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WASA - Coastal Management Program

Coastal Management: What It Is and How It Works



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DIVISION OF COMMUNITY PLANNING

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Alaska Coastal Management Program

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District Program Guidebook Series

- 1** Coastal Management: What It Is and How It Works
- 2** Local Control: Creating a District Coastal Management Program
- 3** Guide to Public Involvement
- 4** Consistency: The Key to Coordination
- 5** Making a District Coastal Management Program Work

Appendix

Guidebooks on other coastal management topics may be published at a future date.

For additional copies and information, contact:

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Department of Community and Regional Affairs
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Acknowledgement

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Coastal Management: What it is and How it Works

COASTAL ZONE
INFORMATION CENTER
US Department of Commerce
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2234 South Hobson Avenue
Charleston, SC 29405-2413

Alaska, Coastal Management Program
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Coastal management is a joint effort by local, state, and federal governments and the private sector to manage coastal resources and promote their wise and balanced use. This guidebook is the first in a series designed to give an overview of the subject. It will touch on the reasons for coastal management and discuss both federal and State coastal management laws. Finally, it will briefly describe the process for developing coastal management programs in Alaska.

Citizens of coastal communities should be involved from the very start in all phases of their district program. This series will, we hope, prepare them to do so.

This guidebook covers the following major topics:

- Coastal Management: Why Do We Need It?
- The Federal Coastal Zone Management Act: Where It All Began
- The Alaska Coastal Management Program: The State's Challenge

Coastal Management: Why Do We Need It?

A Wealth of Resources

Timber

Fish and Wildlife

Alaska's coast contains a wealth of resources which provide food, energy, economic opportunity, and a place to live and recreate. The oil and gas, forest products, fishing, tourism, and transportation industries depend on the coastal area of Alaska, and 75% of all Alaskans live within ten miles of the coast. A few facts will show how important Alaska's coast is in economic terms.

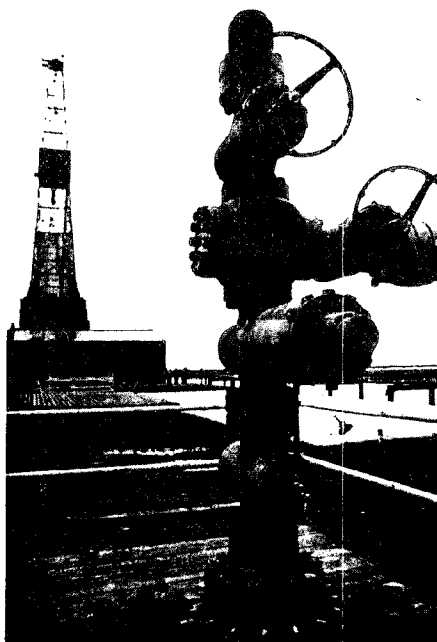
While only 16% of the State's total forested land area is coastal,¹ roughly 90% of potential commercial saw timber volume is within the coastal area (over 75% is in Southeast Alaska alone).²

Recreation, subsistence, and commercial hunting and fishing play an important part in the lives of people using Alaska's fish and wildlife resources. As an example, the commercial fishing and processing industries had a total average monthly employment of over 11,000 in 1976 (about

1. U.S. Forest Service, *RARE II* (Final Environmental Impact Statement), January, 1979.

2. Based on data in Arctic Environmental Information and Data Center Regional Profiles.

6,000 in seafood processing³ and 5,000 in commercial fishing).⁴ Peak figures were much higher: average employment for the month of July, 1976, was nearly 26,000.^{3,4} Most of this employment was located in Southcentral Alaska; all was in the coastal area.



Photographs provided courtesy of the Office of Coastal Management

"The oil and gas, forest products, fishing, tourism, and transportation industries depend on the coastal area of Alaska . . ."

3. Alaska Dept. of Labor, *Statistical Quarterly*, 2nd Quarter, 1977.

4. George Rogers, "Commercial Fish Harvesting Employment Statewide - 1976" (Preliminary Estimates Provided 8/16/78). Unpublished table prepared for the Institute of Social and Economic Research, University of Alaska.

5. Alaska Dept. of Commerce and Economic Development, *Alaska Visitor Industry*, March, 1978.

Oil and gas

Oil and gas resources in Alaska and nearby waters are important to the nation and the world. With Prudhoe Bay production reaching 1.2 million barrels per day, Alaska ranks third among oil-producing states. All of the State's production is in the coastal area, mainly in Upper Cook Inlet and Prudhoe Bay.

The State and federal governments have proposed that 25 oil and gas lease sales be held in Alaska or its offshore waters between 1979 and 1985. Most of the proposed lease sale areas are coastal.

Transportation

Transportation is a key part of Alaska's economy. Two facts make the coast an area of intense activity for the transportation industry: more Alaskans live on the coast than inland, and water transportation tends to cost less than overland transportation. Industries such as timber and oil and gas depend on access to the coast and on tankers, barges, or log-rafting as means of transport. Residents of coastal communities depend on water transportation to import goods and move to and from other parts of the State and country.

Tourism

Alaska's visitor-related firms earned \$610 million in 1975 and employed 3,965 full time and 2,994 seasonal employees.⁵ The coastal cities of Anchorage and Juneau were among the most popular cities to visit. Other coastal areas popular among tourists were Skagway, Ketchikan, Glacier Bay, Kotzebue, Nome, and Barrow.

**Increasing and Competing
Demands for Coastal Resources**

Demand for resources found in Alaska's coastal area is increasing as population and needs for housing, recreation, wilderness, seafood, minerals, and oil and gas all increase. As an example, oil and gas in Alaska will continue to increase in national and international importance. As of 1973, proven oil and gas resources in Alaska were 27% of total U.S. oil reserves

"Demand for resources found in Alaska's coastal area is increasing as population and needs for housing, recreation, wilderness, seafood, minerals, and oil and gas all increase. Sometimes . . . demands may compete for the same resource."



and 13% of total U.S. natural gas reserves. Furthermore, the U.S. Geological Survey estimates that oil and gas resources not yet discovered in Alaska and nearby waters amount to one-third of the total undiscovered oil and gas resources in the country.

Sometimes, however, local, State, national, and international demands may compete for the same resource. Examples of increasing demands being placed on resources surround us, and the need for balanced management is evident. National defense may call for military use of ports when ports are also needed for State and local expansion into bottomfisheries. National and international demand for oil may compete with such uses as caribou calving and rearing and whale migration, all of which are important to subsistence cultures in the Arctic. Valuable mineral resources may be present in areas which are also valued for their recreational use, and for commercial fishing.

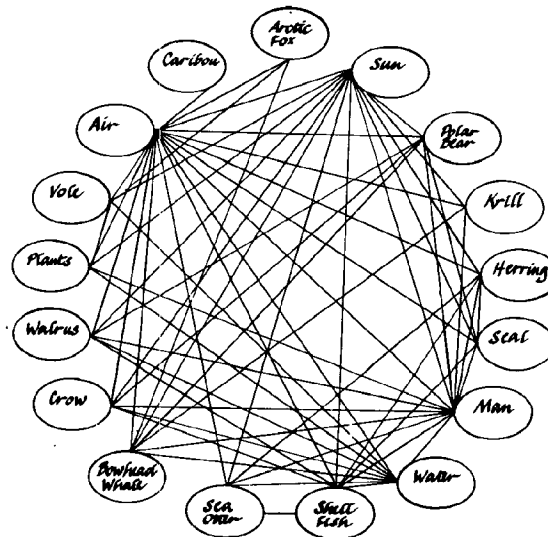
In summary

Alaska's coast is of vast importance to the activities we mentioned, as well as to many we have not mentioned. However, one cannot forget that resources used by man are parts of coastal ecosystems and that these ecosystems do not function solely to serve man: they are the life-support systems for the entire living community, of which man himself is a part.

Ecosystems and Their Limits

An ecosystem is the entire community of animals, plants, and bacteria and their physical and chemical environment. Since all parts of the system are connected, man's overuse of one part can impair other parts and thereby damage the system as a whole.

The Web of Life game shows how parts of an ecosystem depend on each other. Each player wears a sign identifying his or her part in the ecosystem. With a ball of string, each player is connected to elements directly related to that which he or she represents. Once all the related elements are connected by string, one or more players release their hold on the string to show what would happen if elements of an ecosystem were removed or severely damaged.

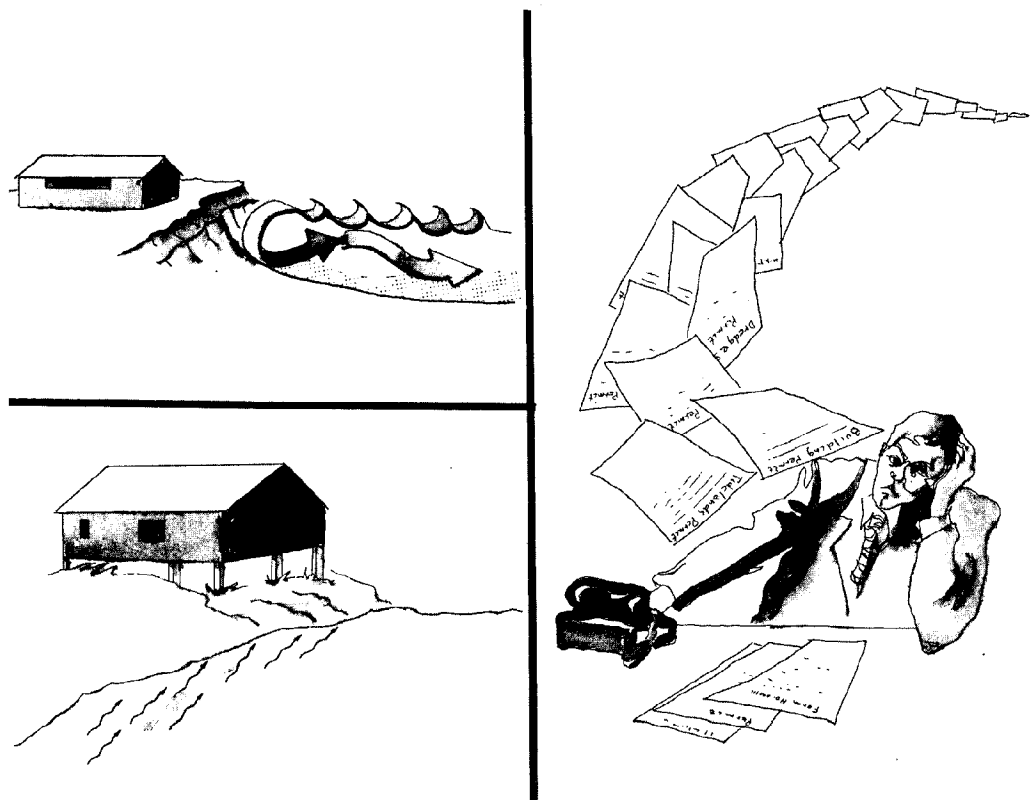


Bristol Bay fisheries disaster

The 1974 Bristol Bay fisheries disaster is an example of a healthy, productive ecosystem damaged through careless management. Various factors, including over-fishing of the salmon resource, an uncontrolled high seas salmon fishery, and cold winters, caused a drastic decline in red salmon in Bristol Bay. In 1974 the fishery, which had at one time produced 22 million red salmon, was closed down and relief was sought. Stocks have since recovered.

The need to understand coastal areas

Preventing damage to ecosystems is a goal of coastal management; protecting human life, property, and economic well-being is also a goal of coastal management: all are achieved in part through understanding physical and biological processes of coastal areas. For example, building on well-drained, level uplands rather than in flood-prone areas can prevent unnecessary surface runoff, loss of life and property, and public expense. Similarly, discharging untreated liquid wastes into coastal waters may damage the fishery on which a coastal community depends. Such discharges might not only reduce the ability of the environment to support living resources but also injure the economic well-being of the community.



"Achieving balanced use of coastal resources is hard sometimes because there is too little control and at other times because there is so much control, duplication of effort, and uncertainty."

A Complex Problem

Avoiding conflict . . .

Achieving balanced use of coastal resources is hard sometimes because there is too little control and at other times because there is so much control, duplication of effort, and uncertainty. For example, a community with no land use controls would have little way of steering new buildings away from eroding shorelines or riverbanks. On the other hand, to build a port and cargo-handling facility in a borough or city which has many local ordinances, a developer may have to satisfy a large number of requirements, including those for local building permits, probably a tidelands lease or permit, a dredge and fill permit, and arrangements for power, water, and road access.

*... and achieving
coordination*

Both the federal Coastal Zone Management Act and the Alaska Coastal Management Act set up a system to coordinate federal, State, and private activities so that efforts are not duplicated and standards are consistent and known well in advance of a proposal. A coastal management program will also help us understand the results of choices we have to make when we decide how coastal areas should be used. Alaska's coastal management program, further, encourages local people to become involved in making decisions about how coastal areas should be used; in a state as varied as Alaska, where coastal regions differ greatly from each other, it is very important that local people become involved in developing their own coastal management program.

**The Federal Coastal Zone
Management Act:
Where It All Began**

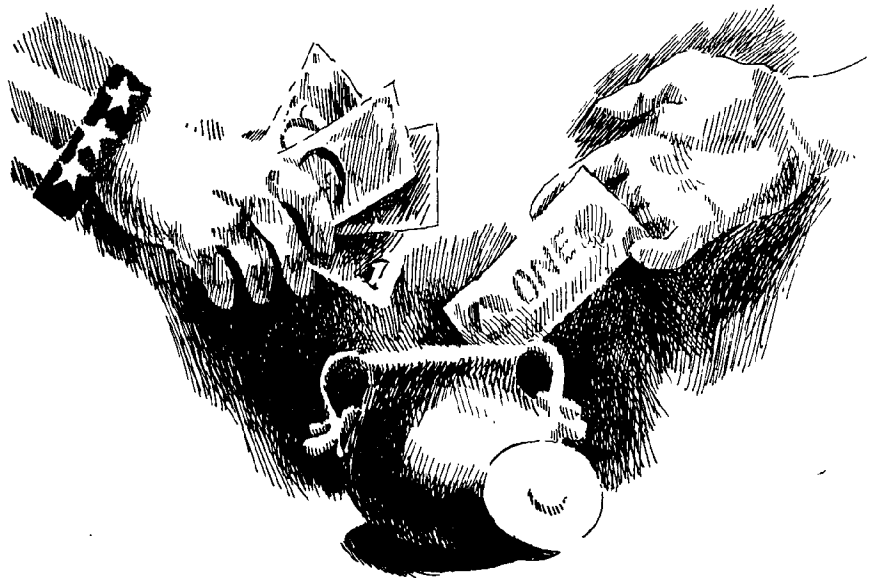
In 1972, recognizing the value of the coast and the many demands being put on coastal resources, the U.S. Congress passed the Coastal Zone Management Act. The Act calls upon states to use the nation's coastal resources in a way which protects natural systems and cultural values.

Matching funds

The Act provides funding to states and creates a new device known as *federal consistency*. States may choose to develop coastal management programs, but they are not required to do so. Funds are given to states on a matching basis, the states paying one dollar for every four dollars provided by the federal government. The State of Alaska provides funds to cities, boroughs, and service area boards on the same matching basis, so that they may develop local, or district, coastal management programs. District programs are described in more detail in the second guidebook.

Once a state has developed a program which is approved by the U.S. Secretary of Commerce, it may receive further funding.

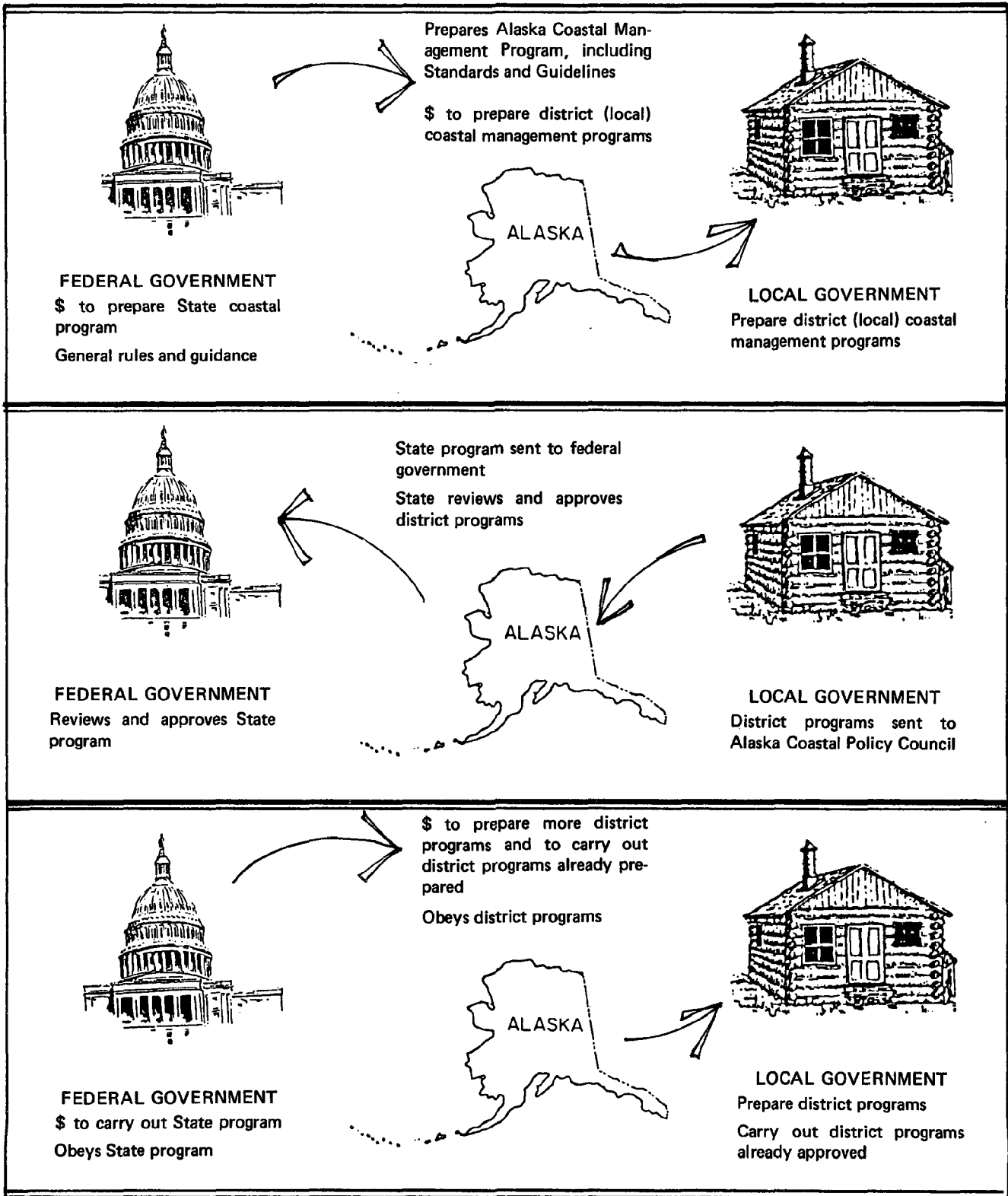
Every four dollars in federal funds
must be matched by one dollar in
non-federal funds.



Federal consistency

Also, once a state's program is approved by the U.S. Secretary of Commerce, federal actions must comply with the state coastal management program in most cases. Federal consistency may be an important new way for states and local governments to influence federal actions in coastal areas, but its value has not yet been tested. State and federal consistency is discussed more fully in the fourth guidebook.

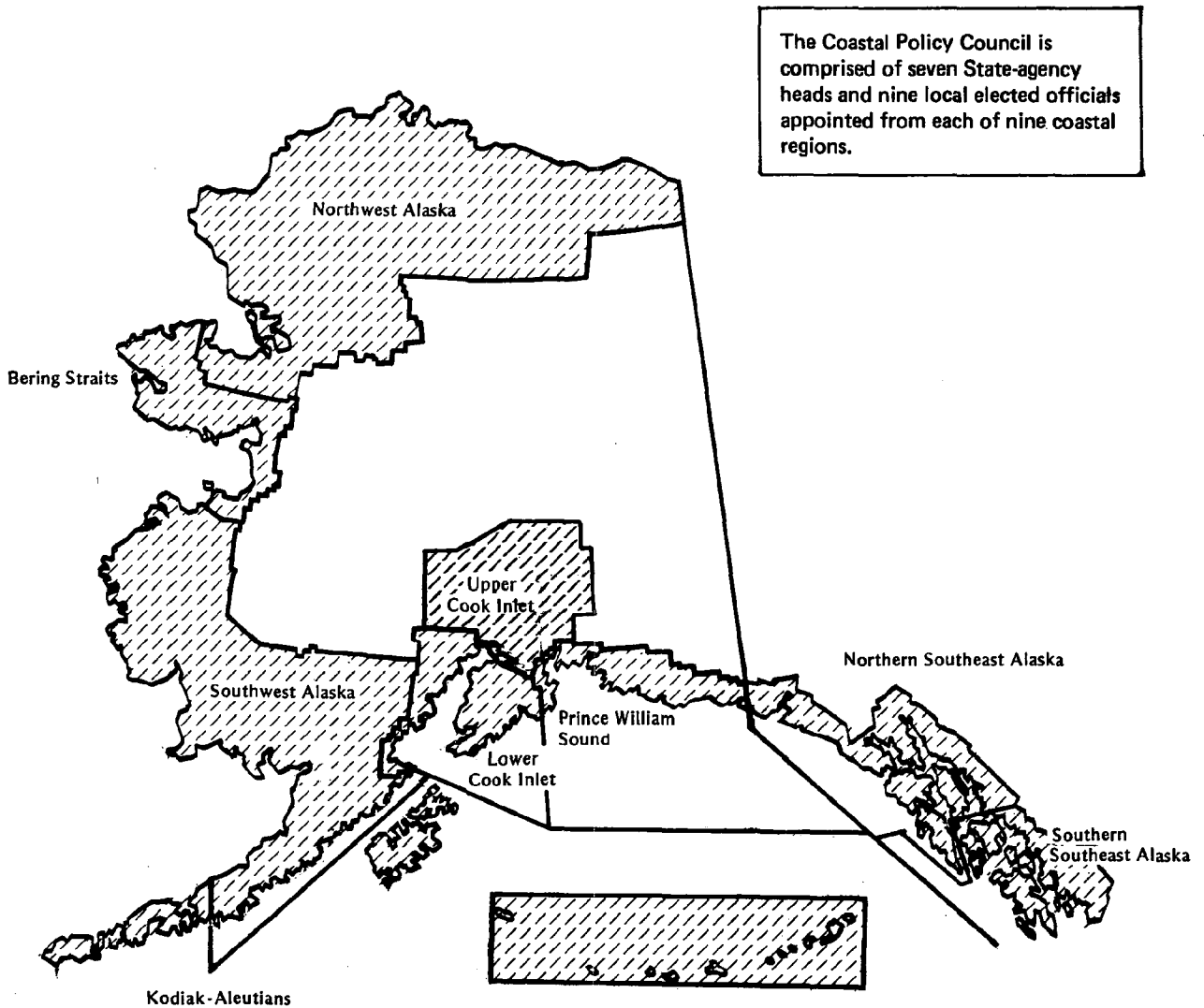
ALASKA COASTAL MANAGEMENT PROGRAM DEVELOPMENT PROCESS



**The Alaska Coastal Management Program:
The State's Challenge**

Background

In 1974, the State of Alaska began to develop a coastal management program. On June 4, 1977, the Alaska Coastal Management Act was passed by the State Legislature in response to the urgent need for better management of Alaska's coast. The Alaska Coastal Management Act, like the federal Coastal Zone Management Act, tries to balance human use of coastal resources with maintenance of natural systems.



The Coastal Policy Council

To guide the State coastal management program, the Alaska Coastal Management Act created a 16-member Coastal Policy Council comprised of seven State-agency heads and nine local elected officials whom the governor appointed from a list of names submitted by local officials in each of nine coastal regions defined in the Act. The Council has adopted standards for the Alaska Coastal Management Program and guidelines for developing district coastal management programs. These standards and guidelines have been approved by the legislature and adopted into the Alaska Administrative Code as regulations.

Standards and Guidelines

The standards adopted by the Council are the minimum requirements for coastal resource management. Standards have been established for coastal uses, activities, habitats, and other resources.

Uses and activities

Uses and activities to be managed in the coastal area include development, particularly in geophysical hazard areas; recreation; energy facilities; transportation and utility routes and facilities; facilities related to commercial fishing and seafood processing; timber harvest and processing; mining and mineral processing; and subsistence.

Resources

Resources to be managed in the coastal area include air, land, and water quality; and historic, prehistoric, and archaeological resources.

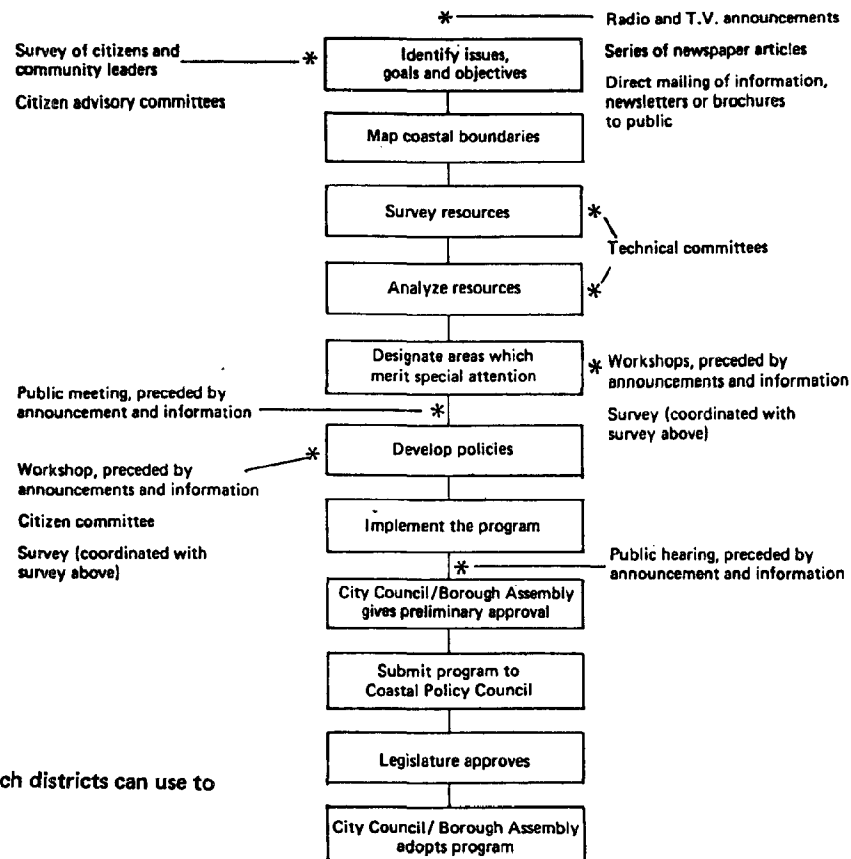
Habitats

Habitats to be managed include offshore areas; estuaries; wetlands and tideflats; rocky islands and seacliffs; barrier islands and lagoons; exposed high energy coast; rivers, streams, and lakes; and important upland habitat.

Areas meriting special attention

There is also a section on what are called *areas which merit special attention*. These areas demand greater attention because they have special values or very high development potential, or both.

FLOWCHART
DISTRICT COASTAL MANAGEMENT PROGRAM



"The guidelines outline a planning process which districts can use to prepare their management program."

Basic planning process

The guidelines outline a planning process which districts can use to prepare their management program. This planning process can be simply outlined as follows: (1) define issues and state goals; (2) gather information from existing sources; (3) formulate alternative ways of reaching goals; (4) weigh alternatives; (5) decide how to use coastal areas and resources; and (6) carry out these decisions.

District Programs

District programs will become the building blocks of the State's program.

Coastal resource districts defined

Coastal resource districts are defined in the Alaska Coastal Management Act (AS 46.40.210[2]) as

- unified home rule municipalities;
- organized boroughs that exercise planning authority;
- home rule and first class cities outside of boroughs that exercise planning authority;
- second class cities outside of boroughs that exercise planning authority and that have a city planning commission and, in the judgment of the Commissioner of Community and Regional Affairs, are able to develop and carry out a coastal program; and
- service areas formed in the unorganized borough for the purpose of developing and adopting a coastal management program. (A coastal resource service area may include one or more regional educational attendance areas.)

A district's means of management

A community can manage coastal resources by applying ordinances, including zoning and subdivision ordinances; building codes; land and water use plans; capital improvement programs; the purchase, sale, lease, or exchange of coastal land and water resources; cooperative agreements and memoranda of understanding; and coordinated project or permit review procedures. State and federal statutes and regulations may also be used to achieve wise management of coastal resources in a community.

Consistency requirements

The Alaska Coastal Management Act requires that State agencies comply with district programs, but it does not require agencies to turn over their management authority to districts. This means that if a State agency has authority over a resource within a district, the agency must comply with the district's coastal management program. Districts, on the other hand, cannot block agency operations without reason.

Public involvement

The public must be involved in all parts of a district's coastal management program. Also, districts must conduct at least two public meetings and one formal public hearing on the draft district coastal management program before the borough assembly or city council approves it.

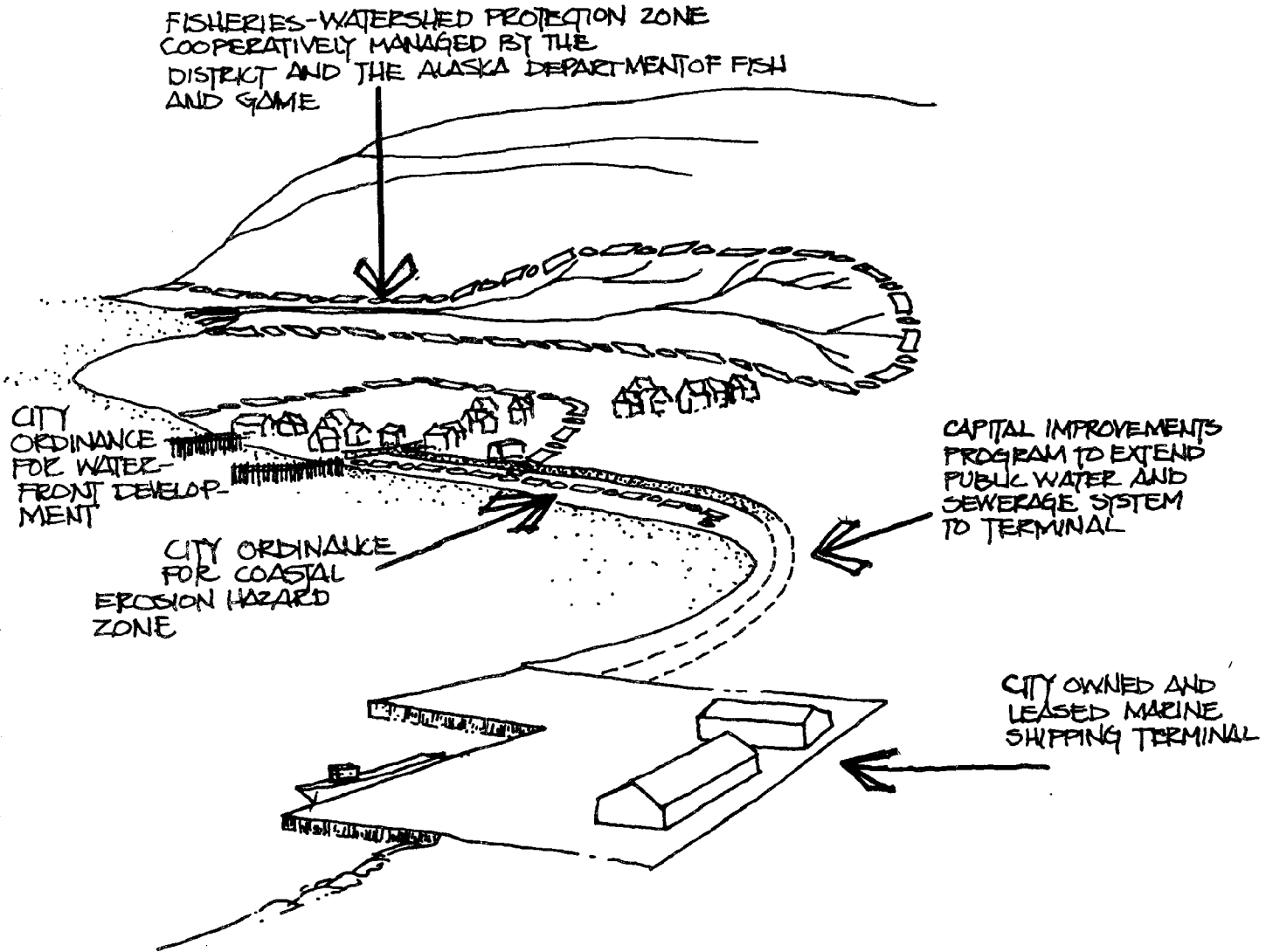
Review and approval

The Coastal Policy Council and the legislature will review and approve district programs before they become part of the State's coastal management program. For a more complete discussion, please refer to the second guidebook.

Public Participation

A high priority

The Coastal Policy Council has placed a high priority on public participation, not only in district program development but also in its own work. The Council will provide opportunities for the public to participate in review and approval of district programs, changes in district programs, and changes in the Alaska Coastal Management Program.



The Office of Coastal Management, which furnishes staff to the Council, will provide information and educational materials concerning coastal management to the public. Such materials include coastal boundary maps prepared by the Alaska Department of Fish and Game; areas suggested for consideration as areas which merit special attention; maps showing the distribution and abundance of coastal fish and wildlife species with commercial, recreational, subsistence, or general ecological importance; and films and slide shows. For a more detailed discussion, please refer to the third guidebook.

Contacts

THE ALASKA COASTAL POLICY COUNCIL represents you, the public, and is responsible for development of the Alaska Coastal Management Program. If you have questions or comments for Council members, you can contact them at the following addresses:

Northwest Alaska

* The Honorable Eben Hopson
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Box 69
Barrow, Alaska 99723

Bering Straits

*** Mr. Stanley Anderson
City Council Member
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Southwest Alaska

*** The Honorable John Nicori, Sr.
Mayor
City of Kwethluk
General Delivery
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** The Honorable Betty Wallin
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Kodiak Island Borough
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Kodiak, Alaska 99615

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** Ms. Lidia Selkregg
Municipal Assembly Member
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Lower Cook Inlet

** The Honorable Donald E. Gilman
Mayor
Kenai Peninsula Borough
Box 850
Soldotna, Alaska 99669

Prince William Sound

* Mr. Malcolm "Pete" Isleib
City Council Member
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** Mr. Roger Allington (Cochairman)
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Southern Southeast Alaska

** The Honorable Robert Sanderson
Mayor
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The Honorable Ernst Mueller
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The Honorable Robert Ward
Commissioner
Dept. of Transportation and
Public Facilities
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* Term ends 1979

** Term ends 1980

*** Term ends 1981

Public members may be reappointed.

THE OFFICE OF COASTAL MANAGEMENT serves as staff to the Coastal Policy Council. Its main tasks are to act as the State's primary contact with the federal Office of Coastal Zone Management; to coordinate the State coastal management program and obtain approval of the State program from the federal Office of Coastal Zone Management; to work with the federal government on consistency requirements; to provide opportunities for public participation in the State's program; and to serve as a clearinghouse for information on Alaska's coast.

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THE DEPARTMENT OF COMMUNITY AND REGIONAL AFFAIRS, DIVISION OF COMMUNITY PLANNING, helps districts develop coastal management programs. Cooperatively with the Local Government Assistance Division, the Division of Community Planning also administers the Coastal Energy Impact Program (CEIP), which includes planning grants.

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