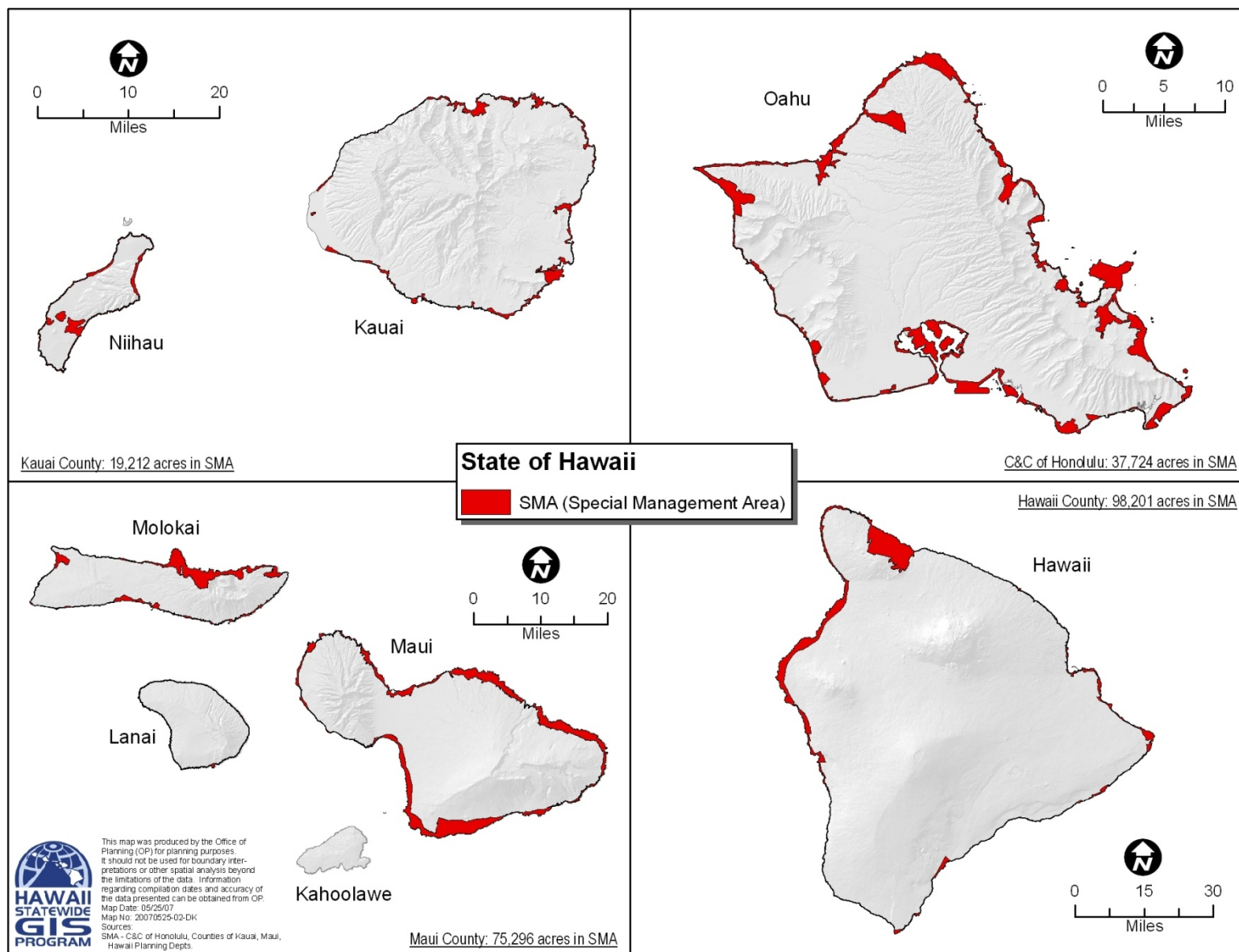
The CZMA requires coastal programs to include an inventory and designation of “Areas of Particular Concern” (APCs) within the coastal zone (15 CFR Part 923.21). The designation of Areas of Particular Concern recognizes that while the entire coastal zone area is important, certain areas may have greater significance or are more vulnerable that they deserve more extensive protection. The APCs may include:

- “Areas of unique, scarce, fragile or vulnerable natural habitat; unique or fragile, physical, figuration; historical significance, cultural value or scenic importance;
- “Areas of high natural productivity or essential habitat for living resources, including fish, wildlife, and endangered species and the various trophic levels in the food web critical to their well-being;
- “Areas of substantial recreational value and/or opportunity;
- “Areas where developments and facilities are dependent upon the utilization of, or access to, coastal waters;
- “Areas of unique hydrologic, geologic or topographic significance for industrial or commercial development or for dredge spoil disposal;
- “Areas or urban concentration where shoreline utilization and water uses are highly competitive;
- “Areas where, if development were permitted, it might be subject to significant hazard due to storms, slides, floods, erosion, settlement, salt water intrusion, and sea level rise; and
- “Areas needed to protect, maintain or replenish coastal lands or resources including coastal flood plains, aquifers and their recharge areas, estuaries, sand dunes, coral and other reefs, beaches, offshore sand deposits and mangrove stands.”

Most of Hawai‘i’s APCs are geared towards the preservation and restoration of areas with significant conservation, recreational, ecological and aesthetic values. General provisions for the use and protection of these areas are included in objectives and policies of the Hawai‘i CZM Program as described in Chapter II. However, additional and more specific use restrictions may be mandated by specific area plans and zone designations

At present, the APCs include the Shoreline Setback Areas (SSAs) described in the previous section, the Natural Area Reserves System (NARS), the Marine Life Conservation District (MLCD), Estuarine Reserve and Wildlife Sanctuaries (ERWS), and Community Development Districts (CDD). These areas are managed by State and

Figure 4. Special Management Areas in Hawai'i.



county agencies under the Hawai'i CZM Program network umbrella. Hawai'i's APCs and their priorities of use are described below and conceptually mapped in **Appendix III** through **VI**.

Natural Area Reserves System

Hawai'i possesses unique natural resources, such as geological and volcanological features and distinctive marine and terrestrial plants and animals, many of which occur nowhere else in the world, and are highly vulnerable to loss by the growth of population (Section 195-1, HRS). To protect and preserve these unique natural assets, and to provide base lines against which changes are being made in the environments, the Natural Area Reserves System (NARS) was established.

The Department of Land and Natural Resources through its Division of Forestry and Wildlife (DOFAW) manages the State's 20 NARS. The agency determined the following priority of uses for more than 123,431 acres of natural area reserves:

- **High Priority:** "Uses which preserve and enhance the existing ecosystems, the areas geological features, historic resources, and endangered species."
- **Low Priority:** "Uses generally prohibited by the Department of Land and Natural Resources' administrative rules including harm to plant or animal life, construction, and polluting activities."

The reserves include diverse areas ranging from marine and coastal environments to lava flows, tropical rainforests, and even an alpine desert. Within these areas, rare plants and animals can be found, many of which are on the edge of extinction. The reserves also protect some of the major watershed areas which provide vital sources of fresh water. The natural area reserves statewide are as follows:

- **City and County of Honolulu:** Mount Ka'ala, Ka'ena Point, Pahole
- **County of Hawai'i:** Manukā, Mauna Kea Ice Age, Kahauale'a, Kīpāhoehoe, Laupāhoehoe, Pu'u Maka'ala, Pu'u O 'Umi, Waiākea 1942 Lava Flow
- **County of Kaua'i:** Hono O Nāpali, Ku'ia
- **County of Maui:** 'Āhihi-Kīna'u, Hanawi, Kanaio, West Maui, Oloku'i, Pu'u Ali'i, Nakula

To protect and manage them for future generations, DOFAW engages management teams to control the encroachment of non-native plants and animals which threaten the existence of the natural biota on the reserves. A more detailed description of NARS and current activities conducted within the reserves are available at <http://www.state.hi.us/dlnr/dofaw/nars/narsfr.html>.

Marine Life Conservation District

Hawai'i's coastal waters feature different habitats, each displaying a wide array of marine life as described in Chapter II. These habitats and resources have always been

important in the lifestyles of Hawai'i's people. Recreational fishing is enjoyed by many local residents. Snorkeling and scuba diving are popular activities with residents and tourists, and they offer excellent opportunities to see reef fish in their natural environment. Managing activities affecting these resources for the enjoyment of the current and future generations is essential. To ensure that these resources are sustainable, Chapter 190, HRS established the Marine Life Conservation Districts (MLCD).

The MLCD is the NARS ocean counterpart. The MLCD seeks to balance the needs of different user groups and the welfare of the marine environment on which its inhabitants depend. To ensure that this balance is achieved, the following priorities of use were established:

- **High Priority:** "Uses which preserve, protect, conserve, and or propagate marine resources and geological features."
- **Low Priority:** "Uses generally prohibited by the Department of Land and Natural Resources' administrative rules including polluting, construction, and certain types of fishing."

Currently, there are 11 MLCDs on three islands – Hawai'i, Maui, and O'ahu. The sites are most popular for snorkeling, diving and underwater photography. DLNR limits fishing and other consumptive uses in these sites to provide fish and other aquatic life with a protected area in which to grow and reproduce. More detailed description of the sites listed below is available at <http://hawaii.gov/dlnr/dar/mlcd/index.htm>.

- **City and County of Honolulu:** Hanauma Bay, Pupukea, Waikīkī
- **County of Hawai'i:** Keakakekua Bay, Lapakahi, Old Kona Airport, Wai'alae Bay, Waiopae Tidepools
- **County of Maui:** Honolua-Mokūle'ia Bay, Mānele-Hulopo'e, Molokini Shoal

Together with DLNR, the Hawai'i CZM Program reinforces the conservation and protection of endangered species within the Marine Life Conservation Districts through its authorities and enforceable policies. **Appendix II** lists the network of resource agencies related to coastal ecosystems and marine resources.

Estuarine Reserves and Wildlife Sanctuaries

The National Estuarine Research Reserves System (NERRS) defines **estuary** as part of a river or stream or other body of water having unimpaired connection with the open sea, where the sea water is measurably diluted with fresh water derived from land drainage (15 CFR Part 921.2). **Estuarine sanctuary**, on the other hand, refers to a research area which may include any part or all of an estuary, adjoining transitional areas, and adjacent uplands, constituting to the extent feasible a natural unit, set aside to provide scientists and students the opportunity to examine over a period of time the ecological relationships with the area (USGS, 2007). Unlike other coastal states, Hawai'i does not have many estuaries. The **Waihe'e Coastal Dunes and Wetlands**

Reserve on Maui is a prominent estuarine reserve that is habitat to at least six endangered birds, two endangered plants, and two endangered insects (Szuster and Ghen, 2006). Other notable estuaries in the state include: **Mū'olea Point**, **Pūpūkea-Paumalū Natural Area**, **Honu'apo Estuary**, and **Kīlauea Bay**.

Similar to estuarine reserves, wildlife sanctuaries are home to many native plants and animals endemic to Hawai'i. Estuarine reserves and wildlife sanctuaries help protect rare ecosystems that are vital to maintaining a healthy and sustainable Hawai'i. The 143-acre **Kanaha Ponds Wildlife Sanctuary** on Maui is one of the important sanctuaries in Hawai'i. It is a habitat and nesting site for endangered and migratory birds. The **Paikō Lagoon Wildlife Sanctuary** on O'ahu is another prominent sanctuary.

These systems across the state are managed by the Department of Land and Natural Resources. Based on the provisions of Chapter 195D, HRS, the DLNR established the following priorities of use:

- **High Priority:** "Uses which preserve and enhance indigenous wildlife in the area and uses which preserve, protect, conserve or study the area's historic resources and native animal and plant communities."
- **Low Priority:** "Uses generally prohibited by the Department of Land and Natural Resources' administrative rules including polluting, construction, and certain types of fishing and hunting."

The following web pages – http://hawaii.gov/dlnr/dar/fish_regs/otherareas.htm and http://hawaii.gov/dlnr/dar/streams/stream_natives.htm – provide additional discussion and maps of the estuarine reserves and wildlife sanctuaries in Hawai'i.

Community Development Districts

Because of the potential impact urban developments have on coastal resources, the Hawai'i CZM Program included special urban areas of value to the list of Areas of Particular Concerns. These areas are known as **Community Development Districts (CDD)**.

CDDs are lands designated by the State government in support of alternative methods for managing and financing infrastructure required to support community development. The Hawai'i Community Development Authority (HCDA) manages the State's CDDs. Because of the following priority of uses, Chapter 206E, HRS, established **Kaka'ako** and **Kalaeloa** as Hawai'i's CDDs:

- **High Priority:** "Mixed uses providing significant employment and low-cost housing, parks and open space, and enhancing compatible, industrial and commercial activity."

- **Low Priority:** “Uses incompatible with surrounding districts which would detract from historic and/or cultural resources, or decrease utilization of public transportation or pedestrian facilities.”

The 670-acre Kaka‘ako district is centrally located in Honolulu proper and in close proximity to the central business district, the government center, commercial, industrial, and market facilities. Because of its present economic importance to the State in terms of industry and subsequent employment, there is a need to preserve and enhance its value and potential.

The newest CDD is located at Barbers Point on the western end of O‘ahu. After the 1999 closure of the Barbers Point Naval Air Station, the **Kalaeloa Community Development District** was established. The Kalaeloa district is important to Hawai‘i’s economy as it has harbor facilities that can handle large cargo containers. These facilities are essential for commerce and development. The Hawai‘i CZM Program collaborates with its partners to ensure that the value of community development districts are preserved and enhanced. The HCDA website (<http://www.hcdaweb.org/>) provides more information on Kaka‘ako and Kalaeloa CDDs.

Since 1990, the Office of Planning (OP) has been designated the special management area authority regulating development in community development districts. The Office of Planning, through the Hawai‘i CZM Program, has the administrative authority to process SMA and Shoreline Setback applications for proposed developments within a CDD. No development can occur in the Kakaako or Kalaeloa unless the Hawai‘i CZM Program first issues a SMA permit.

Other Areas of Particular Concern

In addition to establishing APCs for preservation and restoration, the CZMA allows CZM Programs to designate other areas that require additional or special management (15 CFR Part 923.23). With due consideration to the sensitivity and fragility of the coastal zone, the Hawai‘i CZM Program also considers other coastal habitats and ecological, historic, and cultural sites as Areas of Particular Concern. These include regulated fishing areas, wetlands, flood hazard zones, historic and cultural sites, and priority watershed areas.

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CHAPTER IV: THE CZM CONCEPT AND PROMOTING STEWARDSHIP

CHAPTER SUMMARY

The Hawai'i CZM Program has been the State's prime advocate of sustainable resource use and conservation on the islands since 1978. Throughout its history, the CZM projects and activities have helped shape Hawai'i's approach to coastal and ocean resource management.

By working closely with its partners, the Hawai'i CZM Program engages federal, state, and local governments, as well as the public, to work together for sustainable management of the state's coastal resources. By paying close attention to activities in the special management area (SMA), making sure that projects on excluded federal lands comply with CZM policies through the federal consistency process, and ensuring that energy facilities are located appropriately, the CZM network works to keep Hawai'i's coastal zone resources healthy for present and future generations. Integrating the diverse programs and activities of the network is possible in an ecosystems approach whereas plans based solely on functional, species, or resource-specific perspectives may be less efficient.

In the past 35 years, the Hawai'i CZM Program focused on projects and activities related to protection and enhancement of public access, mitigation of coastal hazards impacts, community outreach and education, and implementation of state-of-the-art tools to better manage the coastal zone. Building community resilience to tsunamis and earthquakes not only protects natural resources, but also helps save lives. Community-based management activities such as the Wai'anae Ecological Characterization (WEC) project engage the public to become active stewards of their coastal resources.

With the state's dynamic economy and diverse population, the Hawai'i CZM Program has advocated tailoring projects and activities to the needs of the people as a key element of success. Public outreach and education have been at the heart of CZM projects and activities. Through the distribution of educational materials, public workshops, and policy dialogues for people and organizations concerned with coastal issues, the CZM Program actively promotes public involvement in the coastal management process.

Looking forward to another 35 years of leadership, the Hawai'i CZM Program remains committed to the promise of helping Hawai'i and its people to sustainably manage coastal resources for the benefit of present and future generations.

THE CZM CONCEPT AND PROMOTING STEWARDSHIP

The Hawai'i CZM Program is entrusted with various management activities – recreational, economic, and conservation – within the coastal zone. During the past 30 years, it has initiated and implemented projects and activities to achieve both State and national CZMA policies.

CZM NETWORK IN ACTION

The CZM Program works with its federal, state, and local partner agencies to achieve its objectives through a number of regulatory processes, including those related to the special management areas (SMA), energy facility siting, federal consistency, shorefront access and protection, and shoreline erosion and mitigation. (See Chapter II for more details about the CZM network). This section explains:

- the Special Management Area permitting process;
- process for siting energy facilities;
- shoreline access and protection planning;
- shoreline erosion and mitigation planning; and
- the federal consistency process.

Special Management Area Permit Process

Section 205A-22, HRS, establishes special controls on development within a designated area along the shoreline known as the special management area (SMA). As mentioned in previous chapters, special controls are enforced within the SMA to avoid permanent losses of valuable resources and foreclosure of management options, as well as to ensure that adequate access – by dedication or other means – to publicly owned or used beaches, recreation areas, and natural reserves is provided. Activities and operations on land, water, or seabeds within the SMA are subject to special controls known as the SMA permitting process.

The SMA permit is an important management tool of the Hawai'i CZM Program. The system is unique because it provides overarching guidance through State law for managing coastal development. The SMA permit assures that permitted uses in the SMA are designed and carried out in compliance with CZM objectives and policies and SMA guidelines. Each county independently carries out the SMA program under its own respective ordinances and rules under the general prescriptions in the State law. The process begins with the submission of a permit application by a landowner or developer. The county authority determines if the proposed development or activity requires a minor or a major SMA permit and decides whether a permit should be issued.

An **SMA minor permit** is required for a development within the SMA with a construction valuation of \$500,000 or less, so long as it does not have significant adverse and/or cumulative impacts relative to the CZM objectives and policies (Hawai'i CZM Program,

2006). A public hearing is not necessary for SMA minor permits; however, SMA minor permit notices are published in the Office of Environmental Quality Control's (OEQC) *Environmental Notice* twice a month. The notices are available online at: <http://www.state.hi.us/health/oeqc/index.html>. The minor permits are issued by the county planning director.

When a proposed development or activity is valued at greater than \$500,000 or is deemed to have potential significant adverse and/or cumulative impacts, an **SMA major permit** is required. Development in the geographic SMA must be consistent with CZM objectives and policies in general and the SMA guidelines in particular. A summary of the SMA major permit process is provided in Figure 5 (Hawai'i CZM Program, 2006).

Process for Siting Energy Facilities

To protect and enhance Hawai'i's environment and reduce the drain on non-renewable resources, the CZM Program collaborates with DBEDT and other State agencies to encourage efficient use of energy resources (Chapter 344, HRS). The appropriate siting of energy facilities across the State is one way to promote efficient energy resource use. Section 226-18, HRS, presents objectives and policies for energy facility systems in Hawai'i. It states that planning for the State's facility systems with regard to energy shall be directed toward achievement of the following objectives:

- "Dependable, efficient, and economical statewide energy systems capable of supporting the needs of the people
- "Increased energy self-sufficiency where the ratio of indigenous to imported energy use is increased
- "Greater energy security in the face of threats to Hawai'i's energy supplies and systems
- "Reduction, avoidance, or sequestration of greenhouse gas emissions from energy supply and use."

As the State's energy resources coordinator, the Department of Business, Economic Development, and Tourism (DBEDT) supports the objectives under Section 226-18, HRS, by developing a State program for energy planning and conservation. The program consists of "short- and long-range planning for development and promulgation of methods to encourage voluntary conservation of gasoline, diesel oil, natural gas, propane, heating oil, other fuels, and electrical energy, and efficient development of new or alternative sources of such fuels and energy" (Section 201-12, HRS). DBEDT also coordinates efforts of all public or private agencies having to do with exploration, research, distribution, conservation, and production of energy resources in Hawai'i (Section 196-4, HRS).

In addition to DBEDT, other agencies with regulatory duties regarding energy facility siting and construction are:

Figure 5. SMA Major Permit Process



Source: Hawai'i CZM Program (2006).

- **Department of Health (DOH)** – implements federal and State air, water, noise and hazardous waste regulations (Chapter 344, HRS).
- **Office of Environmental Quality Control (OEQC)** – participates in planning, evaluation, and permitting of energy facilities (Chapter 343 and 344, HRS).
- **Office of Planning (OP)** – facilitates and coordinates Coastal Zone Management regulations (Chapter 205A, HRS).
- **Department of Land and Natural Resources (DLNR)** – oversees ocean, reservoir and geothermal permitting and stewardship of State lands (Chapter 196D).
- **County Governments** – implements energy codes and issues zoning, SMA, and building permits. The county governments play a big role in regulating the location of energy facilities through comprehensive planning and zoning policies (Chapter 46, HRS).

Most energy siting decisions trigger various State or county **planning and zoning regulations**. Chapter 205, HRS, tasks the Land Use Commission (LUC) with regulating new energy facilities based on existing planning and land use policies. Subsequent implementation of county zoning laws ensures that competing land uses are minimized by placing facilities in remote locations.

In addition to planning and zoning regulations, energy facility development in Hawai'i requires a review of potential impacts to natural resources as well as air and water quality. Since energy facilities often require access to or use of State waters or conservation districts, the DLNR oversees ***preservation and enhancement of natural resources***. Also, since energy facilities potentially have impacts on both air and water quality during their construction and operation, the DOH ensures that ***air and water pollution*** associated with these projects are kept to a minimum.

If a proposed energy facility would be constructed within a county's SMA, project proponents need to seek an SMA permit through that county's planning department. In addition, counties may require building, noise, and pollution permits.

Throughout this process, public participation is an important element. State and county agencies seek public input through public hearings and notices. The public may comment on land use issues, potential environmental impacts, and other socio-economic related issues. Public comments help determine whether permits are expedited, delayed, denied, or are made subject to specific conditions.

Shorefront Access and Protection Planning

Pursuant to Section 205A-2, HRS, the Hawai'i CZM Program is obligated to assure the provision of adequate, accessible, and diverse recreational opportunities in the coastal zone management area by:

- "Protecting coastal resources uniquely suited for recreational activities that cannot be provided in other areas;
- "Requiring replacement of coastal resources having significant recreational value including, but not limited to, surfing sites, fishponds, and sand beaches, when such resources will be unavoidably damaged by development; or requiring reasonable monetary compensation to the state for recreation when replacement is not feasible or desirable;
- "Providing and managing adequate public access, consistent with conservation of natural resources, to and along shorelines with recreational value;
- "Providing an adequate supply of shoreline parks and other recreational facilities suitable for public recreation;
- "Ensuring public recreational uses of county, state, and federally owned or controlled shoreline lands and waters having recreational value consistent with public safety standards and conservation of natural resources;
- "Adopting water quality standards and regulating point and non-point sources of pollution to protect, and where feasible, restore the recreational value of coastal waters;
- "Developing new shoreline recreational opportunities, where appropriate, such as artificial lagoons, artificial beaches, and artificial reefs for surfing and fishing; and
- "Encouraging reasonable dedication of shoreline areas with recreational value for public use as part of discretionary approvals or permits by the Land Use

Commission, Board of Land and Natural Resources, and county authorities; and crediting such dedication against the requirements of section 46-6.”

To ensure that adequate shorefront and beach access is provided and protected, the Hawai‘i CZM Program collaborates with county and State agencies to manage and protect shorefront access sites. The counties manage development in the SMAs and most beach parks, while the DLNR is responsible for State parks, marine life conservation districts, historic monuments, boating, and acquiring and maintaining public access to the sea, shorelines, and inland recreational areas. DLNR also oversees provision of public rights-of-way and transit corridors along the shoreline as indicated in Chapters 115 and 171, HRS.

In addition, Chapter 173A, HRS, bestows upon DLNR the responsibility to obtain “resource value lands” such as those with natural, environmental, recreational, scenic, and historic value. The law allows DLNR to gain access routes and create trails for public access. Public rights-of-way can also be obtained through various legal mechanisms such as “implied dedication, native Hawaiian rights, the ancient trail doctrine, and public trust doctrine.”

Through its partnerships with other State agencies and the counties, the CZM Program manages and protects shorefront access sites using county ordinances and rules and State statutes. The county planning departments manage and protect shorefront access through implementation of the provisions of Part II-Special Management Areas and Part III-Shoreline Setbacks of Chapter 205A, HRS. Additionally, Chapter 46, HRS, grants counties the right to require developers to dedicate land for public access by right-of-way or easement for pedestrian access as part of the subdivision approval process.

Shoreline Erosion and Mitigation Planning

Shoreline erosion is a significant challenge for Hawai‘i’s coastal zone. Hawai‘i’s coastal erosion rates generally range from 0.5 ft. to 1 ft. per year. Through both natural forces and human activity, approximately 25% of Hawai‘i’s beaches have been degraded over the last half century. Studies show that 24% of O‘ahu’s sandy beaches have been lost, and eight miles of beach on Maui were lost due to seawall construction on eroding shorelines (Surfrider Foundation, 2007).

The CZMA requires state management programs to include a planning process for assessing effects of shoreline erosion and studying ways to control or lessen the impact, and if possible, restore areas adversely affected by erosion (15 CFR Part 923.25). In response to this requirement, the Hawai‘i CZM Program has authorities and management techniques that are intended to minimize costs and extent of structural improvements needed to treat shoreline erosion problems.

To minimize substantial loss of Hawai‘i’s valuable shorelines and coastal resources, the State Legislature and county councils have adopted policies to respond to coastal

erosion and beach loss. The counties have particular responsibility for reducing coastal hazards under the provisions of the SMA permit process and the shoreline setback law. Specific county policies include Chapter 23, Shoreline Setbacks of the Revised Ordinances of Honolulu, which states that “it is a primary policy of the city to protect and preserve the natural shoreline, especially sandy beaches [...] to reduce hazards to property from coastal floods and erosion.”

By virtue of Chapter 205A, HRS, counties are also responsible for prohibiting any construction or activity within the shoreline area that may adversely affect beach processes, public access along the shoreline, and shoreline open space. The CZM Program also encourages counties to take into consideration inland activities which may have an impact on or be affected by shoreline retreat.

State agencies such as the DLNR also carry out policies aimed at preventing and reducing shoreline erosion. Chapter 183, HRS, governs DLNR’s authority to prevent activities such as construction of retaining walls, dredging, or grading on accreted land, which may interfere in the natural course of the beach. Underlying these policies are the environmental requirements under Chapter 343, HRS, also known as the environmental impact statement law, which requires proposed projects within the shoreline to prepare an environmental assessment to ensure that projects conform to relevant State and county policies.

The Hawai‘i CZM Program also teams up with federal agencies such as the Army Corps of Engineers to monitor and conduct projects to mitigate shoreline erosion. The Program and its partner agencies have published the ***Hawai‘i Coastal Erosion Management Plan*** (COEMAP), ***Hawai‘i Coastal Hazard Mitigation Guidebook***, and the ***Hawai‘i Erosion Alternatives*** to provide guidance to coastal property owners, government agencies, and coastal communities on the management of erosion problems.

Federal Consistency Process

The term “federal consistency” refers to the CZMA requirement that federal agency activities, federal license or permit activities, and federal financial assistance activities must be consistent with the enforceable policies of the coastal states’ CZM programs. The federal consistency program in Hawai‘i is administered by the Hawai‘i CZM Program. This sub-section explains:

- which actions are subject to the federal consistency process;
- the nature of the review process itself; and
- opportunities for public participation in the process.

Actions Subject to Federal Consistency

Federal Agency Activities: The CZMA federal consistency requirements apply to any functions performed by or on behalf of a federal agency and any federal development

projects. Federal agency activities and development projects that affect any land or water use or natural resource of the coastal zone must be consistent to the maximum extent practicable with the enforceable policies of the Hawai'i CZM Program.

Section 307 of the CZMA requires federal agencies to determine whether their activities will affect any coastal use or resource. Examples of activities that may have coastal effects are: the installation of navigational aids by the U.S. Coast Guard; road construction in national parks; military exercises; development of fisheries management plans by the National Marine Fisheries Service; construction of federal flood control projects; facility improvements at military bases; and disposal of hazardous waste by a contractor for a federal agency.

Federal agencies must submit their consistency determinations to the Hawai'i CZM Program at least 90 days prior to final approval of the activity. The Hawai'i CZM Program has 60 days from receiving a federal agency's consistency determination to review and concur with (or object to) the determination. Public notices of CZM consistency reviews of federal agency activities are published in *The Environmental Notice*, which is distributed by direct mail and posted on the OEQC website (<http://www.state.hi.us/health/oeqc/notice/index.html>).

Federal License or Permit Activities:

Federal consistency reviews are also required for non-federal parties seeking federal licenses or permits which affect any coastal use or resource. These activities must be fully consistent with the enforceable policies of the Hawai'i CZM Program. The Hawai'i CZM Program has identified federal licenses and permits which authorize activities that affect coastal uses and resources. For the list of federal licenses and permits that are subject to federal consistency review, *contact the Hawai'i CZM Program.*

Typical activities requiring a permit are:

- **utility line crossings of waterways**
- **dredging and excavation**
- **placement of rip-rap in streams**
- **site development fill for residential, commercial, or recreational uses.**

The most commonly reviewed federal permit is the Department of Army Permit, which is administered by the U.S. Army Corps of Engineers under Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act.

Applicants for federal licenses or permits must submit a CZM consistency certification to the Hawai'i CZM Program for review. The CZM Program has up to six months to concur with (or object to) an applicant's consistency certification. Public notices of CZM consistency reviews of federal permit activities are published in the State OEQC publication, *The Environmental Notice*. The federal permitting agency can grant its permit only when a consistency concurrence is issued by the Hawai'i CZM Program.

Federal Financial Assistance to State and Local Governments: When State and county agencies apply for federal financial assistance, the proposed activities must be fully consistent with the enforceable policies of the Hawai'i CZM Program. Federal agencies can grant federal funds only when a consistency concurrence has been issued by the Hawai'i CZM Program. Only federal assistance programs that have been identified by the Hawai'i CZM Program are subject to federal consistency review. Agencies applying for federal grants should contact the Hawai'i CZM Program to learn whether a federal consistency review is required. Public notices of CZM consistency reviews of federal assistance activities are published in the OEQC publication, *The Environmental Notice*.

The timeframe for consistency reviews of federal assistance proposals is not specified by federal regulations. The Hawai'i CZM Program generally takes about two months, on average, to complete reviews of federal assistance proposals.

Federal Consistency Review Process

The Hawai'i CZM Program implements the federal consistency review process in accordance with the CZMA and applicable federal regulations (15 CFR Part 930). Consistency of federal actions is evaluated on the basis of the federally approved enforceable policies of the Hawai'i CZM Program, which include the Hawai'i CZM law, Chapter 205A, HRS, as well as the enforceable policies of the State and county agencies of the Hawai'i CZM network. For an authoritative listing of those policies please contact the Hawai'i CZM Program at the Office of Planning.

The general administrative framework of the Hawai'i CZM Program's federal consistency review starts with review of the proposed activity and determination of what type of review is required. Early pre-application consultation with the Hawai'i CZM Program is strongly encouraged to facilitate the review process. Figure 6 on the following page shows the overall review process.

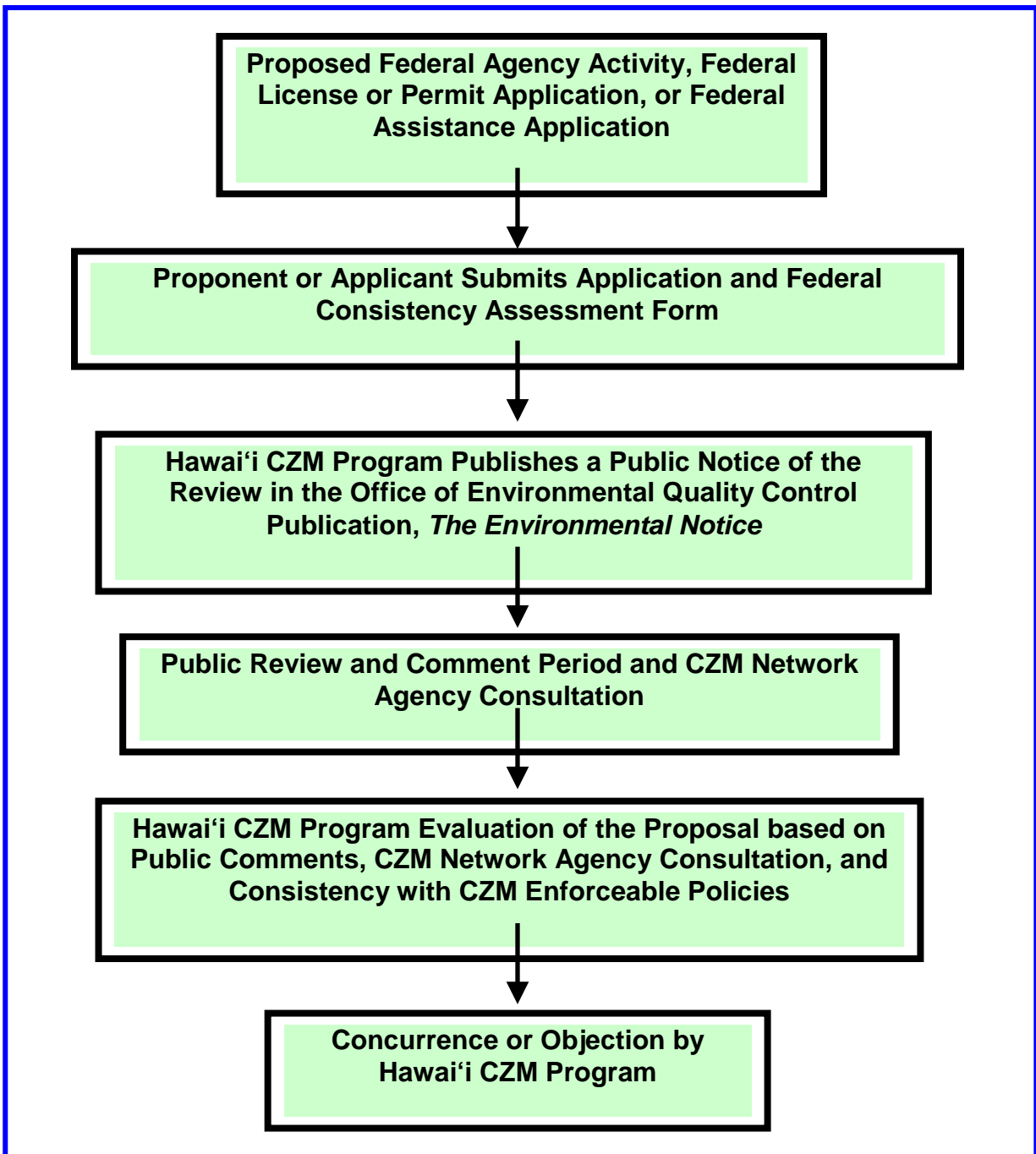
The federal consistency review is initiated by submission of a coastal consistency determination for a federal agency activity or a coastal consistency certification by applicants for federal licenses or permits and federal financial assistance. The Hawai'i CZM Program has an application form and an assessment form which may be used to provide basic information required for federal consistency review. These forms can be obtained from the Hawai'i CZM Program or the Hawai'i CZM website. The following website also contains additional information about the federal consistency review process: http://hawaii.gov/dbedt/czm/program/fed_con.shtml.

Public Participation in the Federal Consistency Decision

One of the key components of the Hawai'i CZM Program federal consistency review is public participation. To ensure that the public has an opportunity to participate, the CZM Program publishes a public notice of each federal consistency review in *The Environmental Notice* which is published twice a month and is distributed by direct mail

and posted on the OEQC website (<http://www.state.hi.us/health/oeqc/notice/index.html>).

Figure 6. Federal Consistency Review Process.



HAWAI'I CZM PROGRAM'S SUCCESS STORIES

For over three decades, Hawai'i has benefited from successful CZM Program efforts to protect, enhance, and manage our coastal resources. Much of the Program's most meaningful contributions occur behind the scenes. That is because the Program often coordinates and assists *other* departments and agencies with their work – providing the impetus, funding, and expertise needed for their own projects to succeed. The Program's achievements may be more indirect than direct, more derived from influence or encouragement than from clear-cut actions taken by the Office of Planning alone.

The most significant successes of the CZM Program are thus hard to quantify, but their impact is still significant. Among the most important of these are the changes in attitude towards coastal resource management. After all, coastal zone management is really about managing human activities that impact on coastal resources. What follows are brief descriptions of some of the better known and far reaching successes and activities of the Hawai'i CZM Program in:

- public stewardship and attitudes toward the coastal zone;
- public access;
- citizen participation, outreach, and education; and
- hazard mitigation.

Public Stewardship and Attitudes Toward the Coastal Zone

From its inception, the Hawai'i CZM Program has championed the classic Roman "public trust doctrine," which holds that the government is supposed to maintain certain resources for the public's use. However, the Hawai'i Program has also consistently advocated the idea that the ultimate "stewards" of coastal resources are not government officials, but the residents of affected communities.

"Stewardship doesn't reside in government; it resides at the community level where values are determined and impacts are felt."

- D. Tom, Hawai'i CZM Program Manager, (2007)

The CZM Program counts the following as some of its successes in advancing this philosophy –

Broadening public involvement in the SMA process: When the CZM Program was being established in the 1970s, the initial Special Management Area legislation required citizens to establish some sort of legal "standing" to intervene in, or otherwise challenge SMA permit approvals. The Hawai'i CZM Program encouraged liberal public involvement in SMA permit proceedings. In 1977, it also proposed the passage of Section 205A-6, HRS, a cause of action provision that allows any person to challenge any action or decision in circuit court on the basis of noncompliance with the CZM objectives and policies.

Public involvement in, and developer attitudes toward, public access: As described at more length below, the CZM Program worked with the counties in the 1980s to institutionalize public access to the beach or other natural assets. Above and beyond the legal accomplishments, the county access laws were largely shaped not by planning technicians alone, but by public input at numerous meetings. Retired Hawai'i CZM Program Manager Doug Tom recalls that developers initially questioned the rationale for access requirements. But over time, resort managers and other property owners learned that beach access was critical to establishing a sense of partnership with and acceptance by the community: "Today they no longer ask 'why?,' but rather 'how many and where?' That sort of human acceptance has been a tremendous shift in this state."

Converting the Ocean Resources Management Plan to a place-based philosophy: When the Hawai'i CZM Program began updating the old 1991 ORMP in the mid 2000s, stakeholders asserted loudly and clearly that the existing system was not working. The reason was that government agencies were enforcing standardized statewide policies and regulations that did not recognize the unique cultural and geographical characteristics of individual coastal communities. The new ORMP, therefore, developed policies and decision-making systems that were community-specific. The 2006 ORMP is discussed in further detail in Chapter V.

Public Access

The public's ability to access beaches and the ocean is a fundamental principle supported by the Hawai'i CZM law, Chapter 205A, HRS. The CZM Program believes Hawai'i was among the first states to ensure public access to beaches (as well as certain upland areas valued for subsistence and cultural purposes) by advocating legislation and imposing permit conditions.

In particular, Hawai'i was the first state – or among the very first – to ***institutionalize*** the concept of public access in county land use permit procedures. It is now accepted by all sectors of society that beaches are important components of the public domain.

The CZM Program originally worked with the County of Hawai'i to develop the first public access plan. Through a "gentlemen's agreement" and initial grants to the County of Hawai'i, the CZM Program supported the development of a prototype public access framework. This tested framework, combined with another series of planning grants, allowed the other counties to proceed with their own public access plans.

In the 1980s, the Hawai'i CZM Program collaborated with and supported county initiatives to develop countywide public access plans based on swimming, snorkeling, surfing, fishing, picnicking, gatherings of friends and family, cultural inspiration, and other recreational values and interests.

The CZM Program was very cautious in avoiding a centralized public access plan because it recognized the uniqueness of each island. By providing grants, the CZM Program helped each county think broadly and develop a plan with unique solutions that fit its individual situation, while still supporting the CZM general goals and objectives.

Unlike Hawai'i, where public access is incorporated into the State Constitution, other states may need to impose public shoreline access fees or tolerate a public and private ownership pattern that inhibits public access.

Public access and view plane studies were products of collaborative efforts with the counties.

Through the continuous access policy that the CZM Program helped institutionalize, one can theoretically walk around the entire island without being obstructed by private property owners. In practice, one vertical access point in Hawai'i may be worth more than 50 similar points in other states where parts of the shoreline area are privately held.

Over the years, the Hawai'i CZM Program has been consulted on public access policies by policy makers, news media, or private groups from many other states and even a number of foreign countries – including Okinawa, the national government of Japan, Korea, Australia, South Africa, and the People's Republic of China.

Citizen Participation, Outreach, and Education

Public outreach and education have been at the heart of the CZM Program since it began. Since 2002, the CZM Program has brought public participation, outreach and education to new heights by espousing community-based management activities such as the Wai'anae Ecological Characterization (WEC) project. The overall purpose of the project was "to create a 'living' product that summarizes socio-economic, physical, biological, historical, and cultural information for the Wai'anae *moku* along with Geographic Information System (GIS) data and resources." Numerous meetings with government agencies and community groups were held to develop the concept and a scope of work.

The CZM Program and its partners worked closely with the Wai'anae community to develop an information base that may be used within an *ahupua'a* management system. (The *ahupua'a* was the traditional Native Hawaiian land use unit extending from ocean to mountain, integrating coastal and inland resources). The information included:

- (1) historic and cultural information that may be used to develop a modern *ahupua'a* management framework;
- (2) key community issues regarding cumulative secondary impacts;
- (3) educational materials and outreach to build community consensus for an *ahupua'a* management framework and community resources management; and
- (4) a template for management to share with other communities statewide.

In conjunction with this information, the WEC produced a CD-ROM synthesizing physical, biological, cultural, historic, and spatial information in a website format. The information can be used to examine the effects of cumulative secondary impacts on coral and other living resources, as an educational tool for community planning and for other educational and decision-making activities. A WEC release event was also held in conjunction with the City and County of Honolulu's Sunset on the Beach in Wai'anae. Almost 1,000 WEC CDs were distributed to people attending the event. Another 500 CDs were given to libraries, schools, and public officials statewide.

The latest Ocean Resources Management Plan (ORMP) has been well received for its extensive efforts to obtain views and recommendations from stakeholders such as the Marine and Coastal Zone Advocacy Council (MACZAC), Hawai'i Ocean and Coastal Council (HOCC), ocean users, and environmental organizations. A workshop attended by more than 200 people statewide contributed information on issues, priorities, and recommendations for the ORMP. Hawai'i's efforts were mentioned in the "2007 US Ocean Policy Report Card" developed by the Joint Ocean Commission (a partnership of the U.S. Commission on Ocean Policy and the Pew Oceans Commission – see: <http://www.jointoceancommission.org/>).

In partnership with The Wildlife Society (Hawai'i Chapter) the CZM Program participated in a workshop on wetland management. The workshop was primarily attended by wetland managers and researchers. The CZM Program's role was to provide an overview of regulatory requirements in conjunction with the U.S. Army Corps of Engineers and the State DOH, Clean Water Branch. The CZM Program presentation on federal consistency included: (1) providing a general overview of the Hawai'i CZM Program, (2) explaining the basic procedures and requirements of federal consistency, and (3) meeting with individuals to discuss specific federal consistency procedures and requirements relevant to their projects.

Public outreach and education are ongoing activities in the CZM Program. Annually, the Program supports the development of related outreach and educational materials such as the 'Ōhi'a Productions' ***"In the Clear Blue Sea Educational Resource Guide"*** and ***"Wings of the Islands Educational Resource Guide,"*** and the OEQC online environmental impact assessment library. The Program also sponsors workshops and conferences such as the Pacific Rim Vessel Pollution Enforcement Seminar and helps finance the annual ***"Get the Drift and Bag It!"*** cleanup.

The CZM Program has been committed to effective integrated coastal resource management through management tools, regulatory processes, and, most important, active engagement with the community who are the true stewards of these vital resources. The CZM Program looks forward to the next 30 years, guided by the new course set forth in the Ocean Resource Management Plan.

Hazard Mitigation

Hawai'i is threatened by numerous hazards, many of which affect the nearshore area. These hazards include coastal erosion, earthquakes, tsunamis, hurricanes, sea level rise, flooding, subsidence, lava flows, and wildfires. These hazards can result in significant loss of life, property and environmental damage, business loss and interruption, and damage to historical and cultural resources. Recent natural disasters include Hurricane Iniki in 1992, the 2004 Mānoa floods, and the heavy rains and floods on Kaua'i in 2006. The magnitude 6.7 Kīholo earthquake of October 2006 was the most powerful seismic event in the United States that year.

As previously noted in Chapter II, one objective of the Hawai'i CZM law is to reduce hazard to life and property from tsunami, storm waves, stream flooding, erosion, subsidence, and pollution (Section 205A-2, HRS). A related objective deals with the improvement of the development review process in the management of coastal hazards. The hazard mitigation work of the Hawai'i CZM Program is focused on meeting these objectives to achieve greater community resilience to natural hazards.

The impacts of natural hazards can be lessened through a comprehensive hazard mitigation program that is implemented statewide. Injury and loss of life is lessened when a community is aware and knowledgeable as to what to do in the event of a hurricane, flood, earthquake, or tsunami. Property damage resulting from natural hazards can be mitigated by construction in accordance with building codes that incorporate state-of-the-art requirements to protect health, safety, and welfare in the built environment. The Hawai'i CZM Program works in partnership with county, state, federal, and international partners, both public and private, to realize the coastal hazard objectives of the Hawai'i CZM law. The following examples illustrate how we work toward achievement of a hazard resilient community.

State and county hazard mitigation plans. The CZM Program has provided technical assistance and funding for State and county multi-hazard mitigation planning. These plans are essential for State receipt of federal post-disaster funding and pre-disaster mitigation grant funding, including flood mitigation assistance, fire management assistance, certain categories of public assistance, and two hazard mitigation grant programs. These monies can be used for projects such as repair of critical facilities, public awareness programs, and risk and vulnerability assessments, all of which build resilience for future hazard events. The CZM Program wrote portions of the 2007 State Hazard Mitigation Plan Update on OP's role in integrating hazard mitigation into local, regional, and statewide planning. As a member of the State Hazard Mitigation Forum, CZM collaborates with public and private sector stakeholders in statewide hazard mitigation activities.

Coastal hazards mitigation plans resulted from a strong partnership with the State civil defense agency.

Hazard mitigation training and business continuity workshop. In 2003 CZM received a special grant for hazard mitigation in the Pacific, and partnered with State Civil Defense to present a three-day hazard mitigation and business continuity workshop. The workshop focused on sustaining the economic feasibility of business operations as well as the economic vitality of communities in the aftermath of a disaster. Attendees came from islands throughout Hawai'i and the Pacific.

Earthquake hazards mitigation. The risks to property from earthquakes in the County of Hawai'i are among the highest in the nation, with only San Francisco and San Jose, California having a greater annual loss per million dollars of building value (State of Hawai'i Earthquake Report, 2005). To ensure that the risks to life and property from earthquakes are minimized, the Hawai'i CZM Program actively participates and partners with federal, state and county agencies as a member of the Hawai'i State Earthquake Advisory Committee (HSEAC). The following are examples of HSEAC projects where CZM provided technical and funding assistance.

In 2006, in partnership with the Federal Emergency Management Agency (FEMA), State Civil Defense, and the Structural Engineers Association of Hawai'i (SEAOH), CZM provided training for individuals to conduct post-earthquake safety evaluation of buildings. When an earthquake strikes, there is an immediate need for qualified professionals to evaluate damaged buildings to determine safety for occupancy. Four months after this training took place, the Kīhole Bay earthquakes struck the west coast of the Big Island. The trained county inspectors and volunteer structural engineers evaluated approximately 1,700 buildings, making timely and sound decisions regarding the continued use and occupancy of damaged buildings.

Through a multi-year project, FEMA's loss estimation model, HAZUS-99, was customized to Hawai'i-specific parameters. This work was presented in the publication "Earthquake Hazards and Estimated Losses in the County of Hawai'i". Customization included three major areas: (a) ground motion attenuation function was customized to produce the closest fit to the ground motion acceleration data from past earthquakes striking the County of Hawai'i, (b) building inventory was revised to account for Hawai'i's unique building construction types, including single-wall construction, the number and locations of specific building types, and Hawai'i construction costs, and (c) soil types were customized to account for general locations of volcanic ash and alluvium deposits, and a comprehensive soil profile type survey of the island of Hawai'i was accommodated in the soil type assignments for each census tract. Training on this loss estimation modeling was held in the County of Hawai'i in 2004 and attended by over 100 county leaders. This project successfully bridged the gap between science and management. The Report was featured in a special hazards edition of the Coastal Services Magazine in 2006, as an example of how the latest science can be translated to a form that planners and decision makers can readily use. It won the 2007 Overall Award for Excellence in Mitigation from the Western States Seismic Policy Council.

Hurricane hazards mitigation and improved building codes. Hurricanes are among the most devastating natural hazards in the United States. As development of the nearshore areas increases, more people and property are placed in harm's way.

A community's resilience to natural hazards such as hurricanes can be strengthened by adoption and enforcement of modern building codes which incorporate the latest advances in science and engineering and provide a uniform and predictable regulatory environment for homeowners as well as the design, construction, and insurance industries. In 2006, CZM completed wind risk assessment, maps, and wind design standards for hurricane-force winds hitting the County of Hawai'i. Efforts are ongoing to ensure that this work will be incorporated into the State and county building codes. Similar assessments are presently underway in the Counties of Maui and Kaua'i, funded by CZM and FEMA. In 2007, the City and County of Honolulu adopted the 2003 International Building and Residential Codes. That same year, over 860 trainees attended International Building Code workshops which were sponsored by CZM, in partnership with the City and County of Honolulu Building Division, SEAHO, and the local chapters of the American Institute of Architects and the Construction Specifications Institute. The training is developing a highly qualified public/private building industry, which is essential to realize the full value of the new building codes.

Tsunami hazards mitigation. In its continuing efforts on tsunami issues, the Hawai'i CZM Program works with partners in government agencies, the private sector, and international organizations, mainly through the Tsunami Technical Review Committee (TTRC). TTRC members include the University of Hawai'i, Pacific Disaster Center, United Nations Educational, Scientific, and Cultural Organization (UNESCO), Pacific Tsunami Warning Center, Hawai'i County Civil Defense Agency, Maui County Civil Defense Agency, Kaua'i County Civil Defense Agency, O'ahu Civil Defense Agency, and the National Weather Service.

In 2004 CZM worked as a member of the TTRC to train local news media and hotel security and management on proper response during a tsunami event. A modified version of the workshop was presented to the Waikiki community in partnership with State legislators representing the Waikiki community. Media coverage of these events helped heighten tsunami awareness throughout the State.

In response to the Indian Ocean tsunami and to increase awareness and knowledge of tsunamis both locally and internationally, CZM worked with the International Tsunami Information Centre, an agency of UNESCO, in updating and printing 100,000 copies of "Tsunami: The Great Waves" in 2005. The updated publication broadened its scope to include the Indian Ocean, Southeast Asia, and Caribbean, and included the latest in scientific knowledge and tsunami mitigation. Copies were distributed worldwide, including nations in the Pacific, Southeast Asia, the Indian Ocean, the Caribbean, South America, and Europe. 10,000 copies went to Hilo's Pacific Tsunami Museum where they are used to promote tsunami education in Hawai'i and the Pacific.

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CHAPTER SUMMARY

Many of Hawai'i's residents are economically, culturally, and spiritually connected to the sea. Hawai'i's coastal zone provides jobs and fuels a tourism-based economy reliant on clean beaches and water, coral reefs, and fresh island seafood. While a vibrant and healthy ocean environment is essential to the quality of life in Hawai'i, the islands face significant challenges in preserving the health of its ocean resources and the benefits they provide. Development always comes with the risk of degrading coastal water quality and coral reef ecosystems. Intensified ocean recreational and commercial uses generate conflicts over public beaches and exploitation of ocean resources. Regional and global conditions such as sea level rise, increased frequency and severity of storms, and marine debris create new challenges.

To address these current and future complex challenges, the Hawai'i Ocean Resources Management Plan (ORMP) calls for a change in the State's approach to natural and cultural resources management. The prevailing approach is "sector-based" – one that involves jurisdictional entities and focuses on individual resources managed as commodities. The management efforts under this approach tend to be fragmented with gaps and overlaps in jurisdiction. The State and its partners realized this approach is inadequate because resources and natural systems do not follow jurisdictional boundaries. They are interconnected, most critically in insular boundaries.

Building on native Hawaiian management principles and lessons from past efforts, the ORMP is geared towards integrated and area-based approaches to natural and cultural resources management. This proposed approach requires greater collaboration among jurisdictional authorities and catalyze community involvement and stewardship. The ORMP lays out three perspectives for ocean resources management in Hawai'i:

- Perspective 1: Connecting Land and Sea
- Perspective 2: Preserving our Ocean Heritage
- Perspective 3: Promoting Collaboration and Stewardship.

In line with these three perspectives, the Office of Planning (OP) – the lead agency for the Hawai'i Coastal Zone Management Program – developed a strategic plan to redefine, reinforce, and reinvigorate its mission and goal system. The ORMP and OP strategic plan establish management priorities for the next five years. Their overarching goal is to improve and sustain the ecological, cultural, economic, and social benefits that Hawai'i residents derive from ocean resources for future generations.

THE ORMP

The ocean and its shoreline areas are integral in the lives of the people of Hawai'i. For many generations, people depended on the ocean's resources for daily subsistence, and some continue to do so today. Many Island residents are culturally and spiritually connected to the sea. Hawai'i's coastal zone provides jobs and fuels a tourism-based economy reliant on clean beaches and water, coral reefs, and island-fresh seafood. At leisure, a majority of Hawai'i residents are drawn to the ocean to fish, surf, paddle, and barbeque on the beach with family and friends. Even visitors or residents who never swim in the ocean are rejuvenated by a walk on the beach, the feel of the trade winds, and the aesthetic beauty of our shores. The opportunity to enjoy the ocean's bounty is essential to the people's health and well-being.

Due to a wide variety of natural and man-made factors, Hawai'i faces significant challenges in preserving the health of its ocean resources and their economic and spiritual benefits. To ensure the ocean will continue to serve the island lifestyle, the State must improve its management approach. For this reason, the Hawai'i CZM Program developed the Ocean Resources Management Plan (ORMP) to ensure that present and future generations will continue to enjoy the quality of ocean-oriented life in Hawai'i.

The full ORMP is embedded in the Office of Planning's (OP) workplans. The workplans carry out Chapter 225M, HRS which set out a broad framework, which defines OP's responsibility for preserving Hawai'i's future. The workplans call for continued collaboration between OP programs in carrying out the ORMP. This linkage between the ORMP and OP's programs creates a foundation for successful management of limited but vital resources.

OCEAN RESOURCES MANAGEMENT PLAN OF 2006

The ORMP is a statewide plan mandated by Chapter 205A of the Hawai'i Revised Statutes (HRS). The Hawai'i CZM Program is charged with reviewing and periodically updating the ORMP, as well as coordinating its overall implementation. In 1991, the first Ocean Resource Management Plan was published, and in 1995 it was incorporated into the CZM statute. A 1998 review revealed that, while most of the planned actions were accomplished, revisions were needed to address changing priorities and new concerns related to ocean resources management. In 2003, the Hawai'i CZM Program initiated the ORMP update process and in 2006 the Program published the new ORMP (Hawai'i CZM Program, 2006).

The 2006 ORMP calls for a change in the approach to natural and cultural resources management. It recognizes that the current sector-based approach is inadequate to address the many challenges the State faces now and into the future. The 2006 ORMP highlights the need for government to incorporate new perspectives on relationships among the people, land, and sea. Building on native Hawaiian management principles and lessons from past efforts, the CZM Program is moving toward integrated and area-

(Old:) “Sector-based” approach is implemented by jurisdictional entities

- Focus on individual resources, managed as commodities;
- State and county management plans are prepared by jurisdictional entities considering each resource separately, e.g. fisheries, water quality, forest management;
- Regulations for each resource are developed and applied uniformly statewide;
- Consider the direct impact on resources of specific human uses;
- Management efforts tend to be fragmented with gaps and overlaps in jurisdiction.”

based approaches to natural and cultural resource management. These approaches require greater collaboration among jurisdictional authorities, as well as community involvement and stewardship.

The three guiding perspectives in the revised 2006 ORMP include:

- **Perspective 1:** Connecting land and sea
- **Perspective 2:** Preserving our ocean heritage
- **Perspective 3:** Promoting collaboration and stewardship.

“Perspective 1: Connecting Land and Sea. Careful and appropriate use of the land is

required to maintain the diverse array of ecological, social, cultural, and economic benefits derived from the sea.”

The ORMP notes that modern land uses generate substantial changes in the condition of the sea. Efforts to reduce land-based pollution sources must continue and be strengthened with targeted assistance in priority watersheds. New measures must be developed to protect beaches and shoreline areas from coastal erosion, not only to preserve beaches but also to protect human life and Hawai‘i’s economy.

(New:) “Area-based” approach implemented by a broad base of stakeholders

- Targets sustained production potential for ecosystem goods and services
- Area-specific management plans, developed at *ahupua’a* or *moku* levels with community involvement address, all resources *in an integrated* manner considering cumulative impacts
- Regulations adapted to area or ecosystem management priorities
- Considers direct and indirect impacts on ecosystem of all human activities in an area
- Emphasizes community involvement in management decision making and action”

Urbanization and economic development plans should account for environmental carrying capacities and thresholds to more effectively guide the improvement, expansion, and maintenance of environmental infrastructure.

The ORMP proposes a holistic approach that recognizes the interconnectedness of land and sea, the interactions among species, the rhythms of the seasons, and the impacts of overusing resources. The proposed approach is largely based on native Hawaiian *ahupuaʻa* management, which often covers a geographic area extending from the ocean to the mountain tops. Based on this approach, the 2006 ORMP identified three management goals with supporting strategic actions listed below:

1. “Improve coastal water quality by reducing land-based sources of pollution and restoring natural habitats.”

- Reduce soil erosion from upland forest ecosystems and conservation lands.
- Reduce pollutant loads from residential, agricultural, and commercial land uses in priority watersheds.
- Restore and protect wetlands, streams, and estuaries.

2. “Protect beaches, wetlands, and coastal communities from shoreline erosion and other coastal hazards.”

- Develop and implement a comprehensive and integrated shoreline policy that addresses the impacts of chronic and episodic coastal hazards.
- Develop a Hawaiʻi beach and shoreline management plan with specific management measures to address coastal erosion and other hazards in priority areas.
- Encourage appropriate coastal-dependent development that reduces risks from coastal hazards and protects coastal and cultural resources.

3. “Improve and ensure maintenance and appropriate use of environmental infrastructure.”

- Inspect and maintain sewer collection systems including the detection of leaks.
- Reduce the number of individual wastewater systems and improve the operation of existing systems in the coastal environment.
- Reduce illegal storm-water discharges to the wastewater system.

“Perspective 2: Preserving Our Ocean Heritage. *A vibrant and healthy ocean environment is the foundation for the quality of life valued in Hawaiʻi and the well-being of its people, now and for generations to come.”*

Hawaiʻi’s coastal resources are being degraded by a variety of direct and indirect uses of the ocean. To improve the quality of the marine environment, the 2006 ORMP

proposes development of a comprehensive management system that considers the ecology, environmental conditions, and resource uses of a specific geographic area.

Under the proposed system, existing efforts to reduce pollution from sea-based sources would be continued and strengthened, with added emphasis on halting marine alien species and discharges from commercial vessels in state waters. The proposed system also recognizes that ocean ecosystems such as coral reefs would benefit from a multi-pronged approach that includes the following:

- Strengthening and expanding marine protected areas;
- Employing new, ecosystem-based approaches for managing nearshore fisheries; and
- Substantially increasing the capacity for enforcement and voluntary compliance with ocean resource rules and regulations.

In addition, the ORMP calls for new approaches to the management of recreational and commercial uses of Hawai'i's beaches and coastal areas. This would include developing responsible and sustainable ocean-based tourism. To preserve our ocean heritage, the ORMP proposes that ongoing efforts in ocean science and technology be strengthened and expanded to diversify Hawai'i's economy while employing safeguards for ocean resource protection.

To realize the goal of preserving Hawai'i's ocean heritage, the ORMP advances five management goals. Each goal is accompanied by supporting strategic actions. The management goals and strategic actions include:

1. "Improve coastal water quality by reducing marine sources of pollution."

- Minimize the introduction and spread of marine alien and invasive species.
- Establish wastewater-discharge restricted zones and conditions for commercial vessels in archipelagic waters.
- Provide appropriate waste management infrastructure to support commercial and recreational marine facilities.

2. "Improve the health of coastal and ocean resources for sustainable traditional, subsistence, recreational, and commercial uses."

- Strengthen and expand marine protected area management.
- Develop ecosystem-based approaches for nearshore fisheries management.
- Establish and institutionalize approaches for restoring, operating, and preserving ancient Hawaiian coastal fishponds and salt ponds.
- Improve enforcement capacity and voluntary compliance with existing rules and regulations for ocean resource protection.
- Enhance the conservation of Hawai'i's marine protected species, unique habitats and biological diversity.

3. “Enhance public access and appropriate coastal dependent uses of the shoreline.”

- Enhance and restore existing public shoreline areas and scenic vistas.
- Establish new shoreline areas for public and appropriate coastal dependent uses.

4. “Promote appropriate and responsible ocean recreation and tourism that provide culturally informed and environmentally sustainable uses for visitors and residents.”

- Develop community-based frameworks and practices for identifying and mitigating ocean recreational use conflicts.
- Promote responsible and sustainable ocean-based tourism.

5. “Encourage cutting edge and appropriate ocean science and technology with safeguards for ocean resource protection.”

- Promote alternative ocean energy sources.
- Plan and develop sustainable commercial aquaculture in coastal areas and ocean waters to diversify and expand Hawai‘i’s economy and provide locally produced sources of seafood.
- Expand ocean science and technology.”

“Perspective 3: Promoting Collaboration and Stewardship. Working together and sharing knowledge, experience, and resources will improve and sustain efforts to care for the land and sea.”

A more holistic approach to ocean resource management may lead to integrated natural resources management approaches, strengthened community participation and stewardship, and more capacity for collaboration among those with common interests in caring for the land and sea. Governance mechanisms that encourage existing partnerships and help foster new collaborative relationships are essential elements of this approach. Collaborative governance provides greater opportunities for integrated planning and public involvement. Emphasizing place-based approaches can accommodate unique characteristics (resources, weather, demographics, etc.) of each place, regardless of jurisdictional boundaries. The Wai‘anae Ecological Characterization (WEC) project described in Chapter IV is an excellent example of what can be accomplished through collaborative governance. More information on the WEC can be found at: <http://hawaii.gov/dbedt/czm/initiative/wec/index.htm>.

The proposed approach is based on the native Hawaiian *ahupua‘a* system, wherein ‘aha councils – composed of a diverse group of practitioners and acknowledged experts in agriculture, fishing, water resources, and cultural skills – served as a governing body to manage natural resources. Within the context of State legal and programmatic

provisions, the new approach will incorporate community involvement in environmental and natural resources management in geographic areas in respect of community values

A more holistic approach can save significant time, money, and effort in developing good management plans. The ORMP's goals and supporting strategic actions relating to this topic include:

1. “Apply integrated and place-based approaches to the management of natural and cultural resources.”

- Develop integrated natural and cultural resources planning process and standardized tools.
- Build capacity for community participation in natural and cultural resource management.

2. “Institutionalize integrated natural and cultural resources management.”

- Develop legislative and administrative management of natural resources.
- Monitor and evaluate ORMP implementation.

Success of the ORMP obviously will depend on continuous commitment by various agencies and the public towards natural resource management in general and ocean resource conservation in particular. Many proposed actions would be the responsibility of government agencies mandated by law to manage ocean resources and the land-based activities that can affect these resources. The ORMP highlights actions to be carried out by State and county agencies, as well as encouraging collaboration with federal agencies when interests and responsibilities overlap.

Non-governmental organizations, community groups, and the private sector also play a vital role in ocean resources management. They serve as the frontline in providing local perspectives and knowledge necessary for successful place-based management. The private sector will be instrumental in designing and implementing best management practices consistent with societal values. Building the capacity for community participation through training, education and outreach, technical assistance, and access to information as well as increasing responsiveness within agencies to accommodate increased participation is a critical component to this entire plan. This support is needed to maximize the reach of community stewardship efforts.

The ORMP goals will not be attained overnight. The process will allow for gradual but measurable positive changes in ocean resource management. The ORMP proposes a sequence of five-year implementation phases through the year 2030.

During the first five years (2007 – 2011) management goals and strategic actions will be designed to demonstrate integrated natural resources management and collaborative governance mechanisms such as technical assistance, training, and financial support for community-level initiatives in priority areas.

Plans and programs will be aligned with integrated approaches over the second five years (2012 – 2016) and expanded statewide. In these first two phases, the condition of ocean resources and the coastal zone is expected to improve over time, first in priority areas and then eventually expanding over time to coastal areas throughout the state.

The last two phases (2017 – 2030) will build on lessons learned from earlier phases. They will focus on the institutionalizing and mainstreaming integrated natural resources management and collaborative governance mechanisms. “Institutionalization” includes development of legal and policy reforms to support natural and cultural resource management approaches. “Mainstreaming” involves the implementation and adoption of the holistic approach statewide by all stakeholders including federal, state, and county governments, the State Legislature, county councils, nongovernmental organizations, academic institutions, the private sector, community groups, and the public.

A complete version of the 2006 ORMP is available at the Hawai‘i CZM Program’s office and website: <http://hawaii.gov/dbedt/czm/orm/pdf/2006ormp.pdf>.

CHAPTER V REFERENCES

Hawai'i CZM Program. 2006. *Ocean Resources Management Plan*.

APPENDICES

APPENDIX I.

Coastal Zone Management Act Cooperative Agreements and Grants

The CZMA entitles coastal states with federally-approved CZM programs to apply and compete for available CZM funds. Each state with a federally-approved CZM program is eligible for a grant or cooperative agreement with NOAA and receives between \$500,000 and \$2.15 million each year in federal funds. The Hawai'i CZM Program has participated in grants and cooperative agreements with the federal government since 1978. The Hawai'i CZM Program has also participated in several project-specific grant programs available through CZMA funding. Throughout its history, the Hawai'i CZM Program has received administrative grants, coastal resource improvement grants, coastal enhancement grants, funds for coastal water protection, coral reef management and technical support.

In addition to the annual federal administrative funds, CZMA Section 306A-Resource Management Improvement Grants are also available. States awarded with Resource Management Improvement Grants can use the funds to preserve or restore coastal areas, redevelop urban waterfronts and ports, and provide access to public beaches and coastal waters. Similar to the federal administrative grant, Resource Management Improvement Grants must also be matched by the state.

State CZM programs are also eligible for CZMA Section 309-Coastal Zone Enhancement Area Grants. These grants are awarded based on a review of the coastal state program (*i.e.*, approval of a five-year strategy for coastal zone enhancement). The grants can be used to strengthen the CZM program by underwriting projects on wetland protection and restoration, increased public access to coastal areas, protection from coastal hazards, special area management planning, management of ocean resources, and reduction of marine debris along the coast. Unlike the other CZM section awards, the grants do not require a state match.

CZMA Section 306: Administrative Grants

A state CZM program is eligible to receive CZMA Section 306-Federal Administrative Grant money which requires matching funds by the state. The majority of Hawai'i CZM's annual funding is from CZMA Section 306 award grants. The federal grant supports general program implementation and requires a one-to-one match of non-federal and/or services-in-kind. The Hawai'i CZM Program uses CZMA Section 306 funds to administer the special management area (SMA) permit process in the counties, hold training and outreach projects, maintain public participation by providing travel funding to personnel and CZM partners. The Hawai'i CZM personnel salaries and fringe benefits are also derived from CZMA Section 306 funds.

CZMA Section 306A: Coastal Resource Improvement Grants

A coastal state with a federally-approved CZM program is eligible for coastal resource improvement grants provided that it demonstrates satisfactory progress in achieving the national policy objectives. Grants under Section 306A require the state to match the amount of any federal grant.

Coastal resource improvement grants may be used for low-cost construction projects consistent with activities supported by this section. Projects may include, but are not limited to, paths, walkways, fences, parks, and rehabilitation of historic buildings within the coastal zone. Funding under this section may also be used for buying lands to provide access to public beaches. The resource improvement funds may also be used in the rehabilitation or acquisition of piers to provide increased public use as well as the establishment of shoreline stabilization measures.

The Hawai'i CZM Program has previously received funding under CZMA Section 306 to support public access activities.

CZMA Section 309: Coastal Zone Enhancement Area Grants

The Section 309 enhancement area grants program encourages states to develop program changes in one or more of the nine designated coastal zone enhancement areas to achieve certain national objectives. Section 309 grants do not require providing a match.

To receive grants under this section, states need to submit a five-year assessment and strategy to OCRM. The strategy should include the state's prioritization of technical and fiscal needs as well as proposed changes to improve the implementation of the state's CZM program. Changes to improve CZM programs may include new or amended laws, regulations or enforceable policies.

The federally-approved Hawai'i CZM Program's Section 309 Enhancement Area Grants

CZMA Section 309 Enhancement Areas:

- ***Ocean resources management;***
- ***Opportunities for public access to coastal areas;***
- ***Reduction of threats to life and destruction of property by regulating development and redevelopment in coastal hazard areas;***
- ***Protection, restoration, enhancement or creation of coastal wetlands;***
- ***Development of procedures to assess, consider, and control cumulative and secondary impacts;***
- ***Reduction of marine debris;***
- ***Preparation and implementation of special management area plans;***
- ***Adoption of procedures and enforceable policies to help facilitate the energy facility siting; and***
- ***Enhancement of procedures and planning for siting marine aquaculture***

Program Assessment and Strategy for FY 01-05 selected the following enhancement area priorities for funding based on government agency and public input: **coastal hazards, ocean resources, and cumulative and secondary impacts (CSI).**

Through Section 309 funding, the Hawai'i CZM Program has broadened its coastal hazard initiatives. The State CZM Program prepared a new 5-year assessment and strategy for implementation beginning on July 2006. For the period, Section 309 funds were earmarked for priority enhancement area projects related to **coastal hazards and cumulative and secondary impacts (CSI).**

CZMA Section 310: Technical Assistance

Funds available under Section 310 allow for coordination of technical assistance, studies, and research activities. The grant program requires a one-to-one match from the state. In Hawai'i, Section 310 funds have been used to support development and implementation of program changes under Section 309, and support coastal clean water and coral reef programs. The research and studies under coastal clean water and coral reef programs conducted with Section 310 funds are made available to the public in the form of publications, workshops or other means appropriate.

In the past, the Hawai'i CZM Program received Section 310 funds to support coral reef management and the development of the Coastal Non-Point Pollution Control Program (CNPCP). At present, Hawai'i has a conditional CNPCP, which applies throughout the State. The Hawai'i CNPCP comprises 57 enforceable management measures and 13 administrative elements that were conditionally approved by NOAA and the U.S. Environmental Protection Agency (EPA). In FY 2005-2006, work concentrated on refining the measures to meet federal requirements in collaboration with the Department of Health (DOH). In addition, the Hawai'i CZM Program participated in meetings related to polluted runoff control.

CZMA Section 309 Coastal Hazard Initiatives have focused on:

- **Working with the State and Counties to develop hazard mitigation plans.**
- **Working in partnership with hazard-specific technical committees to assess the state of knowledge of the hazard, to analyze and model the hazard.**
- **Building widespread public awareness and in targeted groups regarding hazards, preparedness, and mitigation.**

CZMA Section 6217: Protecting Coastal Waters

In the re-authorization of the CZMA in 1990, Congress created Section 6217 or the “Coastal Nonpoint Program,” which calls for State coastal Zone Management and Water Quality Programs to develop a Coastal Non-Point Pollution Control Program. The DOH, Environmental Management Division, Clean Water Branch, Polluted Runoff Control Program and the Hawai‘i CZM Program are charged with developing and implementing the program.

In September, 2001, the Hawai‘i CZM Program and DOH collaborated in developing a work plan for obtaining approval of Hawai‘i’s CNPCP. The Hawai‘i CZM Program and DOH explored alternatives to provide additional staffing resources and assistance from both agencies, so that the necessary non-point source pollution management measures can be submitted to the NOAA-OCRM and EPA.

The Hawai‘i CZM Program and DOH’s Polluted Runoff Control Program worked to develop a watershed planning guidance that will help the state address several of the CZARA requirements through a watershed based approach and move the state closer to full program approval.

Section 6217 requires coastal states to implement management measures for non-point source pollution to restore and protect coastal waters.

Non-point source pollution includes water pollution that cannot be tied to a single, identifiable source such as nitrate pollution from agriculture.

APPENDIX II.

CZM Network of Resource Agencies*

(* This table is to guide persons wishing to conduct a use in the coastal zone to the appropriate agency(ies) that they may need to talk to about licenses, permits and specific policies and standards.)

HAWAI'I CZM OBJECTIVES AND POLICIES	NETWORK OF RESOURCE AGENCIES
Recreational Resources	
Objective 1: Provide coastal recreational opportunities accessible to the public.	Department of Business, Economic Development and Tourism Department of Land and Natural Resources Land Use Commission City and County of Honolulu County of Hawai'i County of Kaua'i County of Maui
Policy 1: <i>Improve coordination and funding of coastal recreational planning and management.</i>	Department of Business, Economic Development and Tourism Department of Land and Natural Resources Department of Transportation
Policy 2: <i>Provide adequate, accessible, and diverse recreational opportunities in the coastal zone management area by:</i> <i>Protecting coastal resources uniquely suited for recreational activities that cannot be provided in other areas.</i>	Department of Health Department of Land and Natural Resources Department of Transportation Land Use Commission City and County of Honolulu County of Hawai'i County of Kaua'i County of Maui

HAWAI'I CZM OBJECTIVES AND POLICIES	NETWORK OF RESOURCE AGENCIES
<i>Requiring replacement of coastal resources having significant recreational value including, but not limited to, surfing sites, fishponds, and sand beaches, when such resources will be unavoidably damaged by development; or requiring reasonable monetary compensation to the State for recreation when replacement is not feasible or desirable.</i>	Department of Land and Natural Resources Land Use Commission
<i>Providing and managing adequate public access, consistent with conservation of natural resources, to and along shorelines with recreational value.</i>	Department of Land and Natural Resources Department of Transportation City and County of Honolulu County of Hawai'i County of Kaua'i County of Maui
<i>Providing an adequate supply of shoreline parks and other recreational facilities suitable for public recreation.</i>	Department of Health Department of Land and Natural Resources Department of Transportation City and County of Honolulu County of Hawai'i County of Kaua'i County of Maui
<i>Ensuring public recreational uses of county, state, and federally owned or controlled shoreline lands and waters having recreational value consistent with public safety standards and conservation of natural resources.</i>	Department of Business, Economic Development and Tourism Department of Land and Natural Resources
<i>Adopting water quality standards and regulating point and nonpoint sources of pollution to protect, and where feasible, restore the recreational value of coastal waters.</i>	Department of Health City and County of Honolulu County of Hawai'i County of Kaua'i County of Maui

HAWAI'I CZM OBJECTIVES AND POLICIES	NETWORK OF RESOURCE AGENCIES
<i>Developing new shoreline recreational opportunities, where appropriate, such as artificial lagoons, artificial beaches, and artificial reefs for surfing and fishing.</i>	Department of Land and Natural Resources Land Use Commission
<i>Encouraging reasonable dedication of shoreline areas with recreational value for public use as part of discretionary approvals or permits by the land use commission, board of land and natural resources, and county authorities; and crediting such dedication against the requirements of section 46-6.</i>	Department of Land and Natural Resources Land Use Commission City and County of Honolulu County of Hawai'i County of Kaua'i County of Maui
Historic Resources	
Objective 2: Protect, preserve, and, where desirable, restore those natural and manmade historic and prehistoric resources in the coastal zone management area that are significant in Hawaiian and American history and culture.	Constitution: Article VIII-5: Local Government, Transfer of Mandated Programs Department of Business, Economic Development and Tourism Department of Land and Natural Resources Land Use Commission City and County of Honolulu County of Hawai'i County of Kaua'i County of Maui
Policy 1: <i>Identify and analyze significant archaeological resources.</i>	Department of Business, Economic Development and Tourism Department of Land and Natural Resources
Policy 2: <i>Maximize information retention through preservation of remains and artifacts or salvage operations.</i>	Department of Land and Natural Resources Land Use Commission

HAWAI'I CZM OBJECTIVES AND POLICIES	NETWORK OF RESOURCE AGENCIES
Policy 3: <i>Support state goals for protection, restoration, interpretation, and display of historic resources.</i>	Constitution: Article VIII-5 Department of Land and Natural Resources Land Use Commission
Scenic and Open Space Resources	
Objective 3: Protect, preserve, and, where desirable, restore or improve the quality of coastal scenic and open space resources.	Constitution: Article VIII : Local Government Department of Business, Economic Development and Tourism Department of Land and Natural Resources Land Use Commission
Policy 1: <i>Identify valued scenic resources in the coastal zone management area.</i>	Department of Business, Economic Development and Tourism City and County of Honolulu County of Hawai'i County of Kaua'i County of Maui
Policy 2: <i>Ensure that new developments are compatible with their visual environment by designing and locating such developments to minimize the alteration of natural landforms and existing public views to and along the shoreline.</i>	Land Use Commission
Policy 3: <i>Preserve, maintain, and, where desirable, improve and restore shoreline open space and scenic resources.</i>	Constitution: Article VIII Department of Land and Natural Resources Land Use Commission City and County of Honolulu County of Hawai'i County of Kaua'i County of Maui

HAWAI'I CZM OBJECTIVES AND POLICIES	NETWORK OF RESOURCE AGENCIES
Policy 4: <i>Encourage those developments that are not coastal dependent to locate in inland areas.</i>	Constitution: Article VIII Land Use Commission
Coastal Ecosystems	
Objective 4: Protect valuable coastal ecosystems, including reefs, from disruption and minimize adverse impacts on all coastal ecosystems.	Constitution: Article XI: Conservation, Control and Development of Resources Department of Land and Natural Resources Department of Agriculture / Department of Health Department of Transportation Land Use Commission Office of Environmental Quality Control Office of Planning City and County of Honolulu County of Hawai'i County of Kaua'i County of Maui
Policy 1: <i>Exercise an overall conservation ethic, and practice stewardship in the protection, use, and development of marine and coastal resources.</i>	Department of Health Department of Land and Natural Resources Land Use Commission City and County of Honolulu County of Hawai'i County of Kaua'i County of Maui

HAWAI'I CZM OBJECTIVES AND POLICIES	NETWORK OF RESOURCE AGENCIES
Policy 2: <i>Improve the technical basis for natural resource management.</i>	Department of Health Department of Land and Natural Resources Office of Environmental Quality Control City and County of Honolulu County of Hawai'i County of Kaua'i County of Maui
Policy 3: <i>Preserve valuable coastal ecosystems, including reefs, of significant biological or economic importance.</i>	Department of Agriculture Department of Health Department of Land and Natural Resources City and County of Honolulu County of Hawai'i County of Kaua'i County of Maui
Policy 4: <i>Minimize disruption or degradation of coastal water ecosystems by effective regulation of stream diversions, channelization, and similar land and water uses, recognizing competing water needs.</i>	Department of Health Department of Land and Natural Resources Department of Transportation City and County of Honolulu County of Hawai'i County of Kaua'i County of Maui

HAWAI'I CZM OBJECTIVES AND POLICIES	NETWORK OF RESOURCE AGENCIES
<p>Policy 5: <i>Promote water quantity and quality planning and management practices that reflect the tolerance of fresh water and marine ecosystems and maintain and enhance water quality through the development and implementation of point and nonpoint source water pollution control measures.</i></p>	<p>Department of Health Department of Land and Natural Resources Department of Transportation Land Use Commission Office of Environmental Quality Control Office of Planning City and County of Honolulu County of Hawai'i County of Kaua'i County of Maui</p>
<p>Economic Uses</p>	
<p>Objective 5: Provide public or private facilities and improvements important to the State's economy in suitable locations.</p>	<p>Department of Business, Economic Development and Tourism Department of Land and Natural Resources Department of Transportation Office of Planning City and County of Honolulu County of Hawai'i County of Kaua'i County of Maui</p>
<p>Policy 1: <i>Concentrate coastal dependent development in appropriate areas.</i></p>	<p>Department of Business, Economic Development and Tourism Department of Land and Natural Resources Department of Transportation Land Use Commission Office of Planning</p>

HAWAI'I CZM OBJECTIVES AND POLICIES	NETWORK OF RESOURCE AGENCIES
<p>Policy 2: <i>Ensure that coastal dependent development such as harbors and ports, and coastal related development such as visitor industry facilities and energy generating facilities, are located, designed, and constructed to minimize adverse social, visual, and environmental impacts in the coastal zone management area.</i></p>	<p>Department of Business, Economic Development and Tourism Department of Land and Natural Resources Department of Transportation Land Use Commission City and County of Honolulu County of Hawai'i County of Kaua'i County of Maui</p>
<p>Policy 3: <i>Direct the location and expansion of coastal dependent developments to areas presently designated and used for such developments and permit reasonable long-term growth at such areas, and permit coastal dependent development outside of presently designated areas when:</i></p> <p><i>Use of presently designated locations is not feasible;</i></p> <p><i>Adverse environmental effects are minimized</i> <i>The development is important to the State's economy.</i></p>	<p>Department of Land and Natural Resources Department of Transportation Land Use Commission Office of Planning City and County of Honolulu County of Hawai'i County of Kaua'i County of Maui</p>

HAWAI'I CZM OBJECTIVES AND POLICIES	NETWORK OF RESOURCE AGENCIES
Coastal Hazards	
Objective 6: Reduce hazard to life and property from tsunami, storm waves, stream flooding, erosion, subsidence, and pollution.	Department of Health Department of Land and Natural Resources Department of Transportation City and County of Honolulu County of Hawai'i County of Kaua'i County of Maui
Policy 1: <i>Develop and communicate adequate information about storm wave, tsunami, flood, erosion, subsidence, and point and nonpoint source pollution hazards.</i>	Department of Land and Natural Resources City and County of Honolulu County of Hawai'i County of Kaua'i County of Maui
Policy 2: <i>Control development in areas subject to storm wave, tsunami, flood, erosion, hurricane, wind, subsidence, and point and nonpoint source pollution hazards.</i>	Department of Health Department of Land and Natural Resources Department of Transportation City and County of Honolulu County of Hawai'i County of Kaua'i County of Maui
Policy 3: <i>Ensure that developments comply with requirements of the Federal Flood Insurance Program.</i>	Department of Land and Natural Resources City and County of Honolulu County of Hawai'i County of Kaua'i County of Maui

HAWAI'I CZM OBJECTIVES AND POLICIES	NETWORK OF RESOURCE AGENCIES
Policy 4: <i>Prevent coastal flooding from inland projects.</i>	Department of Health Department of Land and Natural Resources Land Use Commission City and County of Honolulu County of Hawai'i County of Kaua'i County of Maui
Managing Development	
Objective 7: Improve the development review process, communication, and public participation in the management of coastal resources and hazards.	Budget and Finance Department of Business, Economic Development and Tourism Department of Land and Natural Resources Office of Planning City and County of Honolulu County of Hawai'i County of Kaua'i County of Maui
Policy 1: <i>Use, implement, and enforce existing law effectively to the maximum extent possible in managing present and future coastal zone development.</i>	Budget and Finance Department of Land and Natural Resources Office of Planning City and County of Honolulu County of Hawai'i County of Kaua'i County of Maui
Policy 2: <i>Facilitate timely processing of applications for development permits and resolve overlapping or conflicting permit requirements.</i>	Budget and Finance Department of Land and Natural Resources City and County of Honolulu County of Hawai'i County of Kaua'i County of Maui

HAWAI'I CZM OBJECTIVES AND POLICIES	NETWORK OF RESOURCE AGENCIES
<p>Policy 3: <i>Communicate the potential short and long-term impacts of proposed significant coastal developments early in their life cycle and in terms understandable to the public to facilitate public participation in the planning and review process.</i></p>	Land Use Commission
Public Participation	
<p>Objective 8: Stimulate public awareness, education, and participation in coastal management.</p>	<p>Constitution: Article XI</p>
<p>Policy 1: <i>Promote public involvement in coastal zone management processes.</i></p>	Department of Business, Economic Development and Tourism
<p>Policy 2: <i>Disseminate information on coastal management issues by means of educational materials, published reports, staff contact, and public workshops for persons and organizations concerned with coastal issues, developments, and government activities.</i></p>	Department of Business, Economic Development and Tourism Department of Land and Natural Resources

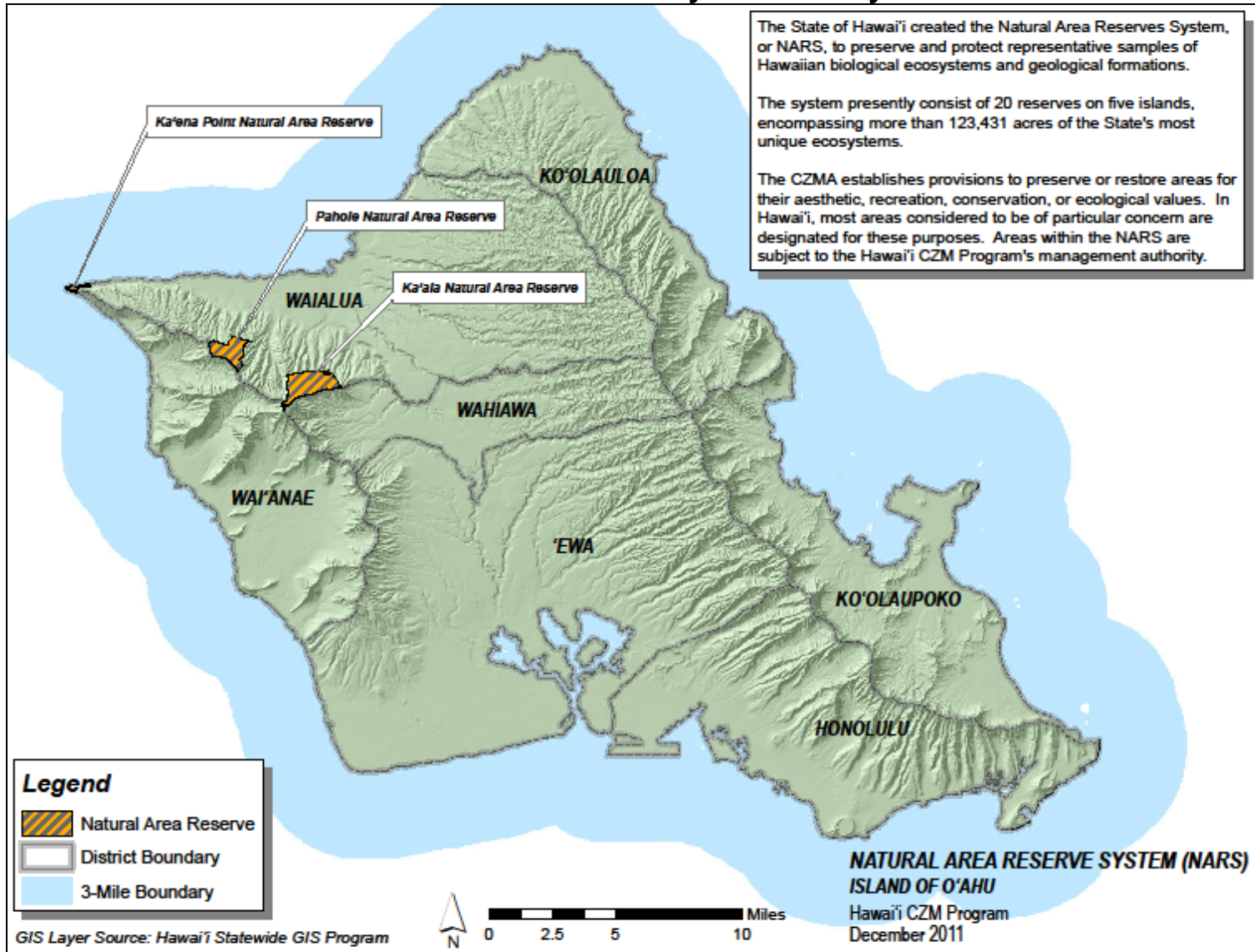
HAWAI'I CZM OBJECTIVES AND POLICIES	NETWORK OF RESOURCE AGENCIES
Policy 3: <i>Organize workshops, policy dialogues, and site-specific mediations to respond to coastal issues and conflicts.</i>	Department of Business, Economic Development and Tourism Department of Land and Natural Resources City and County of Honolulu County of Hawai'i County of Kaua'i County of Maui
Beach Protection	
Objective 9: Protect beaches for public use and recreation.	Department of Land and Natural Resources City and County of Honolulu County of Hawai'i County of Kaua'i County of Maui
Policy 1: <i>Locate new structures inland from the shoreline setback to conserve open space, minimize interference with natural shoreline processes, and minimize loss of improvements due to erosion.</i>	Department of Health Land Use Commission Office of Planning City and County of Honolulu County of Hawai'i County of Kaua'i County of Maui
Policy 2: <i>Prohibit construction of private erosion-protection structures seaward of the shoreline, except when they result in improved aesthetic and engineering solutions to erosion at the sites and do not interfere with existing recreational and waterline activities.</i>	Department of Health Department of Land and Natural Resources City and County of Honolulu County of Hawai'i County of Kaua'i County of Maui

HAWAI'I CZM OBJECTIVES AND POLICIES	NETWORK OF RESOURCE AGENCIES
Policy 3: <i>Minimize the construction of public erosion-protection structures seaward of the shoreline.</i>	Department of Health Department of Land and Natural Resources City and County of Honolulu County of Hawai'i County of Kaua'i County of Maui
Marine Resources	
Objective 10: Promote the protection, use, and development of marine and coastal resources to assure their sustainability.	Department of Business, Economic Development and Tourism Department of Land and Natural Resources City and County of Honolulu County of Hawai'i County of Kaua'i County of Maui
Policy 1: <i>Ensure that the use and development of marine and coastal resources are ecologically and environmentally sound and economically beneficial.</i>	Department of Health Department of Land and Natural Resources City and County of Honolulu County of Hawai'i County of Kaua'i County of Maui
Policy 2: <i>Coordinate the management of marine and coastal resources and activities to improve effectiveness and efficiency.</i>	Office of Planning

HAWAI'I CZM OBJECTIVES AND POLICIES	NETWORK OF RESOURCE AGENCIES
<p>Policy 3: <i>Assert and articulate the interests of the State as a partner with federal agencies in the sound management of ocean resources within the United States exclusive economic zone.</i></p>	<p>Office of Planning</p>
<p>Policy 4: <i>Promote research, study, and understanding of ocean processes, marine life, and other ocean resources in order to acquire and inventory information necessary to understand how ocean development activities relate to and impact upon ocean and coastal resources.</i></p>	<p>Constitution : Article XI</p> <p>Department of Land and Natural Resources Office of Planning</p>
<p>Policy 5: <i>Encourage research and development of new, innovative technologies for exploring, using, or protecting marine and coastal resources.</i></p>	<p>Department of Land and Natural Resources Office of Planning</p>

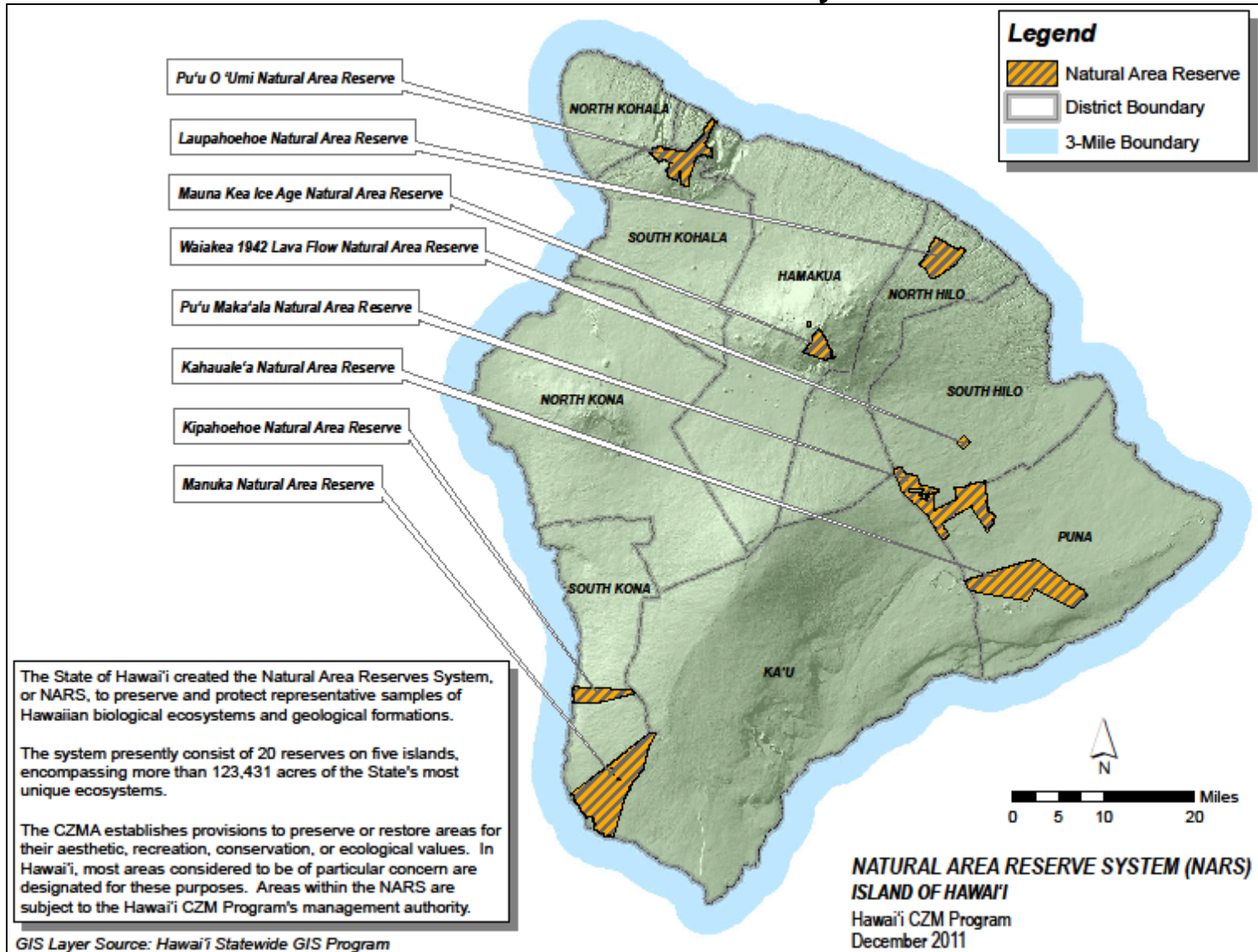
APPENDIX III.

Areas of Particular Concern – City and County of Honolulu



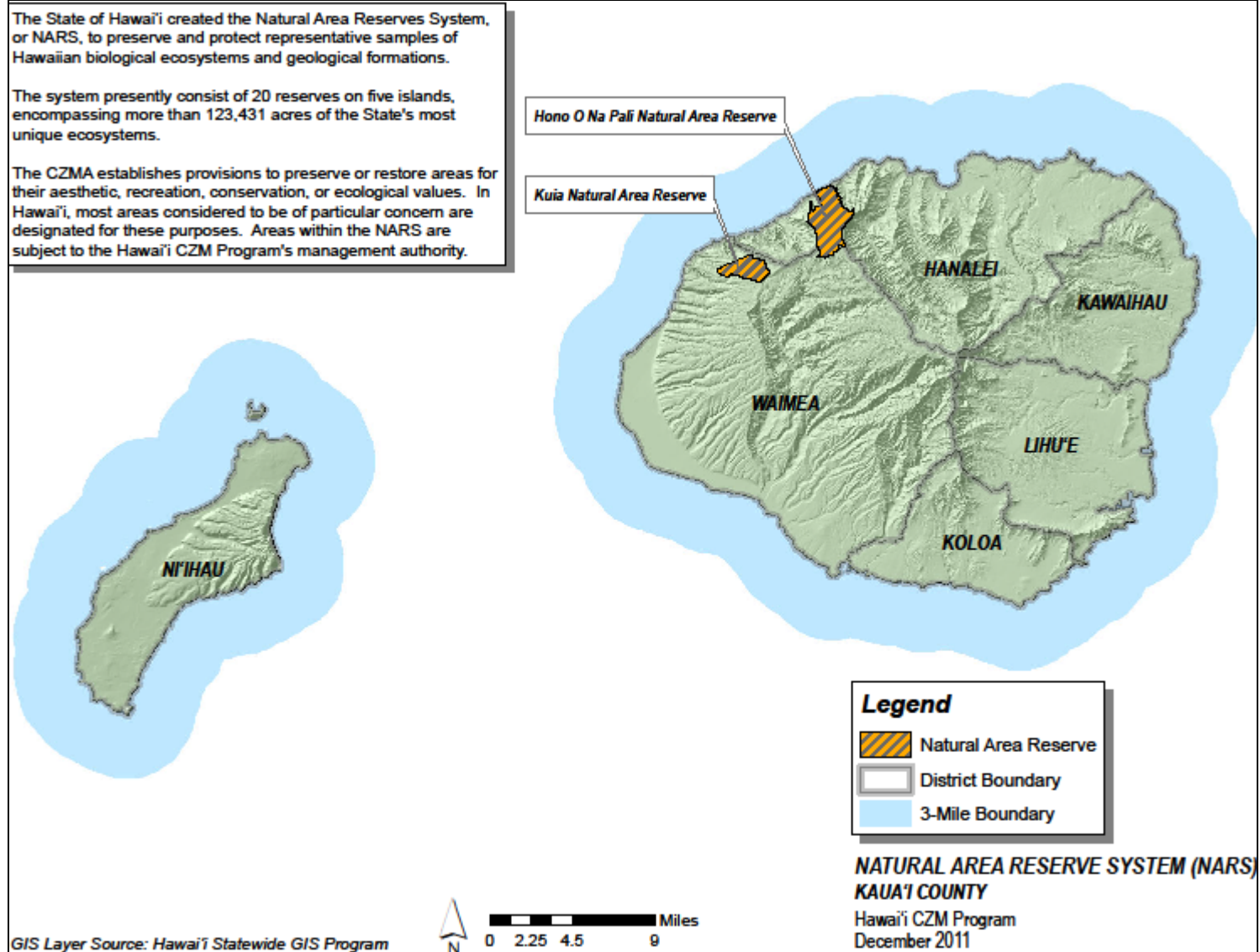
APPENDIX IV.

Areas of Particular Concern – County of Hawai‘i



APPENDIX V.

Areas of Particular Concern – County of Kauaʻi



APPENDIX VI.

Areas of Particular Concern – County of Maui

