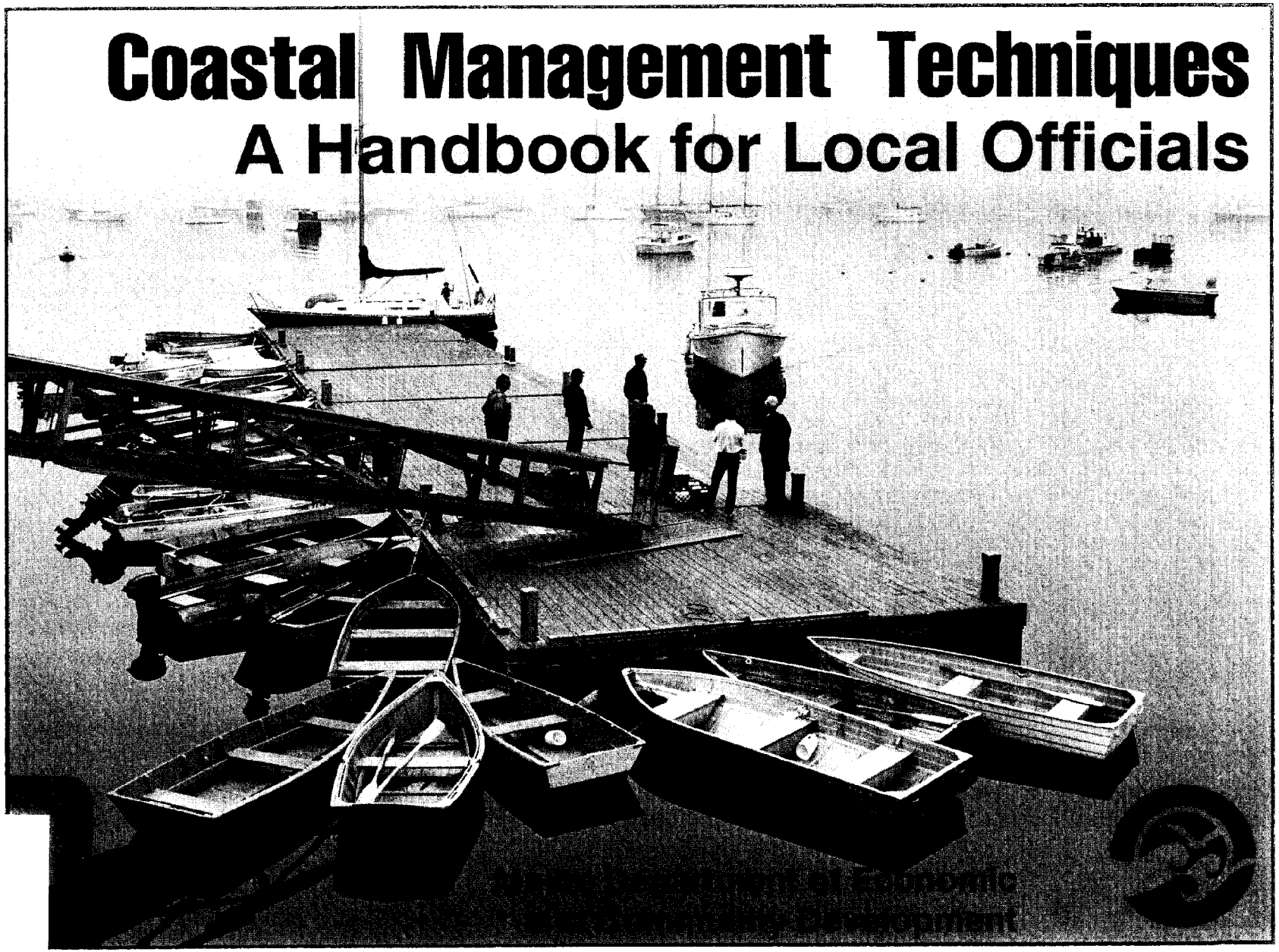
Coastal Management Techniques

A Handbook for Local Officials



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COASTAL MANAGEMENT TECHNIQUES

A HANDBOOK FOR LOCAL OFFICIALS

Prepared for:

Maine Department of Economic and Community Development

Prepared by:

Land & Water Associates and Maine Tomorrow, Hallowell, Maine

October, 1988

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Christopher Ayres, photo.

Waiting for the ferry to the Cranberry Isles at Northeast Harbor

PREFACE

Recent growth and development has put tremendous pressure on Maine's coastal towns, cities and villages. The Maine Legislature has responded by enacting two significant new laws. Maine's Coastal Management Act of 1986 and Maine's Comprehensive Planning and Land Use Regulation Act of 1988 require communities to plan thoughtfully for the future and to take action to ensure that coastal values are protected.

This Handbook is designed to help local officials identify State and local issues and to develop solutions to problems associated with growth. It pays special attention to the issues of port and harbor development, marine resource management, shoreline access, scenic area protection and recreation opportunities.

The Maine coast is endowed with extraordinary natural diversity - thousands of islands and inlets; rocky cliffs and sandy beaches; waterfowl and whales; seals and schools of fish; shorelands blanketed with oak and hickory, red spruce and birch.

The Maine coast is also a place for people. Drawn by both economic opportunity and the quality of life, Maine citizens have created ports, coastal cities, small towns, and fishing villages that together account for over one-half of Maine's total population.

Just as surely as the coast is shaped by ocean and weather, so is it shaped by the needs of its residents and visitors. New recreational and economic needs arise. Traditional, rural ways of life rub shoulders with urban pressures. Stresses are placed on limited and sometimes fragile resources.

This Handbook identifies the stresses and pressures brought on by change and suggests how local officials can deal with them - simply and effectively - through local action.

Maine's Coastal Policies

In April, 1986 **An ACT to Enhance the Sound Use and Management of Maine's Coastal Resources** *(38 MRSA Section 1801) was signed into law. It states:*

"The Legislature finds that the Maine coast is an asset of immeasurable value to the people of the State and the nation, and there is a state interest in the conservation, beneficial use and effective management of the coast's resources; that development of the coastal area is increasing rapidly and that this development poses a significant threat to the resources of the coast and to the traditional livelihoods of its residents; that the United States Congress has recognized the importance of coastal resources through the passage of the United States Coastal Zone Management Act of 1972 and that in 1978 Maine initiated a coastal management program in accordance with this Act which continues to be of high priority; and that there are special needs in the conservation and development of the State's coastal resources that require a statement of legislative policy and intent with respect to state and local actions affecting the Maine coast."

"The Legislature declares that the well-being of the citizens of this State depends on striking a carefully considered and well reasoned balance among the competing uses of the State's coastal area. The Legislature directs that state and local agencies and federal agencies as required by the United States Coastal Zone Management Act of 1972, PL 92-583, with responsibility for regulating, planning, developing or managing coastal resources, shall conduct their activities affecting the coastal area consistent with the following policies to:

1. **Port and harbor development.** Promote the maintenance, development and revitalization of the State's ports and harbors for fishing, transportation and recreation;

2. **Marine resource management.** Manage the marine environment and its related resources to preserve and improve the ecological integrity and diversity of marine communities and habitats, to expand our understanding of the productivity of the Gulf of Maine and coastal waters and to enhance the economic value of the State's renewable marine resources;

3. **Shoreline management and access.** Support shoreline management that gives preference to water-dependent uses over other uses, that promotes public access to the shoreline and that considers the cumulative effects of development on coastal resources;

4. **Hazard area development.** Discourage growth and new development in coastal areas where, because of coastal storms, flooding, landslides or sea-level rise, it is hazardous to human health and safety;

5. **State and local cooperative management.** Encourage and support cooperative state and municipal management of coastal resources;

6. **Scenic and natural areas protection.** Protect and manage critical habitat and natural areas of state and national significance and maintain the scenic beauty and character of the coast even in areas where development occurs;

7. **Recreation and tourism.** Expand the opportunities for outdoor recreation and encourage appropriate coastal tourist activities and development;

8. **Water quality.** Restore and maintain the quality of our fresh, marine and estuarine waters to allow for the broadest possible diversity of public and private uses; and

9. **Air Quality.** Restore and maintain coastal air quality to protect the health of citizens and visitors and to protect enjoyment of the natural beauty and maritime characteristics of the Maine coast."

Christopher Ayres, photo.

Eider ducks seek food along the coast.

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Alec Giffen of Land and Water Associates prepared the initial text with assistance from Rich Rothe of Maine Tomorrow. Drew Parkin of Land and Water Associates provided expert advice, while Brian Kent of Maine Tomorrow refined the text and acted as editor and design and production specialist.

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USING THIS HANDBOOK

This handbook is designed to assist local governments in addressing coastal land use problems and opportunities. It identifies coastal issues and policies and suggests ways to resolve problems.

No one community will need all of the strategies listed in this Handbook. For while all Maine coastal communities share similar characteristics, each is unique. A "cookbook" approach will not work. This Handbook is intended to stimulate, rather than replace, thoughtful local planning.

This handbook contains four sections:

Section I explains why managing coastal resources and land use is important. It provides background information on Maine's coastal policies and outlines how communities can address coastal issues.

Section II contains nine sub-sections. Each focuses on a specific policy and explains actions communities can take to implement that policy.

Section III contains examples of ordinance language and specific wording that other towns have used to achieve their policy objectives.

Section IV offers an appendix of supplemental sources of information. It lists references, organizations and sources of funding that towns can draw on for more information.

If you're interested in coastal policies in general, read Section I and the introductory paragraphs under each policy statement in Section II.

If your community wishes to focus on a particular coastal problem or issue (such as controlling development in hazard areas), turn directly to the sub-section that deals with that issue. Scan the headlines in the sub-section and you'll find a range of actions which may be appropriate to your situation. Then, for more specifics, refer to the cross-referenced examples in Section III.

SECTION I: BACKGROUND AND INTRODUCTION

WHY A HANDBOOK ON COASTAL MANAGEMENT?

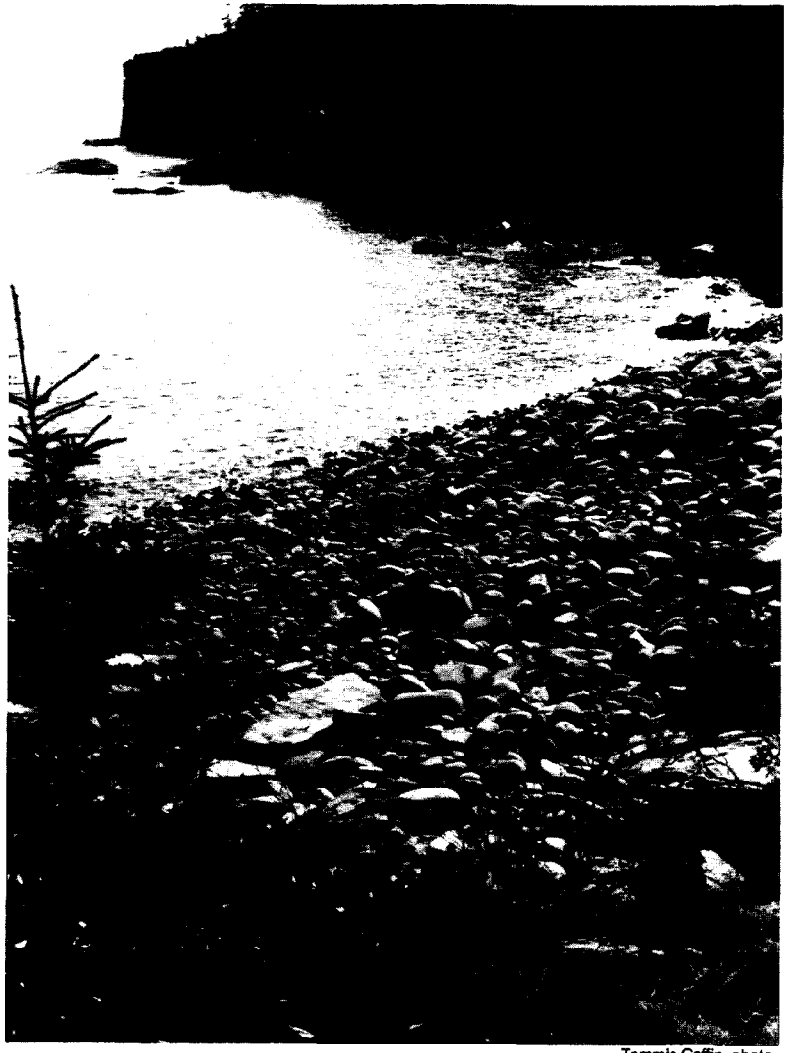
The Maine Coast is a Special Place

The Maine Coast - pause for a moment and think of the images those words bring to mind. Do you think of the cliffs at Quoddy Head, the sand dunes at a southern Maine beach, a favorite island, or rolling swells in Penobscot Bay? Here in Maine we take the coast for granted, but do you know another area with its special cultural and natural values? It is *truly* a special place of immeasurable value.

This handbook is designed to help communities protect and enhance the special values of the coast.

The Threat of Uncontrolled Growth

Rapid and unprecedented change is occurring along the Maine coast. A short 15 years ago the future of Maine's coast seemed relatively secure. Land use on the coast changed slowly. However, those times are gone. Today the population in some coastal communities has increased by as much as 40% in the last 10 years. Land uses have changed even faster. Some communities have limited the number of building permits issued to avoid exceeding their capacity to accommodate growth. Others face pressures that may force fisherman out of their harbors, close off access, degrade wildlife habitat, and eliminate open space.



Tammis Coffin, photo.

Otter Cliffs, once the home of "sea-mink", on Mount Desert Island

3000 MILES OF COAST
As the crow flies only 200 miles separates Kittery, Maine's southernmost town, from Lubec, the State's northernmost coastal community. Yet, if we were to trace the actual coastline we would have a line in excess of 3000 miles long. This is roughly the distance from Portland to London.

It is clear that Maine has entered a new era, and that if the Maine coast is to continue to provide the special values that have nourished Maine people for generations, Maine communities must plan ahead and take an active role in shaping their future. In fact, two recent pieces of legislation require communities to act.

Maine's Coastal Management Act and Maine's Comprehensive Planning and Land Use Regulation Act

In 1986, the Legislature enacted a law, Maine's Coastal Management Act. The law establishes nine coastal policies and requires State agencies and local governments to conduct their affairs in a manner consistent with these polices.

The 1988 Growth Management legislation requires communities to incorporate coastal policies in their plans and ordinances. The legislation mandates local land use planning and implementation actions, establishes a timeframe for compliance, and also requires that community policy be consistent with the coastal policies.

Given these legislative mandates and the pressures of growth, more and more coastal communities are upgrading existing ordinances, undertaking comprehensive planning, and seeking innovative solutions to a host of coastal issues. Both Acts seek to assure that community actions are carefully considered and address a broad spectrum of issues in a balanced fashion. The coastal policies serve as a useful guide in designing the coastal management elements of local comprehensive plans.

Why Coastal Management is Needed

The following examples illustrate why coastal resources need to be managed:

- Maine fishermen must now compete with recreational boaters and non-water dependent uses for space in many of Maine's ports;
- Opportunities for public access to the coast are growing fewer each year while demand for access is increasing dramatically;
- Coastal storms can cause millions of dollars of property losses if proper sand dune and flood protection ordinances are not in place;
- Scenic and natural areas, that are fundamentally important to both the quality of life in Maine and the tourism industry, are being lost to development;
- Traditional marine resource industries are having greater difficulty gaining access to the water;
- Marine industries cannot compete with high value residential, tourist, and recreational uses of shore land;

- Swelling populations are affecting the quality of life in some coastal areas and threaten fragile resource areas;

- Conflicts between residents and non-residents and commercial fishermen and recreational boaters are increasing over access to moorings in many harbors;

- Many acres of productive clam flats have been closed to harvesting because of pollution and overboard discharges; and

- Scientific evidence suggests that air pollution may be causing tree diseases in Maine's coastal forests.

All of these problems can and should be addressed locally. The thousands of local land use decisions made every year change the form of the built environment on the coast as dramatically as the tides. Further, if these local decisions are to be effective and positively influence the coast, they should be consistent with State goals.

Christopher Ayres, photo.

Clam and bloodworm digger

HOW TO MAKE LOCAL PROBLEM SOLVING EFFECTIVE

The Importance of Effective Local Action

Local action can take on many forms and local government has many tools at its disposal to act creatively to manage the pressures of growth. Communities can guide decisions with both non-regulatory and regulatory measures. For example:

Citizens and citizen groups can:

- Educate residents on coastal issues and problems
- Acquire land or easements through a land trust
- Research or investigate sources of coastal pollution
- Volunteer to serve on local boards

Local governments can:

- Acquire key parcels of land
- Provide economic incentives to marine businesses
- Sponsor research and education; and
- Provide essential public services for coastal residents.

At the regulatory level, communities can:

- Undertake comprehensive or waterfront planning
- Enact innovative shoreland zoning provisions
- Develop a harbor management ordinance
- Enact storm hazard provisions. . . etc.

In summary, local community's have the power and authority to shape and control growth and to manage coastal decisions in a way that is consistent with State goals. Further, they are well served by Maine's Regional Councils who can help craft ordinances, review plans, and provide general planning assistance.

Coastal Policies and Comprehensive Planning

Ideally, all local actions regarding coastal policies, issues, and problems should relate to a community's comprehensive plan.

The value of a comprehensive plan is that it provides broad direction for a community. It allows residents to help plan for their future, and, in coastal communities, it provides a forum for establishing coastal policies. These policies can, in turn, give direction and shape to all community actions involving the coast.

The City of Bath, for example, is developing a Waterfront Plan. That Plan will become a component of the City's overall comprehensive plan and will guide all future Shoreland Zoning decisions.

Local Solutions to Coastal Problems

Each of Maine's 146 coastal communities is unique. Issues and needs vary between communities and appropriate solutions will require the use of different tools and techniques. However, while problems differ, certain approaches to solving coastal management problems have proven effective. These approaches have several common elements which include:

- Involving the public effectively;
- Clearly identifying problems and/or opportunities;
- Setting objectives;
- Designing appropriate strategies for a planning project;
- Thoroughly analyzing the problem;
- Defining realistic options; and
- Selecting a course of action.

Although these approaches may seem self-evident, the discipline they impose on problem solving can help a community reach solutions effectively and efficiently. Each approach is described in more detail below.

1. Public Involvement

Many good plans fail because the public was not effectively involved in their creation. Effective public participation involves more than just holding public hearings. Some examples of actions that can be taken to involve a community in the planning process include:

- selecting a cross-section of residents, local officials, and business representatives to serve on committees;
- conducting workshops to discuss issues;
- inviting frequent press and news coverage;
- conducting surveys to solicit opinions;
- touring areas of concern (such as a boat tour of the waterfront); and
- involving local school children (Stonington invited 6th graders to envision their dreams for the future of the town).

While encouraging broader public participation can be a time consuming endeavor, plans developed by a broad-based process are more likely to be adopted and implemented.

2. Problem Identification

At the outset, it is important to define problems and/or opportunities clearly. Nothing is more frustrating than to get part way through a planning effort only to find that various committee members are working from a different definition of the issue.

MAINE'S LIGHTHOUSES
There are 38 lighthouses along Maine's coast. Many date to the early 1800's. Portland Head Light and Boon Island Light are the oldest, having been built in 1791.

Write down and discuss the issues and gain agreement on the problems and opportunities among the participants before proceeding.

3. Setting Objectives

Set objectives for what you wish to accomplish. For example, in the case of access, your objective may be to maintain all existing access points to the coast. Or alternatively, you may wish to increase the number of access points. Establish explicit objectives to help assure that everyone is moving in the same direction.

4. Designing a Project Strategy

Once the problem is defined and agreed to by the parties involved, design a strategy to accomplish your goals. This will involve, at least, a decision about who will do the work (the committee, local officials, a Regional Council, a consultant) and what the time frame should be. It may also involve identifying funding sources and assigning responsibilities to different individuals or subcommittees.

In other words, provide a structure for your deliberations ahead of time.

5. Analysis

Thorough analysis of the problem will help insure thoughtful solutions.

For example, no recommendations can be made regarding coastal access options without an analysis of property ownership, property values, citizen opinions, the types of access needed, and sources of funds available.

Or, if the problem involves retaining a working waterfront, it will be important to know how many jobs are threatened and what the value of existing Maine industries is, in terms of tax revenue, to the community.

If coastal wetlands are the issue, the community will need to analyze natural systems, wildlife concerns, and the stormwater run-off characteristics of the surrounding area.

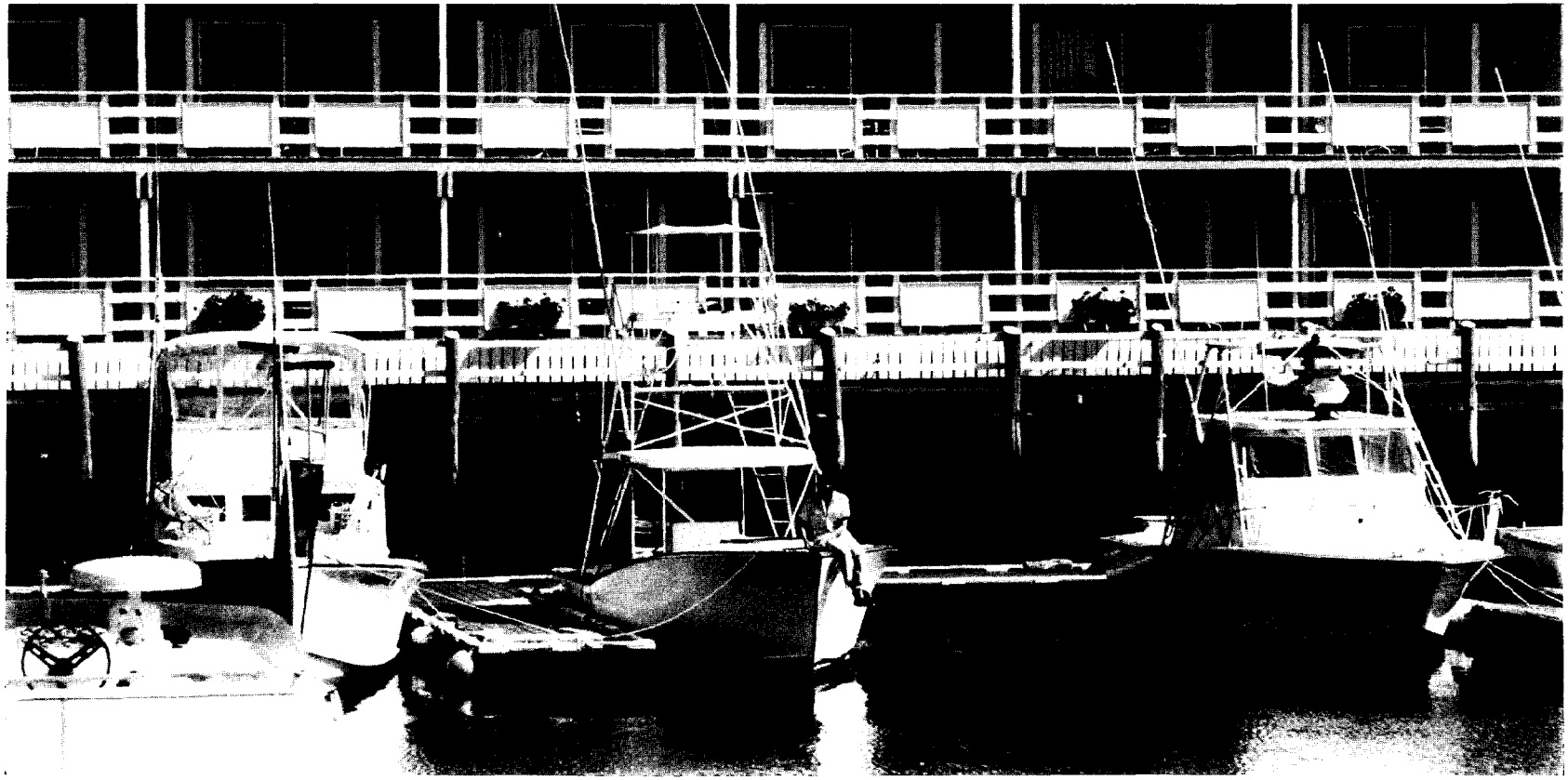
6. Defining Options

Effective planning also involves defining a range of solutions to the problem. This means researching the tools or methods that are available and defining how they might be adapted by your community to meet your particular needs. The options are likely to range from regulatory measures such as adjustments to a land use ordinance or better enforcement procedures, to incentives that encourage private parties to take action.

7) Selecting a Course of Action

The final step in any planning process is selecting a preferred course of action. This selection should be based on the advantages and disadvantages of each of the options available. If the problem analysis has been done properly, and if the public has been involved effectively, this last step may be quite easy.

However, on some issues, there are no easy answers. Different segments of the community may hold quite different views of what actions are appropriate. These are difficult



Christopher Ayres, photo.

Waterfront development crowds the shore at Boothbay Harbor

cases that may require compromise to reach consensus or simply making a decision by majority vote.

Before finalizing what implementation strategy you wish to select, recognize that:

- regulation is but one method of management control;
- no action pending further study is an option;
- there may be State or Federal Grants available to assist you;
- regional or shared solutions may be best; and
- the experiences of other towns and cities - as described in this handbook - may help you find solutions.

Finally, in selecting a course of action to implement solutions to the problem, make sure that you:

- have public support;
- set priorities and a timetable that are achievable;
- can follow through with dollars and/or commitments;
- have the support of local officials;
- have shaped your proposal to meet local Comprehensive Plan objectives; and
- have shaped your proposal to meet State objectives.

STATE APPROACHES TO COASTAL MANAGEMENT

In seeking solutions to coastal problems local communities should be mindful of existing State:

- Laws and regulations;
- Sources of information; and
- Assistance.

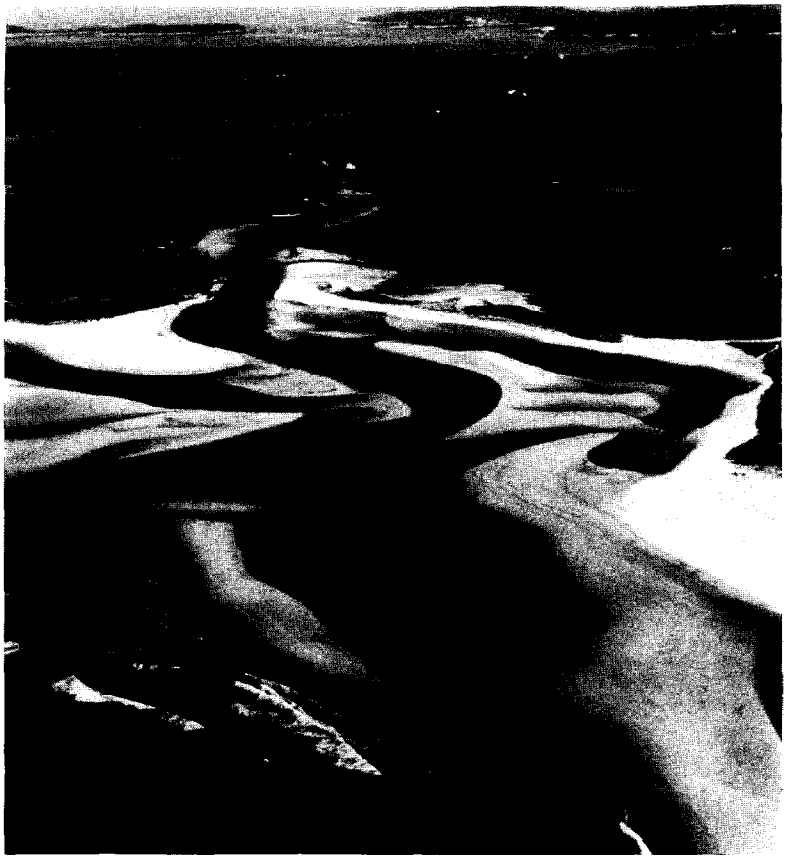
Laws and Regulations

The State directly or indirectly regulates a variety of activities on the Maine coast. These include the following:

1. *Shoreland development.* All shoreland development, including building construction, timber harvesting, and earth moving is controlled by local governments under the Mandatory Shoreland Zoning Act (Title 38 M.R.S.A. Section 435-446).

   The law requires all communities with frontage on the coast, rivers, major streams and wetlands, and large lakes and ponds to adopt and administer a local ordinance which meets or exceeds State standards. Under the law, proposed land use activities within 250 feet of high water are reviewed to assure that they are consistent with zoning, do not adversely affect the natural environment and meet other standards adopted by the community.

2. *Large scale development activities.* Large subdivisions and commercial and industrial facilities are subject to the requirements of the Site Location of Development Law (Title 38 M.R.S.A. Section 481-490) administered by the Department of Environmental Protection.



Hank Tyler, photo.

The patterned complexity of sand, sea, river, wetland and upland at the mouth of the Moose River at Popham State Park.

These and other large scale projects, such as gravel pits, are activities reviewed for their impact on the natural environment, traffic movement, and other local conditions.

Any major proposal on the coast should be evaluated by local officials to determine if it requires both local and State review.

3. *Natural Resource Protection* (Title 38 M.R.S.A. Section 480-A). Activities that affect natural resources - fresh water and coastal wetlands, sand dunes, rivers and streams, fragile mountain areas, and significant wildlife habitats - require a permit from the Department of Environmental Protection under the Natural Resources Protection Act. Proposed activities are reviewed for their impact on existing uses, soil erosion, harm to habitats, and other considerations.

4. *Water discharges.* All water discharges require a license from the Department of Environmental Protection. These are reviewed to assure that the quality of water is not adversely affected.

5. *Subdivisions.* Subdivision of land into 3 or more parcels (within 5 years) must be reviewed by local governments under the Subdivision Law (30 M.R.S.A. Section 4956). This law requires communities to develop standards that assure the subdivisions are compatible with existing land uses, are on suitable soils, and do not have an unreasonable adverse impact on the natural environment or municipal services.

6. *Submerged lands.* The State owns the land under the ocean from the low tide mark to 3 miles seaward. Development projects, such as wharves or piers, that extend beyond the low-water mark require lease permits from the Bureau of Public Lands in the Department of Conservation.

7. *Other activities.* A variety of other State and Federal laws address particular activities which may affect the coast. For example, the Federal government, through the Army Corps of Engineers, regulates dredging and filling of wetlands under Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Waters Act. The Army Corps should be contacted regarding any project affecting a wetland to ensure that necessary permits are obtained.

   In addition, communities are allowed by Maine law to control land and water uses within their boundaries. Thus, many communities have adopted regulations which go beyond those mandated by State law.

Information

The State makes a variety of information on coastal management techniques and data available to communities, developers and individuals. This information includes: Maps showing the nature and location of coastal resources, handbooks, model ordinances, socio-demographic information, statistics on coastal resources, and information on the

comparative value of natural areas. These and other materials are available from the Department of Economic and Community Development, the State Planning Office, and other agencies. For a more complete listing of the materials which are available, see Section IV.

Assistance

State agencies can provide direct assistance to coastal communities. The Bureau of Geology in the Maine Department of Conservation can, for example, help communities understand local geologic conditions. Other agencies, such as the Department of Marine Resources and the Department of Inland Fisheries and Wildlife can assist in understanding the living resources of the coast. A more complete list of these State agencies and the assistance available from them is contained in Section IV.

Regional Councils are also available to assist communities in solving their coastal management problems. A list of the Councils and their addresses is in Section IV.

Financial assistance, in the form of grants, is also available from some of the State agencies. For example, the Department of Economic and Community Development provides grants to assist coastal communities provide recreation facilities and to resolve coastal management problems. For more information on sources of financial assistance, see Section IV.

Tammis Coffin, photo.

Sculptured coastal boulders

and obtain other services. One of the biggest issues facing Maine ports, however, is whether non-water dependent uses should be prohibited or restricted when they threaten to displace fishing or other water dependent uses.

Christopher Ayres, photo.

Unloading ground fish

Other Port Functions

The role that Maine's ports and harbors play in supporting Maine industries other than fishing is less obvious but no less important. For example, Maine's pulp and paper industry, the backbone of the state's industrial economy, relies heavily on materials moved through Maine ports. Further, much of Maine's home heating oil and gasoline supplies flow through the major ports. Many ports and harbors also serve as ferry terminals for island communities, bringing with them problems of increased traffic, parking and maintenance costs, and increased tourism.

Tourism

Ports and harbors attract tourism. Boothbay Harbor, Bar Harbor, Northwest Harbor, and many others draw throngs of visitors each year. Tourists, in turn, bring increased demand for fishing charters, tour boats, recreational boating, mooring space, restaurants and lodging. All help fuel the local economy but they also put increased pressure on traditional marine businesses.

Conflicting Demands

The observations above show that Maine's ports and harbors are subject to conflicting demands. A wide variety of uses are competing for limited space. Areas which were available to Maine's fishermen a few years ago are now available only at a prohibitive price. Many non–water de-

EARLY COASTAL EXPLORATION
Those who celebrate Christopher Columbus' discovery of America forget that Leif Erikson explored the Maine coast in 1003. The first English foray to Maine occurred in 1497; the French followed in 1524. Captain John Smith, of Plymouth Rock fame, explored and mapped the Maine coast in 1614.

pendent users, such as waterfront condominium developers, can afford to pay more for the use of waterfront properties than those who require a harbor location for their businesses. In these situations, local community assistance, through appropriate ordinance provisions, is needed before the fishermen, boat builders and others are forced out.

Further, conflicts can exist among the water dependent users themselves. For example, in some areas recreational boating facilities are competing with commercial fishermen for space. In these cases, harbor management and/or mooring plans are needed to help resolve the conflicts.

Experience has shown that, without attention, ports and harbors will deteriorate. The next sections focus on local solutions to port and harbor problems.

What Communities Can Do to Maintain or Improve Ports and Harbors.

Successes

Several of New England's larger ports have been successful in their efforts to secure a permanent place on the waterfront for the fishing industry and in their efforts to revitalize the waterfront. Ports like Portland, ME, Portsmouth, N.H., and Gloucester, MA have all enacted ordinances to assure fishermen access to the port. In Portland this was capped by the successful public referendum to maintain the working waterfront (see Appendix A1 for the wording of the referendum).

Furthermore, many of Maine's smaller port communities, such as Vinalhaven and Belfast, have made major investments in their waterfronts and downtowns. These efforts have paid off in benefits to fishermen, merchants, residents and visitors. Almost without exception these projects have been the product of a partnership between progressive local leaders and business interests - people who have an interest in, and a commitment to, their community.

Success Starts with a Sound Strategy

The most important single step a community can take to improve its port or harbor is to develop an overall strategy. The strategy should be consistent with, or be incorporated into, the community's overall Comprehensive Plan (see

Appendix A for an excerpt from Boothbay Harbor's and Harpwell's Comprehensive Plans and an excerpt from Scarborough's Harbor Plan).

A local harbor development strategy can include one or more of the following options.

LOCAL OPTIONS TO GUIDE PORT DEVELOPMENT

FAVOR WATER DEPENDENT USES

Steps that can be taken to protect water dependent uses, such as commercial fishing, are based on regulatory and non-regulatory techniques.
Regulatory actions a community may take include:

1.Revise Local Shoreland Ordinances to Favor Marine Development

By creating a special district or zone a community can:

- restrict the types of uses allowed on the waterfront; and/or
- establish separate areas for different uses.

A local marine ordinance can:

- prohibit non-water dependent uses in selected areas;
- give priority to commercial water dependent uses over recreational uses;
- require that certain users provide and maintain access to the waterfront;
- allow mixed uses only if the ancillary uses are secondary to the water-dependent use;
- limit the size and height of non-marine structures;
- regulate construction on docks and wharves; and
- establish standards for refueling areas and spill prevention and clean-up.

(See Appendix A for Yarmouth's "Water Oriented Commercial District" and Portland's "W-2 Waterfront Zone").

Christopher Ayres, photo.

Portland's fishing fleet is a vital part of the local, and state economy.

2.Establish a Density Bonus

Improved physical or visual access to the water can be achieved by establishing a residential density or floor area bonus for developers. Under this scheme, developers provide better access or other public benefits in exchange for development credits (see Appendix A7 for a description of the Waterfront Development District of Beverly, Massachusetts and Appendix C2 for Boothbay Harbor's density bonus).

Non-regulatory actions to favor marine development include:

1.Improve Dock Facilities and Services

Land side facilities such as community piers, parking lots and boat launching and storage areas for fishermen can be improved with local, State, or Federal funds (Waterfront Action Grants and Land and Water Conservation (LAWCON) funds are available from the Department of Economic and Community Development and the Bureau of Parks and Recreation has funds available for boat launch facilities).

2.Use Financial and Other Incentives

Financial incentives and recruitment efforts initiated by the community or local businesses can be used to encourage the mix of waterfront uses needed by the commercial fishing industry, such as parts supplies, storage areas, parking, access, etc.

UNDERTAKE WATERFRONT REVITALIZATION PROJECTS

Revitalization includes: upgrading public and private facilities in the waterfront area, rebuilding or restoring old or rotting commercial fishing piers, and encouraging a mix of uses which make the area economically viable. Specific actions could include:

1. upgrading streets, lights, parking, sidewalks, etc. (Community Development Block Grant or local funding);

2. providing grants and/or low interest loans for improvements on private property (Community Development Block Grant or local funding);

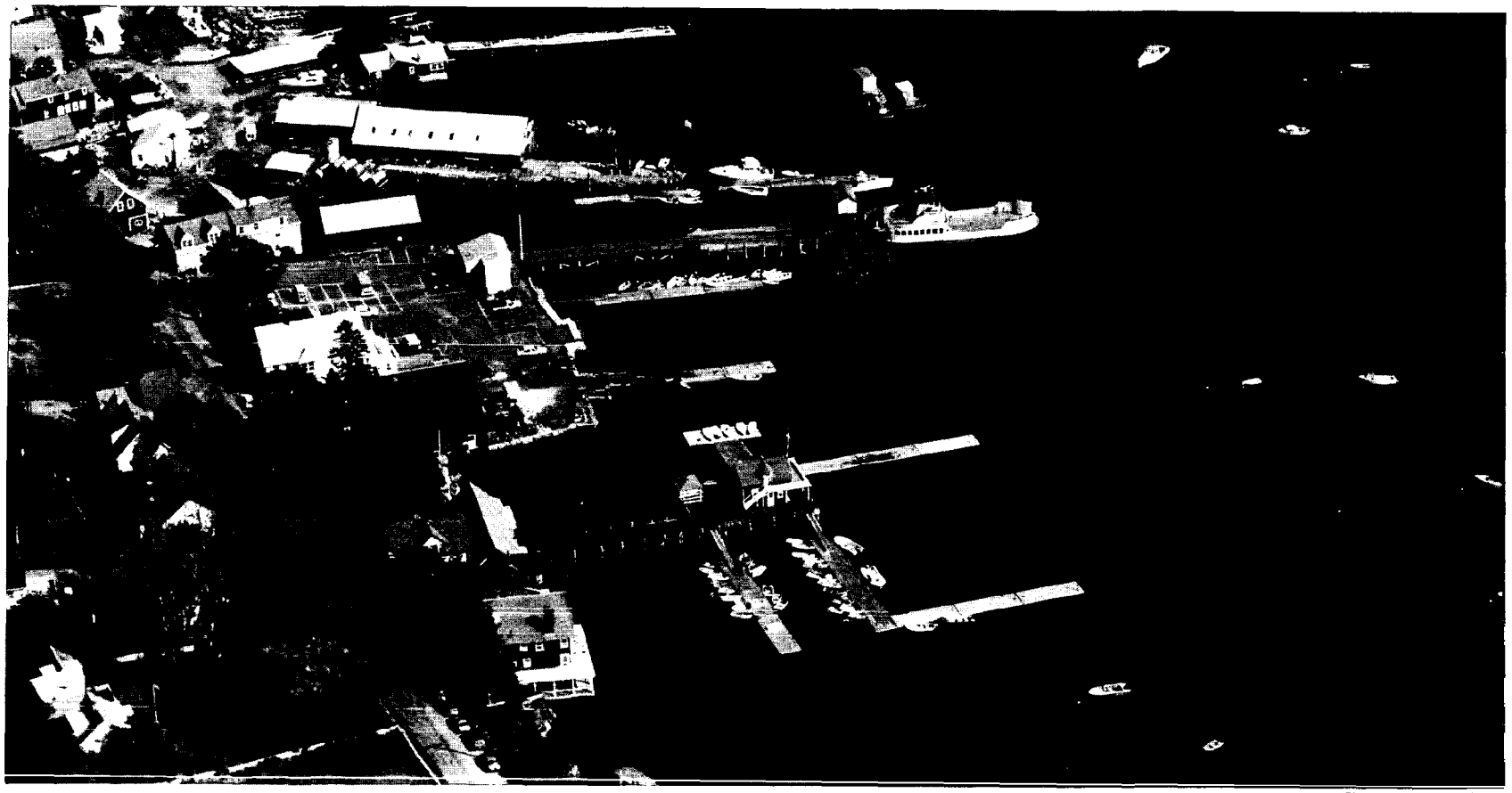
3. recruiting particular types of businesses to locate in the waterfront through an active business recruitment campaign;

4. developing recreational attractions such as historic features, museums, etc. (see Policy 7 - Tourism); and

5. establishing architectural guidelines (see Appendix A5 for the standards in Yarmouth's "Water Oriented Commercial District," and the excerpt from Portland's "Public Access Design Guidelines," Appendix A8).

IMPROVE PUBLIC ACCESS TO THE HARBOR

Ports and harbors can accommodate picnic areas, informational displays, footpaths, small parks, fishing piers, boat launching sites, docks, overlooks, and other facilities for public use. Bath, for example, has a riverfront pathway, boat dock, public restrooms and benches and shelters for picnickers on the edge of its downtown area. (See Policy 3 for more information on access).



Water/dependent uses, docks, parking lots, ferry and moorings vie for space at North Haven

Christopher Ayres, photo.

REVOLUTIONARY WAR SEA BATTLES
The earliest sea battle of the American Revolution was fought off the coast of Machias when 40 townsmen stormed and overtook the British sloop Margaretta. A later effort on the part of the fledgling colonies navy to re-capture Castine from the British was not nearly so successful. In fact, the entire American fleet was lost.

DEVELOP MOORING, DREDGING AND STORM PROTECTION PLANS

Mooring Plans

Mooring plans and ordinances are essential; a good plan can maximize the efficient use of limited harbor space, establish consistent rules and reduce conflicts. Under Maine law (Title 38), communities have the perogative to regulate the assignment of moorings and other harbor management matters. Generally, mooring or harbor ordinances regulate: the number and placement of moorings; the length of private docks; the length of vessels tied to docks; tie up times at public docks; channel setbacks requirements, and fees (see Appendix A9 for Rockport's Harbor Ordinance which includes provisions for moorings). Effective administration and implementation of a mooring plan and ordinance, especially in an active harbor, usually requires hiring a full or part-time harbor master.

Dredging and Protection Plans

Dredging plans assure that basin depths will be maintained and storm protection plans can reduce damages to both vessels and shoreside facilities in the event of a storm. Furthermore, these plans may also be crucial to securing the funds needed to actually conduct dredging or build storm protection structures.

MAINE AND THE WAR OF 1812
The last foreign invasion of the Maine coast occurred during the War of 1812 when the British attacked, and for a time occupied, the Down East coast.

Local Examples of Port and Harbor Development

In 1986, **Boothbay Harbor** conducted a public opinion survey which showed overwhelming support for retaining a working waterfront and limiting new condominium construction along the harbor. The Town subsequently enacted a new zoning ordinance which severely restricts waterfront uses which are not functionally water dependent. For example, multi-family structures are prohibited in the downtown and on certain hillsides overlooking the harbor; only functionally water dependent uses are allowed on the east side of the harbor; buildings within 75 feet of the water on the west side may not be converted to motels (see Appendix A2 for actual language).

Portland has initiated a number of harbor projects; for example, the City has developed a waterfront revitalization plan; fishermen have banded together to purchase Hobson's Wharf so as to assure its continued use as a fishing facility, and the City has hired a consultant to develop a waterfront access plan. Further, the waterfront is now zoned as a seperate "Waterfront Zone".

Yarmouth's Water Oriented Commercial District is aimed at protecting harbor-oriented uses. Restrictions include a height limitation of 35 feet, a stipulation that buildings taller than 25 feet be positioned so as to minimize visual impact, a limit on the "foot print" of buildings to 4,000 feet (8,000 for boat building and repair), and a requirement that at least 65% of the square footage floor space of each building be marine-related (see Appendix A5 for excerpts).

The Town of **Camden** has reserved 6 parking spaces in the Town's busy waterfront parking lot for the exclusive use of fishermen. These reserved spaces are well marked, and are generally used to full capacity by fishermen during the summer months.

The Town of **Rockport** has a comprehensive harbor ordinance which establishes the harbor limits and channel width, and regulates the use of the Town float and the placement of traps and moorings. The ordinance contains a priority list for mooring locations, under which resident shorefront owners have top priority and resident commercial vessel owners have second priority. Non-resident pleasure vessel owners have last priority (see Appendix A9).

2. MARINE RESOURCE MANAGEMENT TECHNIQUES

The State Policy

"Manage the marine environment and its related resources to preserve and improve its ecological integrity and diversity of marine communities and habitats, to expand our understanding of the productivity of the Gulf of Maine, and to enhance the economic value of the state's renewal marine resources."

The Importance of Marine Resource Management

Overview

Marine resources are an essential part of the Maine coast. It is difficult to imagine the coast without its abundant shellfish, finfish, seals, and the other marine life. These resources have tremendous ecological and aesthetic importance and are critical to the coastal economy, yet very little is known about the Gulf of Maine. Today, there is increasing concern as to whether it can sustain its historic productivity.

Ecological Importance

When water from Maine's nutrient rich estuaries wells to the ocean surface it creates conditions where phytoplankton

Christopher Ayres, photo.

A Louisiana or Tricolored Heron at a rookery in Saco Bay.

The American Oyster, the rarest of Maine's commercial shellfish is found on the tidal reaches of Marsh and Piscataquis Rivers.

(microscopic floating plants) thrive. These plants are the food base for fish production in the Gulf of Maine. Additionally, Maine's estuaries support many species, including some which are rare or endangered such as bald eagles and the short nosed sturgeon. Salt, brackish and freshwater marshes store floodwaters, recharge aquifers, filter out pollutants, and provide habitat for a wide variety of waterfowl and other wildlife.

Education and Science

Maine's unusual marine communities are of a great interest and value to educators and scientists. For example: areas in Cobscook Bay and Washington Co. have cold water bottom dwelling communities that are rarely found in coastal waters; rocky headlands contain a variety of animals not found in the predominantly sandy habitats of the east coast of the United States; and many islands support unusual sea bird colonies. All of these need protection and are worthy of scientific study. Increased knowledge and a better understanding of the coastal waters can lead to the improved management of the resource - and that, ultimately, will benefit all coastal residents and communities.

Economics

Marine resources support the commercial fishing and other marine harvesting industries. The products of this industry are diverse – from seaweed extracts to fillets; from aquaculture to deep sea fishing. Overall, fisheries contribute $400

to $500 million to the State's economy (1987). In the future, Maine's fisheries could likely become an even more important contributor to the State's economy, especially as shellfish management is improved and new aquaculture ventures become more prevalent. Salmon farming and commercial oyster operations are, for example, proving successful.

Furthermore, the state's marine resources draw tourists to the coast - to go on whale watches, to view wildlife and to hunt and fish.

Land, Water and Fish

Maintaining or enhancing marine resources depends on proper land and water use as well as good management of valuable marine species.

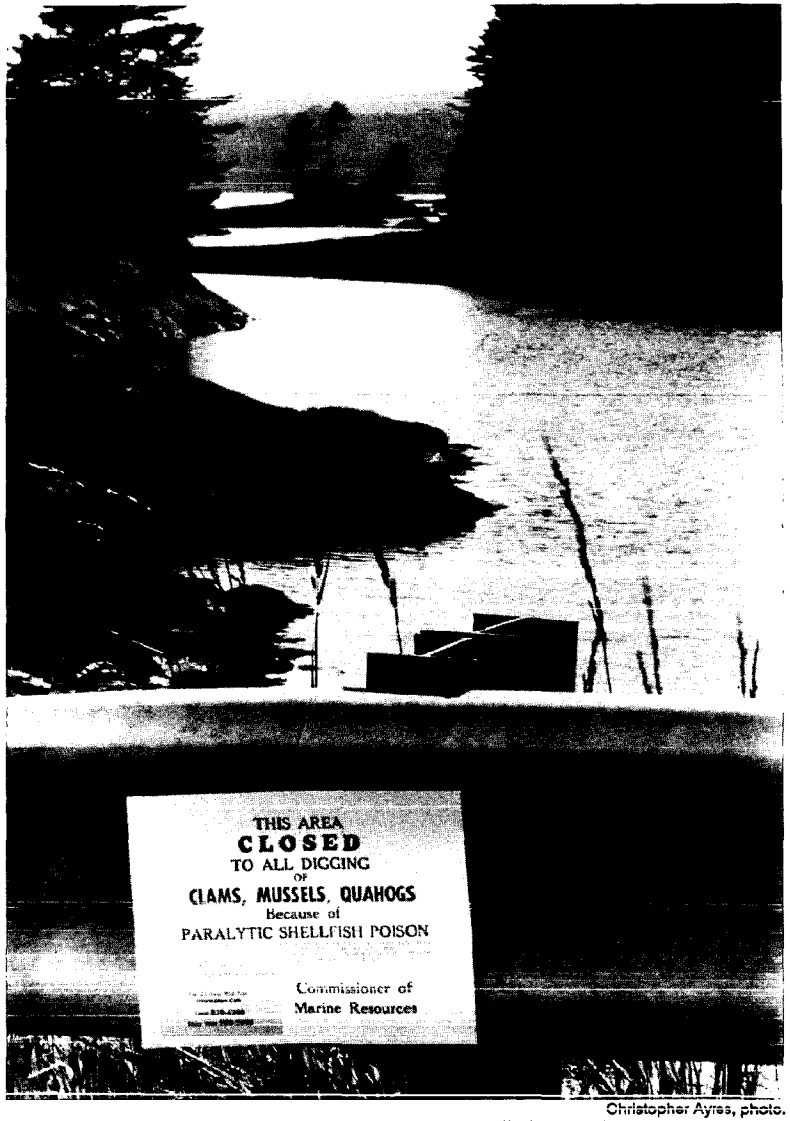
On land, non-point sources of pollution from concentrated coastal development, as well as treated wastewater and other point sources of pollution, can contaminate ocean and estuarine waters with pathogens, heavy metals, hydrocarbons and other materials. Thus, good land use management practices, as well as superior water quality and fisheries management practices, should be followed to maximize the benefits from marine resources.

Local Actions to Improve the Management of Marine Resources.

In the 1950's, virtually every tidal river and estuary with a clam community of any size did not meet approved clam harvesting standards due to pollution. With substantial efforts in improving municipal wastewater treatment systems, diverting storm drains from the treatment facilities, and abatement of residential overboard discharges, water quality has improved to the extent that clams may now be harvested from practically every major estuary.

Further, a number of communities have improved clam production by transplanting small clams from areas where there are high densities of small clams to areas known for good growth potential. In Brunswick, such operations, carried out with the cooperation of the Maine Department of Marine Resources, harvested small clams at a cost approximating $20.00 per bushel. The volume of clams harvested returned about $50.00 per bushel to the digger (a seven-fold increase in landed value) and had the potential of increasing at least five times.

Nonetheless, some valuable clam flats remain closed and in a few areas there have been new closings because of increased waste loads. Further, many acres of flats still need seeding and improved management. Maximizing the full benefits of our marine resources depends on continued efforts to improve management.



Christopher Ayres, photo.

The pristine beauty of a mid-coast cove belies a serious pollution problem.

The management of marine resources is a shared responsibility. Federal and state agencies, as well as Maine's 146 coastal communities, all share responsibility for water quality protection, shoreline development regulation and fisheries management. Local governments can act to improve management of these vital resources in a variety of ways, some of which are described below.

Encourage marine education and research

1. Incorporate marine science and maritime history into the curriculum of the local schools. This could include establishing outdoor "classrooms" for studying marine and estuarine ecology; (contact the Department of Marine Resources);

2. Encourage study of the local marine and estuarine environments by research labs as well as colleges and universities;

3. Work with educational institutions and conservation organizations to determine how best to conserve areas with special scientific or educational importance;

4. Establish a local committee to collect information on marine resources, comment on development proposals and hold educational forums on local marine and estuarine ecology. This committee could also work to educate landowners and developers on how to reduce the impacts of discharges and development on the marine environment (Department of

Marine Resources and Department of Environmental Protection); and

5. Include provisions that support the shellfish industry in a local harbor management plan (see Appendix B1 for an excerpt from Scarborough's Comprehensive Harbor Plan relating to marine resources).

Improve management of local fisheries

1. Support efforts by fishermen to conserve local fish stocks with self- imposed limitations on gear and length of season; and

2. Improve local shellfish management. These activities can include developing a local clam management plan and ordinance, seeding depleted flats, and reopening polluted flats (contact the Department of Marine Resources for information - see Appendix B2 for Scarborough's Shellfish Conservation Ordinance).

Support marine business development

1. Encourage businesses which process marine resources, to use under-utilized species, or use new methods or technologies to increase the productivity of the marine environment. Financial incentives, recruiting efforts, and providing harbor improvements can all influence business decisions (contact the Department of Marine Resources and marine extension agents of the University of Maine for more information); and

2. Plan to accommodate new uses, like aquaculture, so that conflicts with traditional uses are avoided (contact the Department of Marine Resources for more information).

Control development

1. Reduce the impact of runoff from construction projects by using catch basins, wide ditches, hay bales and storm water retention devices and by limiting impervious surfaces;

2. Enact and enforce anti-pollution ordinances:

   a. Require generous buffer strips and setbacks along the shoreline (through Shoreland Zoning) to filter runoff and prevent potentially harmful materials from reaching the marine environment;

   b. Vigorously enforce local land use controls to assure that measures designed to protect the marine environment are implemented; and

   c. Assist in the enforcement of State anti-pollution laws by reporting violations and educating the public about these laws;

3. Review development proposals to ensure that they have no adverse impacts on the marine environment or biological communities. Development projects should not affect flushing rates, tidal flow, salinity levels, or sediment transport. They should also be designed to minimize storm water runoff (contact the Maine Geological Survey, the Marine Extension Service at the University of Maine and the Department of Marine Resources).

4. Enact a Harbor Ordinance that restricts discharges from boats (excluding house boats) moored in the harbor.

Cooperate on Management

Because town lines do not correspond with marine resource area boundaries, the best management can only result from joint local efforts. Cooperation with other towns and agencies to develop joint management plans and implementation measures pays dividends. Two or more towns, for example, could design and implement a management plan for an estuary that is divided by a common town-line; this is an equitable and ecologically sound approach.

Christopher Ayres, photo.

Inadequate setbacks from beach and wetland impose on the natural environment along the Wells coastline.

3.MANAGING SHORELINES AND SHORELINE ACCESS

The State Policy

"Support shoreline management that gives preference to water dependent uses over other uses; that promotes public access to the shoreline and that considers the cumulative effects of development on coastal resources."

The Importance of Shoreland Management

Management Issues

As the above described policy indicates, shoreland management can take on many forms. The discussion that follows focuses on three important management issues:

1. the need to provide for *water dependent uses;*

2. the need to promote *public access* to the shore; and

3. the need to consider the *cumulative effects* of development on the coast.

Each of these issues is addressed in detail below. The discussion first identifies the problems that local communities face and then offers solutions. Solutions that go beyond regulation and involve non-regulatory techniques can be effective in achieving management objectives.

For example, individuals and organizations can use purchase and resale techniques to preserve important shoreland values. Key parcels of land can be purchased to provide access, and protect wildlife habitat or scenic values, and then be resold for development after public right-of-way, easements or covenant provisions are incorporated in the deeds. Market research has shown that these techniques need not diminish the value of the property and can enhance it.

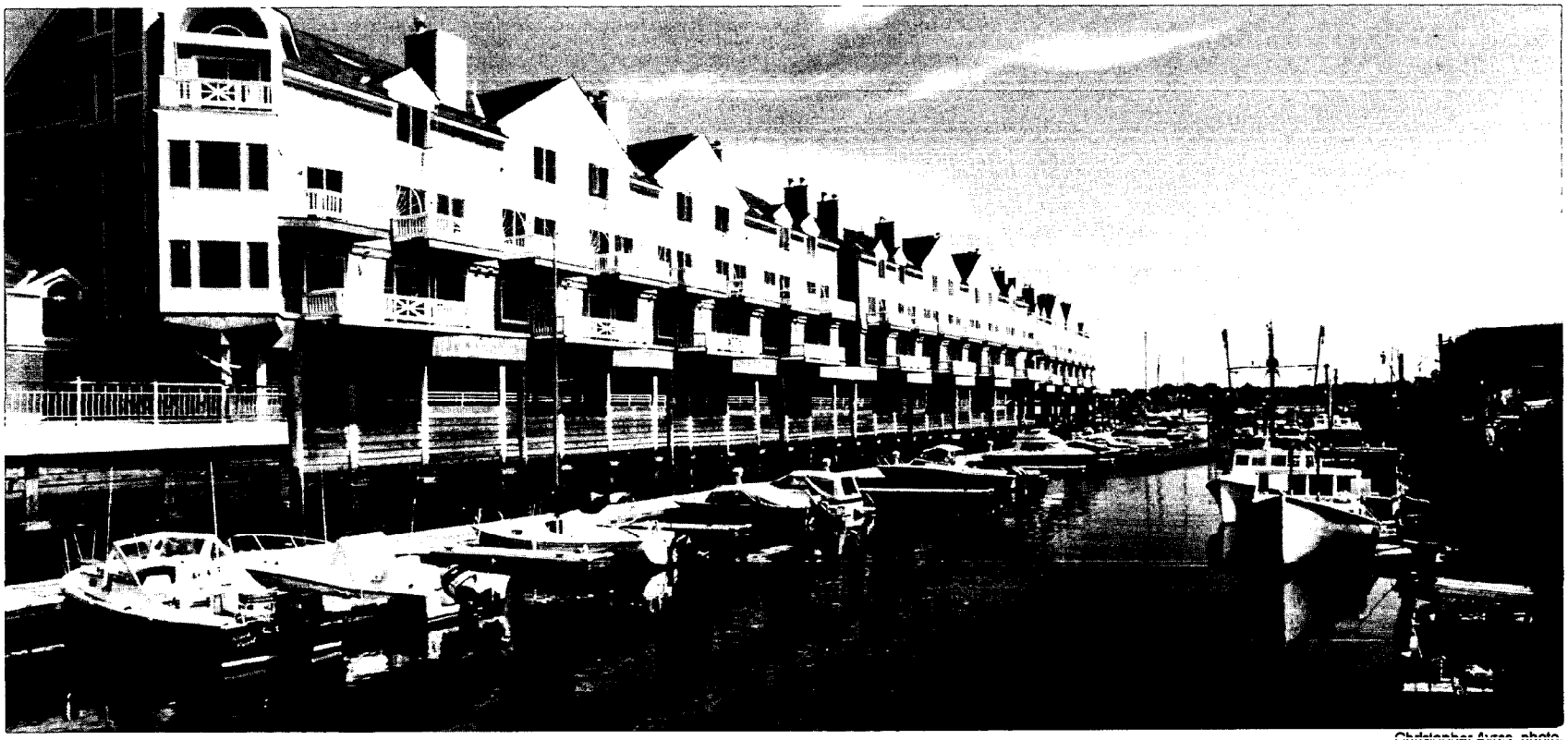
Further, some towns have raised local funds and purchased property needed to provide public access to high value shoreline areas. Machiasport has raised funds locally to buy key parcels of shoreland and Stockton Springs is currently exploring acquisition options for a stretch of beach on Penobscot Bay (see Appendix C-4).

Water Dependent Uses - Problems

Overview

Water dependent uses are those requiring direct access to the water, such as commercial fish piers, port facilities, and marinas. Support services for marine businesses also need to be located on or near the waterfront. Other uses, such as condominiums and restaurants, do not require a waterfront location, yet they can command a premium price if located on the water. Consequently, many non-water dependent users are able to pay more for a waterfront location than those associated with the marine industries.

The issue regarding water dependency is quite simple - if communities wish to maintain a working waterfront and



Christopher Ayres, photo.

New condominiums and recreational boats face the working waterfront at Portland's Chandlery Wharf.

healthy marine resource industries, they must make a conscious effort to favor water dependent uses in shoreline areas.

The need to favor water dependent uses extends beyond the harbor. Many sites along the Maine coast which lie outside harbors are suitable for water dependent uses, however, less than 10% of the coast is suitable for such uses. Towns should act now to identify these areas and zone them for water dependent uses. Local communities should also recognize that water dependent uses can be squeezed out of "mixed use" shoreland zones. Care should be taken to craft "mixed use" ordinance language so that other uses are considered secondary to the water dependent uses.

Further, conflicts may even arise among water dependent uses. For example, a recreational marina may compete with the fishing fleet for space. State guidelines require that preference be given to commercial uses.

Water Dependent Uses - Solutions

1. Analyze local needs and identify sites suitable for water dependent uses (The State Planning Office has completed a statewide mapping project of sites suitable for water dependent uses. Maps of these areas are available from the State Planning Office and should serve as a useful starting point for local strategies);

2. Provide the public facilities that are needed to encourage water dependent uses, e.g. commercial fishing piers, boat launch and storage areas, parking, etc. (contact the Department of Economic and Community Development for a copy of the Capital Improvements Programming Guidebook; see Section IV for other sources of information and assistance);

3. Provide economic incentives that encourage the mix of uses needed to serve marine harvesting industries; and

4. Require, through local ordinance provisions, that waterfront uses in harbors, and areas outside harbors which are especially well suited to marine uses, be water dependent (see Ports and Harbors for more information on this topic and Appendix A for Yarmouth's "Water Oriented Commercial District" and Appendix A6 for Portland's "W-2 Waterfront Zone").

Access

Overview

Access to the coast is important not only to marine industries but also to those wishing to enjoy the beauty of the coast and its waters. Access includes being able to see the coast, as well as being able to go clamming, boating, swimming, hiking and fishing.

In many areas of the country, access is available only to those who own coastal property. This stands in sharp contrast to Maine's tradition of relatively easy access to the coastline. However, land use, land ownership and attitudes toward public use are changing fast in Maine's coastal areas. For example, the right of the public to use Moody Beach in Wells, is being contested in the courts; and there are often conflicts between commercial and recreational waterfront uses regarding access. With only 3% of the Maine coast in public ownership, maintaining access to the coast in the face of these changes will be difficult. Yet, local communities are obligated to act and find ways to improve access to an invaluable resource - for all.

The notes below show what some communities have done through local efforts.

Improving Access Opportunities - Solutions

1. Identify current and projected future public access needs - the kinds of access needed for various activities (boating, fishing, hiking, open space, etc.);

Hank Tyler, photo.

The man-made environment imposes itself on Wells Beach and the Wells National Estuarine Sanctuary.

2. Inventory and map areas which do, or could, provide visual or physical access to the coast. This includes areas owned by the municipality, conservation organizations, or private parties;

3. Research deeds and existing public use agreements to confirm public rights-of-way or easements (Coastal Zone Managment funds are available for this purpose - contact the Department of Economic and Community Development);

4. Improve or provide new public facilities such as trails, boat ramps, parking lots, and overlooks in areas already in public ownership (contact the Department of Economic and Community Development for a copy of the Capital Improvements Guidebook and the Bureau of Parks and Recreation for information on funding sources; see Section IV for other sources of information and assistance);

5. Purchase or seek gifts of land or easements that can provide needed access. These actions can be taken by local governments or by a conservation organization, neighborhood association, or local land trust (contact the Maine Coast Heritage Trust for more information on easements, covenants, gifts and land trusts, see Appendix C for an example of the Stockton Springs Development Corporation approach);

6. Ensure that existing public access ways are maintained. Over time, public access rights can be lost if rights-of-way are not maintained.

Hank Tyler, photo.

Jasper Beach is a registered Critical Area. A key parcel of land, acquired by the town of Machiasport in 1985, provides access to the beach.

TIDAL RIVERS
Tidal rivers bring a coastal flavor to Augusta, Bangor, and other communities that would not otherwise be thought of as coastal. These coastal rivers also serve as spawning grounds for many of Maine's most important fish species.
Six coastal rivers, the Sheepscot, Narraguagus, Pleasant, Machias, East Machias, and Dennys have the distinction of being the only rivers in the United States to support wild runs of the much prized Atlantic salmon.

7. Encourage developers to provide public access to the coast by allowing greater densities in exchange for a right of public access (see Appendix C2 for excerpt from Boothbay Harbor's Zoning Ordinance);

8. Require, through subdivision or other regulatory review procedures, that open space be maintained between buildings; fences and hedges are limited or prohibited; and building heights and sizes are limited (see Appendix A5 for Yarmouth's "Water Oriented Commercial" zone); and

9. Require that open space be set aside within land developments to afford views and access to the coast for residents of the development (see Appendix C3 for excerpt from Brunswick's subdivision regulations relating to open space set-asides).

The Cumulative Effects of Coastal Development

Overview

Cumulative effects are the combined impacts of several projects. The individual effect of any one project may be small, but combined, a series of projects can cause a significant impact.

For example, in some areas of the Maine coast, salt water is being drawn into individual wells because too many wells are pumping water from the same groundwater reservoir. No particular well creates the problem, however, together, the wells exceed the capacity of the area to provide fresh water.

Another example of cumulative impacts involves commercial "strip" development. Route 1 in southern Maine and Route 3 in Trenton for instance have steadily been developed without regard for the severe traffic and aesthetic impacts that are now apparent. Few water views remain, despite the proximity of the ocean.

Without regulation and sound land use planning, coastal communities will grow until the cumulative effects of development destroy the very values cherished by the community.

The following section describes actions that can be taken to minimize the negative impacts of the cumulative effects of development.

Dealing With Cumulative Effects - Solutions

1. Identify resources vulnerable to the cumulative effects of development and establish management plans for each resource and enact development standards (density limitations, setbacks, buffers, etc.) that can be incorporated into local land use ordinances (contact your Regional Council for help designing standards to fit your particular situation);

Christopher Ayres, photo.

The cumulative effects of poorly regulated development along Route 3.

2. Purchase (or seek gifts of land or easements for) areas in need of special protection to prevent adverse cumulative effects. These purchases need not be made by the municipality itself and the properties purchased may be wholly or partially resold, with covenants, that prevent adverse cumulative effects from occurring;

3. Expand the scope of review for local ordinances to ensure that development projects are reviewed from a broad perspective and are evaluated in light of the extent of existing and future development.

4. Enact zoning provisions (and build in incentives) that preclude strip development. Zoning a long narrow strip of highway for commercial develop can cause traffic problems, decrease highway safety, and jeopardize village or downtown businesses.

Managing the cumulative effects of coastal development is best accomplished through far-sighted planning and land use regulations.

Local Examples of Shoreline Management and Access

The town of **Machiasport** now owns Jasper Beach, which is a rare gravel barrier beach, thanks to the fund-raising efforts of the conservation commission and private citizens. The fund drive included the preparation of a brochure which was widely circulated both in and out of State. Private funds, together with a grant from the Federal Land and Water Conservation Fund, enabled the purchase of the 45-acre site, including 10 acres on the beach. The site was obtained in 1986, and is open to the public.

Scarborough successfully negotiated with a developer in 1987 to obtain a public easement along a beach opposite the former Atlantic House. The developer had purchased the property and sought permission to tear down the structure and build condominiums. While the public had traditionally enjoyed access, the Town wanted to guarantee access rights along that 600-foot stretch of beach.

Harpswell recently purchased several acres of land on Mackerel Cove off Abner Point Road where fishermen can haul out their boats and store them over the winter. While the site had traditionally been used as a boat haul-out point, the property was privately owned. Until 1987, the site was part of a larger parcel which has since been sold. The owner of the original parcel, protected the area immediately around the haul-out site from development by deed restrictions.

The town of **Stonington** recently approved a subdivision at Cat's Cove which contains a unique conservation easement. Clam and worm diggers are guaranteed access to the sea across the 26-acre subdivision. The easement was part of an agreement under which the Town sold a piece of Town-owned land to the developer for access to a portion of his property in exchange for the easement.

4. HAZARD AREA MANAGEMENT

The State Policy

"Discourage growth and any new development in coastal areas where, because of coastal storms, flooding, landslides or sea level rise, it is hazardous to human health and safety."

The Importance of Hazard Area Protection

Overview

Coastal hazard areas are subject to riverine and coastal flooding and soil slumping. Periodically these areas are lashed by storms or inundated by flood waters, making them unsafe for development. Further, since sea levels are rising in some parts of Maine, careful management and planning of hazard areas is essential.

Discouraging or preventing growth in these areas can: protect public health and safety, reduce public costs that result from damage to public and private facilities in hazardous areas, and help maintain the health of natural systems, such as estuaries, which depend upon floods and sediment to sustain them.

Safety

Flood waters, high winds and violent, storm-whipped seas can cause enormous property damage and endanger lives. Placing roads, structures, or other public facilities in these areas is unwise. Where such facilities, such as a public dock, have to be placed in a hazard area, special precautions are essential to ensure public safety.

Reducing Public Costs

The coastal storms of 1978 showed that the public costs of disaster relief and the reconstruction of public facilities in flood damaged areas, can be substantial. These storms severely damaged private homes, businesses, public roads, piers, buildings and shoreworks. All-told, the two storms of 1978 caused millions of dollars worth of damage, much of which was paid for by Maine taxpayers. Clearly, careful local planning efforts should be geared to avoiding further building in these areas.

Maintaining Natural Systems

Natural systems in hazard areas, such as barrier beaches and sand dune systems, serve as buffers to protect inland areas from storm damage. Other systems, such as wetlands and floodplain forests, are dependent upon recurring floods and siltation to sustain them. Sand beaches and marshes all respond to changes in sea level. Manmade obstacles, such as seawalls, however, prevent the natural movement of

The aftermath of a coastal storm at Popham Beach

these systems and cause natural processes to stagnate and die. Sand dunes and beach systems must be free to "migrate" landward, with rising sea levels, if they are to serve their natural function as storm barriers. Many communities, as well as state and federal decision-makers, now realize that trying to artificially "stabilize" these systems is costly, futile, and destructive. Properties subject to recurring storm damage should be purchased and kept as open space, for natural storm protection, wildlife habitat, and recreation.

Actions a Community Can Take to Address Coastal Hazards

The nature of hazards vary significantly from one area of the coast to another depending on geologic conditions. For example, eastern Maine is slowly sinking due to forces deep within the earth. On the other hand, the mid coast is relatively stable. To manage hazard areas effectively, coastal communities must understand the natural processes occurring in these areas and then develop a strategy for coping with them. Such a strategy may involve data collection, public education, management, or regulation.

Identify Hazards

Obtain data on flood hazards, flood zones, erosion and slumping, and coastal wetlands, from your regional council, the Maine Geological Survey and/or the Dept. of Economic and Community Development. Further,

1. Determine the vulnerability of the community to the effects of sea level rise (contact the Maine Geological Survey for assistance);

2. Obtain and review maps of flood-prone areas (contact the Department of Economic and Community Development, Flood Insurance Coordinator, and the Federal Emergency Management Agency for assistance);

3. Identify and map other hazard areas, including areas with erosion and slumping problems (contact the Maine Geological Survey for help); and

4. Determine shoreline erosion rates (contact the Maine Geological Survey).

Increase Public Awareness of Hazards

Provide materials and sponsor articles, workshops, and forums on coastal hazards. Encourage local schools to do science projects on erosion and sedimentation action along the shore.

Manage Hazard Area Vegetation

Plant and maintain vegetation on sand dunes and eroding banks to stabilize these areas. Erect fences to keep the public off dunes where revegetation is taking place (contact the Soil Conservation Service and Maine Geological Survey for assistance).

Enact and Enforce Development Limitations

Enact or amend local ordinances to restrict development in hazard areas. Many communities have enacted floodplain management ordinances to meet Federal Emergency Management Agency requirements. These ordinances are

Hank Tyler, photo.

Frontal dune ridge and dune field at Seawall Beach.

required if property owners wish to be eligible for the National Flood Insurance Program.

Some communities, however, may wish to go beyond these requirements. Such efforts may include:

1. Prohibit structures in all floodplain areas, including intermediate hazard zones (contact regional councils or the Department of Economic and Community Development or Federal Emergency Management Agency);

2. Prohibit structures and fill adjacent to and in wetlands (see Appendix D for Yarmouth's Resource Protection District and Cape Elizabeth's wetland's protection provision);

3. Require structures and fill to be well set back from the edge of wetlands (see Appendix D, Cape Elizabeth's wetlands protection provision);

4. Plan for future sea level rise by requiring a margin of safety in structure elevation requirements (2-3 feet above flood levels) (contact the Department of Environmental Protection, the Maine Geological Survey, the Department of Economic and Community Development, or the Federal Emergency Management Agency); and

5. Ensure that flood plain ordinances and other hazardous areas ordinances are properly administered and enforced.

Purchase or Lease Hazard Areas

Purchase, secure easements, or lease wetlands and flood plains for passive recreation such as nature preserves, hiking trails, picnic areas, and other public purposes.

Direct Development Away from Hazard Areas

1. Plan public improvements, such as roads, water lines, and sewers, to avoid hazardous areas;

2. Provide technical and financial assistance for persons or businesses seeking to relocate out of hazardous areas; and

3. Give funding priority to the relocation of public facilities out of hazard areas.

Local Examples of Hazard Area Management

Yarmouth has applied the Resource Protection District to all tidal marshes and areas within the 100-year flood plain or within 100 feet, whichever is greater, of the Royal River, the Cousins River, and Pratt's Brook (see Appendix D1).

Cape Elizabeth has applied the Resource Protection District to all the land areas within 250 feet of Great Pond, Little Pond, and Causeway Brook. The Resource Protection District also applies to land within 100 feet of Alewife Brook, all of Spurwink Marsh, and all wetlands contiguous to these water bodies and Spurwink Marsh (see Appendix D2).

Kennebunk has prohibited all development on slopes of 15% or greater, so as to avoid the negative impacts of erosion on such sites.

Old Orchard Beach commissioned a study of the effects of storm damage on the beachfront dune system that recommended a planting and dune grass management strategy. The Town now has an active planting, protection and management system in place, to stabilize the natural dune formations.

5. THE ADVANTAGES OF STATE AND LOCAL COOPERATION

The State Policy

"Encourage and support cooperative state and municipal management of coastal resources."

The Importance of State and Local Cooperation

Overview

No one level of government can accomplish effective coastal management by itself. Success requires cooperation, and the sharing of ideas and resources. Local communities, however, play the key role: they attract businesses, collect taxes, regulate land use, issue permits, and enforce local ordinances... but often with state assistance in the form of advice or funding. The state, through its various agencies and departments, also regulates land uses and has expertise that local communities can build on. In sum, state and local cooperation benefits everyone.

Sources of Assistance

A variety of programs are available to help communities address coastal management issues. These state programs provide information, technical expertise, and financial assistance. A listing of programs is included in the section on Sources of Information and Assistance in Section IV. Some of the most useful sources are:

Regional Councils

- information on planning and land use issues;
- model land use, development, and harbor ordinances;
- technical assistance;

Maine Department of Environmental Protection

- information on environmental laws;
- assistance on shoreland zoning;

Maine Department of Economic and Community Development, Office of Comprehensive Planning

- information on planning and land use issues;
- sample ordinances;
- technical assistance;
- grants for coastal management projects;
- grants for recreational facilities;
- grants for community revitalization;
- grants for growth management programs;

Maine Department of Marine Resources

- information on marine resources;
- technical assistance;

Maine State Planning Office

- information on scenic areas, public access, and water dependent uses;
- information on natural areas (Critical Areas Program);
- grants from the Maine Coastal Program; grants from the Land for Maine's Future program;

Cooperative Extension Service - University of Maine at Orono

- information and assistance on marine resources, local resource management, and coastal areas.

Most coastal communities already benefit from the advice and assistance provided by the above mentioned agencies. Regional, State and Federal agencies are continually updating and improving their data files and learning from the communities they serve.

What Communities Can Do to Further Cooperative Coastal Management

Successes

Cooperative approaches to resource management can pay dividends and avoid narrow, limited solutions that are not necessarily best for resource conservation efforts. The Saco River Corridor Commission in Maine, for example, administers and controls land use along the immediate shore of the river as it runs through numerous towns and cities. The Cobbossee Watershed District focuses its attention on the lakes and streams in a nine town area, monitors water quality, undertakes research, and helps enforce shoreland ordinances.

There are other opportunities on the coast to focus on shared resources, such as clam flats or river systems, and manage them comprehensively. Furthermore, groups, such as land trusts, can band together to conserve a valued resource. In the end, it is important to manage natural systems in a consistent manner. And where those systems cross town lines, cooperation is the best approach.

Finally, keep in mind that Regional, State and Federal agencies will be supportive of inter-local cooperation and can assist with management decisions.

Seek Out Opportunities

Coastal communities should:

Participate in State efforts to implement coastal policies

1. Explore the ideas outlined in this handbook;

Hank Tyler, photo.

The complex natural systems at the interface between sea and river.

2. Contact Regional Councils, the Dept. of Community and Economic Development, the State Planning Office, the University and other agencies for further information on approaches to dealing with coastal resources issues;

3. Become informed on approaches the State is considering to implement coastal policies. Participate in developing State strategies, particularly as they influence local decision-making;

4. Participate in State review of major development proposals under the Site Location law and other statutes by expressing the views of local residents to appropropriate Augusta officials;

5. Participate in the enforcement of State and local laws by reporting violations;

6. Let State agencies know what assistance you need to do an effective job in carrying out coastal policies; and

7. Keep abreast of changes in State environmental and land use laws that mandate revisions to local ordinances.

Participate with other local officials in developing coastal management programs

1. Share success stories in achieving coastal policies with other communities;

HISTORIC FORTS
The remnants of 24 historic forts can be found along the Maine coast. Built between 1892 and 1912 to protect the colonies and later the United States against attack, these serve as a reminder of Maine's strategic position in the north Atlantic. Ten of these forts were built to protect Casco Bay and Portland, the State's largest city.

2. Participate in regional coastal management efforts (contact your Regional Council);

3. Coordinate or develop joint projects, such as an estuary plan, with neighboring communities; and

4. Attend state and regional conferences and workshops sponsored by Regional Councils and state organizations or agencies to meet other local officials and share ideas and concerns.

6.HOW TO PROTECT SCENIC AND NATURAL AREAS

The State Policy

"Protect and manage critical habitat and natural areas of state and national significance and maintain the scenic beauty and character of the coast, even in areas where development occurs."

The Importance of Protecting Natural Areas and Scenic Beauty

Overview

Maine's coast is a special place of spectacular beauty. The following notes describe its natural, scenic, and special assets and show how coastal communities can act to protect these features.

1. Natural Areas
Maine's coast supports a great diversity of plants and wildlife. Yet, while the whole coast is valuable as plant and wildlife habitat, certain features are especially important to maintaining this diversity.

For example:

- Eagles typically nest in large, old white pine trees and prefer to use the same nest repeatedly.
- Islands serve as important nesting areas for sea ducks, herons, and ospreys. A limited number of islands are used by sea birds such as Leaches petrel and puffins.
- Wetlands provide critically important habitat to a wide variety of wildlife species including wading birds and migratory waterfowl.
- Rare plants like luminous moss, which seems to glow in the dark, occur in only a few locations on the coast.
- Rocky headlands harbor a variety of unusual species which need tide pools and crevices to survive.

All of these habitats are critical to the survival of these species and to the health of the Maine ecosystem and to maintaining the diversity of plants and wildlife on the Maine coast.

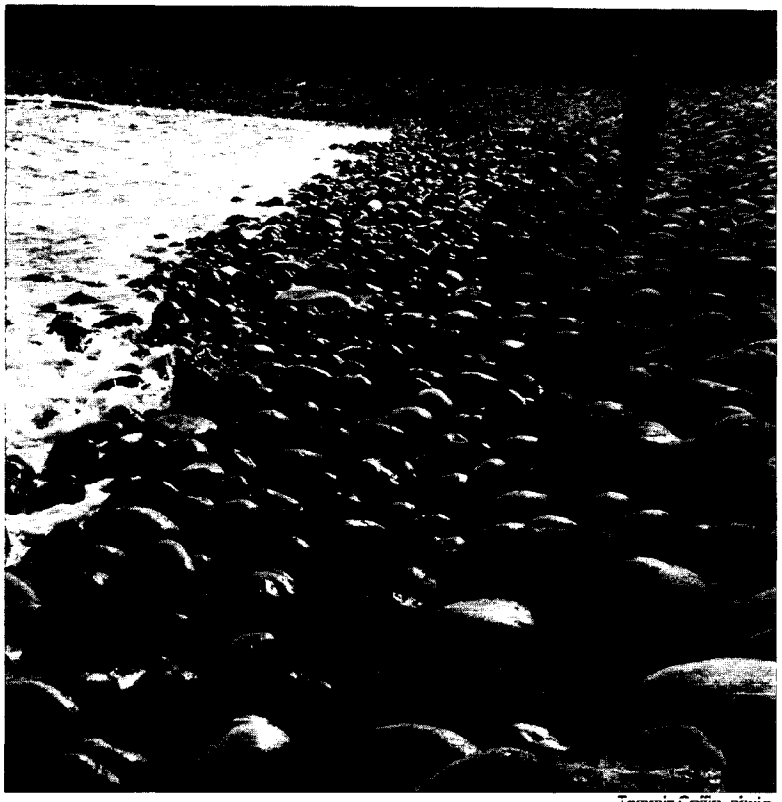
Natural areas have important scientific and educational values as well. For instance, certain areas on the coast are crucial to understanding the history of glaciation not only in Maine but throughout the world. Such areas are important outdoor classrooms and laboratories for educational institutions.

Abundant and diverse wildlife is also important to the quality of life in Maine. Healthy, well managed wildlife

populations provide enjoyment, recreation, food, and income for Maine people while also helping draw visitors to the coast. Nonetheless, there is always the chance that these natural values will be diminished, if not lost, to irresponsible or excessive development.

2. Scenic Beauty

The beauty of Maine's coast is recognized internationally. Bold headlands, sheltered harbors, coastal villages, fog shrouded islands, secluded pocket marshes, lighthouses, and rocky ledges all speak to the charm and beauty of Maine's 3,000 mile coastline. Rarely does one find such



Tammis Coffin, photo.

The boulder beach on Great Duck Island.

exceptional natural beauty *and* superb architecture over so large an area. The Maine coast is a special place.

Scenic beauty is one of the attributes Maine residents value most about the coast. It adds to our sense of place and heritage.

The scenic qualities of Maine's coastline are also important to the tourist industry. The unspoiled beauty of the coast is the principal reason tourists flock to Maine every year. Unplanned and haphazard development, however, can despoil the coast and, if unchecked, destroy the very values tourists seek.

3. Coastal Heritage Areas

Coastal heritage areas are concentrations of unusually significant natural features, historic sites and scenic areas identified by the State Planning Office. These areas are identified as being unique from a statewide perspective and may deserve special protection.

Ways to Protect Natural Areas and Scenic Beauty

Successes

One outstanding example of natural area and scenic beauty protection involves Laudholm Farm in Wells, Maine. At Laudholm, a local citizens group and the Town of Wells, with assistance from the State and Federal governments, bought and protected over 100 acres of prime coastal farm and marshland, lying between a State Park and the Rachael Carson National Wildlife Refuge. This tract is home to geese, deer, ducks and many other species of wildlife. It is also a highly scenic saltwater farm in an otherwise developed area. It will now be managed as a National Estuarine Sanctuary.

Other towns have successfully initiated similar projects. For example, the Land Trust on Isleboro conducted a scenic inventory of the island near Acadia. Easements are held on several parcels of land to help protect the viewshed from the park, while on parts of the "airline" (Route 9 from Bangor to Calais) there is a scenic corridor that restricts cutting along the highway to maintain its scenic beauty. Finally, it may be necessary to look beyond the resource itself to assure its protection. Often, buffer areas around the resource are needed for added protection.

THE FIRST STEP TO NATURAL AND SCENIC AREA PROTECTION:

Develop a Plan

Communities can have the greatest success in protecting scenic and natural areas if they inventory their resources, assess their needs, establish priorities, and develop a plan for effective local action. Such plans should consider non-regulatory measures as well as regulation to achieve their ends. A logical sequence of steps to protecting scenic and natural areas follows:

For Natural Areas

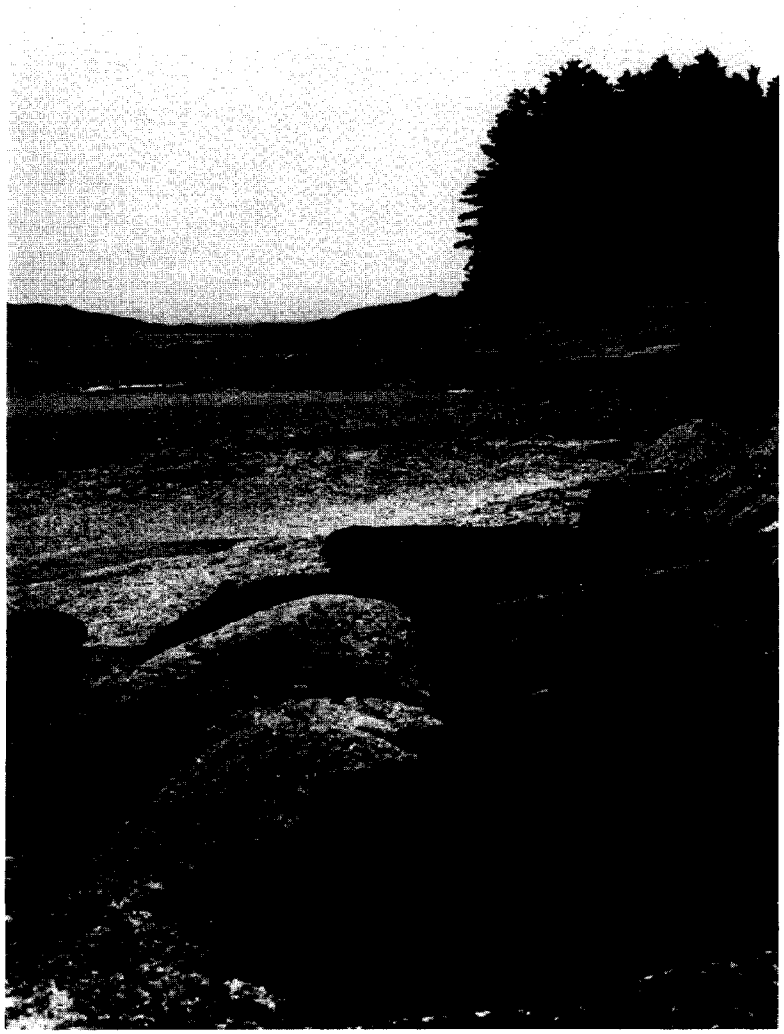
Identify Critical Habitats for Fish, Wildlife and Plant Species

1. Obtain data from the Critical Areas Program in the State Planning Office, The Nature Conservancy, the Departments of Inland Fisheries and Wildlife and Marine Resources, local natural history experts, and published sources. Natural areas include the habitats of rare plants and animals; habitats critical to the survival of more common species; unusual geologic formations and other similar features; and

2. Map coastal heritage areas, sand dunes, rare plant habitats, and critical wildlife habitats.

Assess the present status and conservation needs of natural areas and wildlife habitat areas in the community

The Dept. of Inland Fisheries and Wildlife has published excellent guidelines for protection of wildlife. Management guidelines are available for deer wintering areas, seabird nesting islands, wading bird rookeries, eagle nest sites, osprey nest sites, shorebird roosting areas, and other areas. These guidelines can be used in developing local strategies for acquisition and for zoning requirements.



Hank Tyler, photo.

The granite and spruce lined shore of Great Wass Island.

Develop a conservation strategy for the natural areas in your community

The strategy may include some or all of the following measures:

1. Acquire Critical Habitats, Scenic, and Natural Areas.
   Purchase or seek gifts of land or conservation easements to protect significant areas. These actions can be initiated by a local government, a conservation organization, a land owners association or local land trust. Further, purchased property need not be retained in its entirety. It could, for example, be resold after covenants that protect its natural values are in place.

2. Manage public improvement projects to protect natural areas.
   Water, sewer, and road improvements should be directed away from natural areas. Additionally, education can inform public employees about the effects of road salt, run-off, chemical spraying, and other similar activities on natural areas.

3. Educate land owners on the management needs of natural areas.
   Arrange field trips, seminars or one-on-one meetings to inform landowners about the sensitivity of these areas and the management needed to maintain their values.

THE ICE AGE
40,000 years ago, all of New England the Gulf of Maine was covered by ice. Some 26,000 years later, the ice had receded to roughly the position of the current Maine coast. In large measure we can thank this retreating ice for the beauty of today's coastal landscape.

4. Encourage creative land development by adopting flexible and imaginative ordinances that reward developers for conserving natural areas
   For example, cluster developments and Planned Unit Developments can be designated to accommodate growth while protecting wildlife habitat or the concept of Transferred Development Rights (TDR) might be explored.

5. Enact or Amend Ordinances to Protect Critical Habitats and Natural Areas
   Amend the shoreland zoning ordinance, and/or enact or revise subdivision and site plan review ordinances to protect critical habitats and natural areas. Such provisions might:

   a. Exclude scenic areas and natural areas from density calculations.

   b. Require detailed maps of wetlands and poor soils as part of the development review process.

   c. Enact buffer requirements (structures shall be 100 feet from the edge of a coastal wetland).

   d. Strengthen timber cutting requirements (no clear-cutting within 250 feet of the water; all trees above 4 1/2 inches in diameter to be retained).

   e. Include scenic area and natural area protection language in application review criteria.

   f. Prohibit filling, alteration, or other forms of destruction of these areas (see Appendix D1 for Yarmouth's Resource Protection District; see Appendix E for an excerpt from Brunswick's Zoning Ordinance which subtracts "unusable land" from cluster development density calculations; see Hilton Head's "Waterfront Corridor Overlay Zoning District," and Cape Elizabeth's "Transferable Development Rights").

For Scenic Areas

Inventory scenic areas - including both the built and natural environment

The scenic inventory should include analysis of viewsheds, important land marks, views from water, views from public areas (roads, parks, etc.). For guidelines on how to conduct this inventory see Appendix E5.

Undertake an assessment of the conservation status and needs of these scenic areas

The assessment should involve a parcel by parcel review of that land in the community considered to be of greatest scenic value. It should determine ownership and the long term likelihood of the property changing hands or being developed in a way that effects the scenic value of the property. The goal of the assessment is to identify those scenic areas that may be threatened so that a conservation strategy can be developed.

Develop a conservation strategy which could include some or all of the following:

1. Acquire critical scenic areas. Purchase or seek gifts of land or conservation easements on key parcels of land. These easements could, for example, ensure that future development does not impact the scenic quality of the area - by limiting building heights, establishing buffers, and orienting buildings so that views to the water are left open.

2. Participate in State programs to aid in the purchase of land or easements (Coastal Zone Management (CZM) funds, $35 million bond issue, LAWCON

Hank Tyler, photo.

Great South Beach on Roque Island.

LOG DRIVES
Once a common occurrence on coastal rivers in New England, log drives are today a part of history. During their heyday, log drives occurred on virtually every Maine coastal river that was big enough to float a log. The Saco, Androscoggin, Kennebec, St. George, Penobscot, Machias, and St. Croix each was the scene of significant 19th century log drives.

funds, Community Development Block Grant (CDBG) program).

3. Approach private foundations and organizations, and philanthropists for assistance (Maine Coast Heritage Trust, Maine Audubon).

4. Enact an open space fee for new development and use part of that fee to offset costs and to acquire further open space (Note: this approach would involve an "impact fee" system. Impact fees can only be assessed if the town has undertaken a careful study that documents the need for a fee and determines a fee schedule that is equitable).

5. Enact or amend ordinances to protect scenic areas

   a. Define zones where additional protection for vistas, architecture, prominent buildings, or natural features is needed;

   b. Develop standards for activities in these areas. Note that the standards may vary from one area to another and that they may be geared to protect a special view or exceptional building (see Appendix E for excerpt from Denver's View Protection Ordinance).

   c. Identify scenic areas and require a visual impact analysis for all projects in sensitive areas and all major projects elsewhere.

Examples of Critical Habitat, and Scenic and Natural Area Protection

In 1987, **Pembroke** developed a public park with a scenic overlook on Town-owned land overlooking Reversing Falls. The falls are created by tidal action through the narrow gut connecting Dennys Bay with Cobscook Bay. Prior to the Town's action, the site afforded only limited access to this unique resource.

In **Denver, Colorado,** views of the Rocky Mountains are protected through an ordinance which establishes eight view protection/preservation areas. These areas include 12.5% of the City and are wedges with their apex at a major view point such as a city park. The height of buildings in these wedges is limited so that they will not obstruct views of the Rocky Mountains. This ordinance has been challenged and upheld by the Colorado courts (see excerpt of ordinance in Appendix E).

Medford, New Jersey and **Hilton Head, South Carolina** use overlay zones to protect important visual corridors along roadways. These corridors include requirements for screening and setbacks. **Boulder, Colorado** has one of the more far-sighted open space plans in the country. This plan has identified all of the open space areas in the community which are high priority for acquisition. The community is presently working to acquire these areas. A bond issue was passed and 20,000 acres of open space has already been purchased.

To preserve a dwindling resource highly valued by the community, **King County, Washington** has purchased the development rights on over 12,000 acres of farmland. The purchase of the development rights was funded by a local bond issue for this purpose.

Brunswick has used their cluster provision and conservation easement to protect wildlife habitat. On one 90 acre parcel, the town negotiated with the developer to build 42 townhouses on 3 acres and place the remaining land, a valuable habitat for moose and deer, in a conservation easement. On another parcel, the town holds a conservation easement on 20 acres of wetlands while the subdivision is clustered on 20 acres.

7. OUTDOOR RECREATION AND TOURISM OPPORTUNITIES

The State Policy

"Expand the opportunities for outdoor recreation and encourage appropriate coastal tourist activities and development."

The Importance of Recreation and Tourism

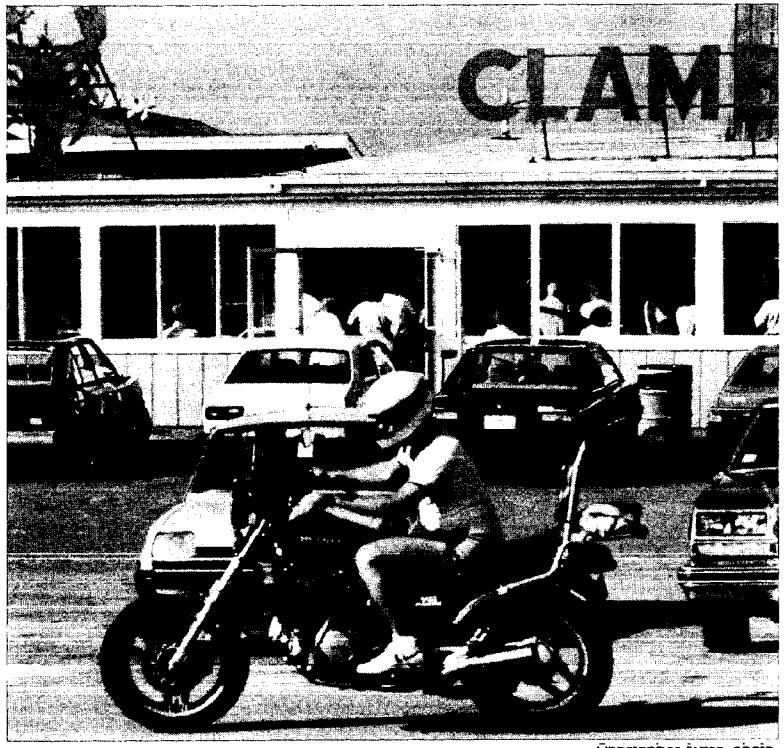
Resident Recreation Needs

The coast of Maine offers many opportunities for a wide variety of recreation activities. Yachting, fishing, swimming, and kayaking are popular in Maine's coastal waters. On shore, there are opportunities for sunbathing, hiking, camping, and scenic drives. Further inland, rivers, lakes and parks offer residents other forms of recreation.

Yet, given an expanding population, development growth, and increasing numbers of tourists, recreation opportunities are limited. Many public beaches are filled to capacity on summer weekends and moorings and boat launching sites are not able to meet the needs of the State's growing number of pleasure boaters.

Tourism: Maine's Second Industry

Tourism is Maine's second largest industry. Well over 6 million tourists visited the State in 1988. Additional expansion of the industry is being encouraged through a regional approach to tourism and by promoting Maine as a four season vacation land.



Christopher Ayres, photo.

Signs of the times, Old Orchard Beach

Towns and regions seeking to capitalize on the marketing of Maine's coastal attractions need to focus on managing their resources to accommodate tourism. If a tourist based economy is to be sustained it must deliver. Local communities, in cooperation with their Regional Councils and the State, must maintain and expand outdoor recreation opportunities for tourists and residents alike.

Managing Tourism

The State policy on coastal tourism emphasizes "appropriate" activities and development, not any and all tourist related activities and development. This policy recognizes that some recreation activities are more beneficial than others, and that successfully integrating tourism with other community functions requires active management.

Tourism provides jobs and income for Maine people, however, it can also bring traffic congestion, crowding, and short term, low paying jobs. The challenge to communities is to maximize the benefits that residents derive from tourism and minimize the problems.

Local Actions to Promote Recreation and Tourism

A Success Story

Machias' waterfront revitalization plan provides an excellent example of what can be done in a small community to enhance opportunities for outdoor recreation. As part of this plan, a riverfront park, accessible from downtown Machias, was constructed overlooking the Machias River and Bad Little Falls. Terraces were built on abandoned mill foundations and a footbridge was constructed on the abutments of the former "Old Iron Bridge" restoring pedestrian access across the river. In addition, a riverside park and picnic area were developed, the area around the Falls was landscaped, and safety fencing was installed.

Develop a Strategy

Any community can have a positive impact on outdoor recreation and tourism by developing a sound strategy: assess local outdoor recreation areas and tourist attractions; identify recreational problems and opportunities; identify where and why crowding occurs; determine community goals for recreation and tourism; identify priorities, build consensus, and determine the actions needed to reach your goals.

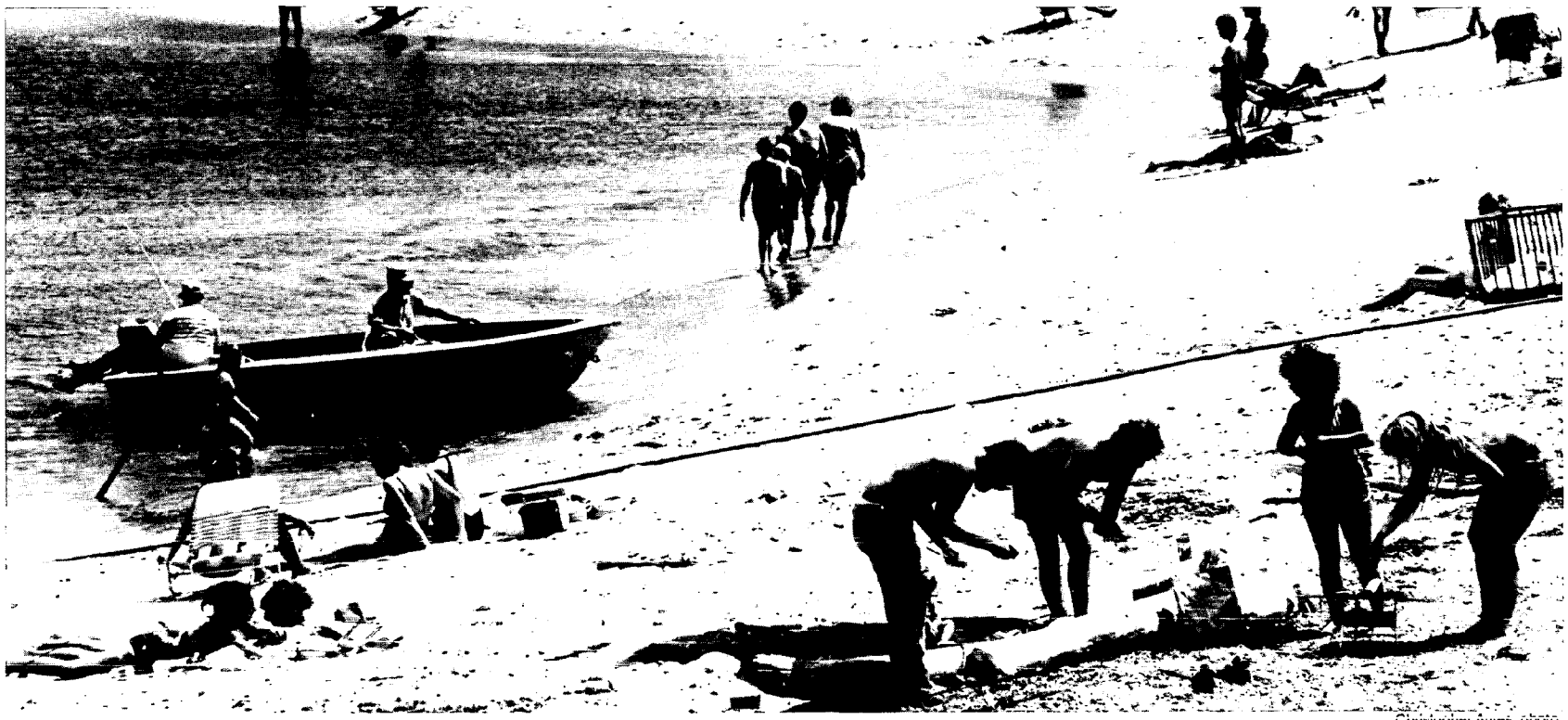
Some of the activities which can be included in a strategy are as follows:

Expand opportunities for outdoor recreation

1. Identify existing and potential outdoor recreational opportunities of all types (for example: swimming beach; passive park areas; boat docks, hiking trails; fishing area; etc.);

2. Evaluate the adequacy of existing facilities; and

3. If deficiencies exist:
   a. form a local citizens organization to start new recreation programs;
   b. acquire key areas to ensure that they are available for recreation;
   c. approach private landowners to determine if they would be willing to allow recreational use of their property;
   d. develop recreation facilities where they are needed; and
   e. investigate opportunities for improved access to shoreline and open water recreation areas (see Section II.3).



Christopher Ayres, photo.

Popham Beach State Park

Plan for tourism

1. Identify trends in numbers of tourists and their activities (seek assistance from your Regional Council);

2. Identify those features in the community which attract tourists (beach, natural areas, harbors, parks, islands, downtown, etc.);

3. Identify undeveloped but potential tourist attractions (deteriorated waterfront, historic structures, estuary, etc.);

4. Identify the positive and/or negative impacts that tourism has on your particular community (number and type of jobs created; income from sales; effect on tax burden; cost of increased traffic; need for additional parking spaces and police protection; etc.);

5. Contact other communities to determine how they have organized to gain the greatest benefit from and minimize problems associated with tourism;

6. Encourage members of the business community to cooperate with one another, and with local government, to develop goals, objectives, and policies to encourage tourism;

7. Encourage, through financial and technical assistance, as well as land use policies, businesses which take advantage of outdoor recreation opportunities or tourist attractions that are consistent with the community's goals for tourism (see Appendix F for excerpts from Freeport's Zoning Ordinance related to their Downtown);

8. Encourage non-profit organizations to develop and run tourist attractions;

9. Consider public support for and management of tourist attractions such as museums, information centers, special events, etc.;

10. Organize community events to attract tourists consistent with your goals for tourism;

11. Prepare a promotional brochure highlighting local events and points of interest;

12. Develop the public infrastructure needed to support tourism:
    a. Consider the establishment of a shuttle-bus service to the waterfront (Ogunquit, Boothbay Harbor);
    b. Provide conspicuous, clean rest rooms; and
    c. Provide adequate parking.

13. Maintain and improve the natural and cultural attributes of the community which draw tourists to the area (see policies on Ports and Harbors and on Scenic and Natural Areas (Section II.1 and II.6) and Appendix F for an excerpt from Hallowell's Historic District design criteria).

Examples of Recreation and Tourism Actions

Eight years ago, the **Ogunquit** Chamber of Commerce established a trolley service as a means of easing congestion and providing convenient transportation during the busy tourist season. The trolley system was so successful that by 1987, seven trolleys made the 8-mile, 40-minute loop. In 1986, **Boothbay Harbor** established a similar service, which provides transportation from parking facilities on Route 27 to the inner harbor area. Both systems charge riders a nominal fee, and both run constantly from early morning until late at night during the season's peak.

In 1987, **Machias** opened a tourist information center in an old railroad station across the street from a popular local restaurant. The Town leased the building from the State, and used prisoners from the Bucks Harbor facility to help renovate it. The Center, which is run by the Town, is heavily used from its opening in mid-June until after Labor Day.

Between 1983 and 1988, the Town of **Freeport** added approximately 900 parking spaces for the general public to its downtown. Most of these spaces have been created by people who develop commercial property. The Town's parking requirements encourage the development of "shared parking", which is available to the general public, rather than private lots which serve only customers of specific stores. A person developing commercial property need only provide 75% of the required parking if the spaces will be open to the general public under the "shared parking" concept.

The states of **North Carolina** and **South Carolina** limit the height of structures on mountain ridges to protect views in these areas. Part of the rationale for the restrictions is that visual beauty is important to the state's tourist industry.

Manteo, North Carolina, has developed a tourism strategy for its community which involves a celebration of the 400th Anniversary of the first colony in the New World and revitalization of the waterfront. The Community's effort emphasized the importance of its visual resources. Manteo's strategy has been successful in both establishing the kind of tourism desired by Manteo's citizens and enhancing the historic features in the community.

8. TECHNIQUES TO MAINTAIN OR IMPROVE WATER QUALITY

The State Policy

"Restore and maintain the quality of our fresh, marine and estuarine waters to allow for the broadest possible diversity of public and private uses."

The Importance of Water Quality

Overview

Maine's coastal waters, along with those in the lakes, ponds, rivers, and streams along the coast are known for their high quality. Groundwater supplies are also pristine and it is only in a few harbors that there is pollution and serious water quality problems.

Clean water is obviously important to public health and environmental quality. Further, it is in the public interest to not only maintain water quality but to improve it.

Importance to the Environment

Clean water sustains all living creatures and plants. Unpolluted environments support rich, diverse biological communities - only a few species are able to withstand the stress brought on by pollution. Clean environments are more interesting, vigorous and productive than those subject to pollution.

Indirectly, clean water also contributes to Maine's economy. Years ago, for example, many of Maine's clam flats were closed because of pollution. Today, thanks to stiffer laws and better enforcement, some of these areas are yielding hundreds of thousands of dollars worth of shellfish.

Pollution Clean Up

Maine has made great strides in cleaning its waters. The restoration of the Atlantic salmon on the Penobscot River is one example of the benefits of this effort. Thousands of fish now run the Penboscot each year while in the late 1960's there were no fish at all.

Other rivers in coastal areas have seen similar water quality improvements; however, many areas are still polluted. The pollution in Portland Harbor, for example, has been found to be much more severe than previously thought, qualifying it as one of the most polluted harbors in New England.

Runoff from Developed Areas

Increased development on the coast underscores the importance of water pollution controls. Water quality degradation can easily occur if runoff from developed areas is not controlled. Runoff from shorefront lots on lakes and streams can contain phosphorous that causes water

degradation and, in summer, algae blooms. Agricultural runoff can also cause problems if not properly controlled. Runoff from streets and parking lots contains oil, grease, gasoline, and many other damaging materials. Further, because the sources of this runoff are so diverse and widespread, preventing adverse impacts on water quality is a difficult problem.

Christopher Ayres, photo.

Friendship Harbor fuel stop

TIDES
Maine's Down East area claims the highest tidal fluctuation of any U.S. coastal area. Tides in Coobscook Bay rise as much as 28 feet. In Calais the average tide rises 20 feet; in Eastport 18.2 feet. In narrow channels these tides are responsible for the phenomenon known as "reversing falls", a rapids area where water flow changes with the tides.

What Communities Can Do to Improve Water Quality

Successes

The Maine legislature has recently banned the use of overboard discharge systems that chemically treat sewage. The chemicals, primarily chlorine, used in the treatment process have been found to be harmful to marine organisms. This in itself will help reduce pollution in some coastal areas. Furthermore, the Federal Environmental Protection Agency is increasing enforcement of ocean dumping prohibitions along Maine's coast.

Inland, some communities are enacting stronger shoreland zoning provisions. Bridgton, for example, has amended its ordinance so that generous "filters" of vegetation (not lawns) are required along the immediate shoreline. These measures effectively reduce phosphorous loading in lakes and ponds.

Assess Water Quality in Your Community

Communities can do a variety of things to maintain and restore water quality. Specific local activities could include:

Work to Reduce or Eliminate Problems Caused By Inadequate Sewage disposal

1. Conduct tests of local septic systems to ensure that they are functioning properly;
2. Assist in enforcement of state water quality laws by reporting violations;
3. Implement an active program of compliance checks to insure that water quality provisions of local permits are implemented;
4. Enact local ordinance provisions for overboard discharges that require annual licenses, documentation of maintenance, and demonstration of no practical alternative;
5. Educate homeowners on the importance of maintaining their septic systems properly; and
6. Enact a Harbor Ordinance provision to restrict discharges from boats moored in the harbor (excluding house boats).

Work To Reduce Non-Point Sources of Pollution

1. Work with the Soil Conservation Service and land owners to prevent or eliminate non-point sources of pollution such as erosion from roads and agricultural fields and organize local residents to explore use of alternatives; require the use of catch basins, wide ditches, hay bales and storm water retention basins where appropriate;

2. Enact ordinance provisions to limit non-point sources of pollution:
   a. Increase setbacks;
   b. Require that all fill and bare soil be seeded and stabilized promptly;
   c. Establish standards for activities that use chemicals in their production;
   d. Regulate road, driveway, and camp road construction near (within 250 feet) of water bodies;
   e. Incorporate adequate ditching, storm water retention and culvert sizing provisions in all relevant ordinances;

3. Provide for generous buffer strips (100 feet or greater, depending on slope) adjacent to water bodies and wetlands when public projects are undertaken; and

4. Cooperate with other communities to develop pollution control plans for estuaries and other bodies of water which cross municipal boundaries;

5 Control erosion on all public projects (especially roads) and design drainage to minimize adverse impacts on water quality;

6. Require marinas to have pumping stations for boats;.

7. Embark on an education program to show builders, developers and shoreland residents on lakes, ponds, and rivers how they can act to reduce phosphorus build-up. Phosphorous comes from lawn fertilizers, manure, septic systems, parking areas, spilled gasoline

Hank Tyler, photo.

The dune system at Popham State Park

and household cleaners and detergents (contact the Lakes Division of the Department of Environmental Protection);

8. Extend municipal shoreland zoning to include all wetlands and flood plain areas beyond the State mandated 250 foot zone; and

9. Map all sand and gravel aquifers and enact an aquifer protection ordinance that controls the storage or discharge of harmful materials within known recharge areas.

SEA MINK
A large, otter-like animal was once known to live on the Maine coast where it fished along rocky shorelines and outlying islands. This "sea mink" was described as being larger than a fox with a slender body and long tail. The fur of the sea mink led to its demise. The last record of this animal in Maine was a report of one killed near Jonesport in 1880.

Examples of Local Actions to Improve Water Quality

The Town of **Southwest Harbor** is in the process of installing a pumping station at Manset Dock for pumping wastes from boats into the Town's sewer system. Effluent will be pumped from boats to a nearby sewer main and then to the Town's secondary treatment plant. This station is one of the few pump-out facilities for boats along the Maine Coast.

The **Chickawaukee Lake Association** has been actively involved in a public education campaign aimed at halting the deterioration of Chickawaukee Lake (this water body serves as the water supply source for the Rockland/Camden area). A lake study conducted for the Association in the early 1980's showed that phosphorus levels were increasing. The Association focused attention on the problem through newsletters, public information meetings, and individual contacts with property owners. The Association's efforts led to the removal of several nearby manure piles, a commitment to reconstruct a dirt road that was washing into the lake, and a willingness on the part of property owners to cut back on lawn fertilizers and other materials that contain phosphorus. The quality of the lake has since improved.

9.TECHNIQUES TO IMPROVE AIR QUALITY

The State Policy

"Restore and maintain coastal air quality to protect the health of citizens and visitors and to protect enjoyment of the natural beauty and maritime characteristics of the Maine coast."

The Importance of Good Air Quality

Overview: Air Quality and Public and Environmental Health

Good air quality is important to public health, environmental health and the state's economy.

For example, many people with respiratory problems suffer during the summer when high concentrations of pollutants are present along the Maine coast. One of the principal problems is ozone which aggravates other health problems and causes many people to remain indoors during periods of peak concentrations.

In addition, air quality problems may be responsible for the loss of vigor in some coastal forests, particularly the spruce fir forest which is typical of many coastal islands. Rates of growth in these forests are declining and scientists suspect that a combination of ozone, acid rain, and other air pollutants, are the cause.

Some of the worst air quality readings recorded on the Maine coast were found on Isle Au Haut (part of Acadia National Park) during the summer of 1988.

The Economic Importance of Good Air Quality

In terms of Maine's economy, air quality is particularly important. If the Maine coast is not a healthful place for tourists to visit, if views are obscured by haze, and if the forest suffers, the area will lose much of its attractiveness.

Furthermore, if air quality problems cause significant deterioration in Maine's forests, the pulp and paper industry would be adversely affected. This would hurt Maine's entire economy and workers. The most immediate problem confronting coastal Maine is the level of ozone during the summer. This is a particularly difficult problem as much of the ozone comes from sources outside the state.

VANISHED BIRDS
The Great Auk, a large, flightless bird was once the dominant species on many of Maine's coastal islands. Hunted for food and oil, it was extinct by 1844. The Labrador Duck was hunted exclusively for its feathers. It too vanished.

What Communities Can Do to Improve Air Quality

While air quality is obviously not entirely a local issue, there are things that Maine communities can do to help address air quality problems.

Specific actions communities could take include:

- Encourage non-motorized forms of recreation, or activities such as tour boats which make efficient use of motor fuel
- Encourage carpooling by making car pool lots available and setting up mechanisms to facilitate carpooling
- Provide shuttle bus service to reduce air pollution and traffic congestion
- Reduce dust by cleaning streets promptly in the spring and requiring industrial activities which generate dust, e.g. gravel extraction, to control emissions (contact the Department of Environmental Protection for information and assistance)

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CITY OF PORTLAND SPECIMEN REFERENDUM BALLOT, MAY 5, 1987

SHALL THE FOLLOWING ORDINANCE ENTITLED: "LAND USE CODE AMENDMENT TO BE ENACTED BY INITIATIVE" BE ADOPTED?

Purpose: To secure the Portland waterfront for marine uses.

In order to secure the Portland waterfront for marine uses, no uses shall be permitted within the area bounded by the Tukeys Bridge and the Veteran's Memorial Bridge lying between and including the waters of the Fore River, Portland Harbor and Casco Bay, excluding the Casco Bay Islands, and the water side of a line running down the middle of Commercial Street, India Street, Fore Street and the Eastern Promenade other than those accessory to fishing activities, maritime activities, functionally water-dependent activities or authorized public uses as these terms are defined below.

Without limitation and not withstanding the provisions of the Portland Land Use Code, particularly Division 4, R-3 Residential zone; Division 8.5, R-OS Recreational and Open Space Zone; Division 14, 1-2 and 1-2b Industrial Zones; Division 18, W-1 Waterfront Zone; Division 18.5, W-2 Waterfront Zone; and any other Division, Zone, or Section of the Code purporting to authorize pier and/or land uses of any kind, there shall not be permitted in the area described in the first paragraph:

1) Hotels, motels, boatels and residential uses.

2) Office, industrial, commercial, research and institutional uses and facilities which are not accessory to the activities defined below.

Definitions.

(1) FISHING ACTIVITIES means activities required for, supportive of or commonly associated with fishing, such as fin fish and shell fish processing, storage, marketing and handling, the manufacturing and sale of bait, nets and other fishing supplies, and the manufacture, sale, installation and repair of fishing boats, engines and equipment, and ground level parking incidental to any such uses.

(2) MARITIME ACTIVITIES means activities required for, supportive of or commonly associated with the construction, repair, operation, storage, loading and unloading of boats, waterfront dock and port facilities, marinas, navigation aids, boat fuel and equipment supply, ground level parking incidental to such uses and other activities the primary purpose of which is to facilitate maritime trade.

(3) FUNCTIONALLY WATER DEPENDENT ACTIVITIES means activities that require, for their primary purpose, a location on the waterfront or that require direct access to the water and which cannot relocate away from the water.

(4) AUTHORIZED PUBLIC USES means uses of facilities which are publicly owned and designed for a public purpose, together with public utility facilities, and equipment storage and other facilities necessary for public safety.

Because of the significance of this amendment to development activities within the defined waterfront area and the potential for long-run harm which development inconsistent with this amendment will have for all of the citizens of the City of Portland, the provisions hereof, if subsequently accepted by the voters of the City of Portland, shall be applicable to all pending proceedings, applications and petitions commenced after December 22, 1986, which is the date of the filing of this initiative in the City Clerk's office of the City of Portland.

Each and every provision of this amendment is severable. If any provision is determined to be invalid by a court of competent jurisdiction, or the application of any provision to any person or circumstance is determined to be invalid by such a court, such invalidity shall not affect any other provisions or the application to any other person or circumstance.

Place a cross (x) or check mark (v) in the square showing whether you are in favor of enacting the Ordinance or opposed to it.

FOR THE ORDINANCE ☐

AGAINST THE ORDINANCE ☐

EXCERPTS FROM BOOTHBAY HARBOR'S COMPREHENSIVE PLAN, 1986

OBJECTIVES

RESIDENTIAL GROWTH

1. To prevent the conversion of the existing character of the harbor from a commercial center with marine-related activities to a high-density residential enclave dominated by condominiums or multi-unit developments.

2. To prevent the proliferation of high-density residential development projects from dominating the visual appearance of the harbor, whether viewed from one part of the shore to another or from the water.

3. To retain and protect the New England architecture that has characterized most of the older buildings in Boothbay Harbor.

4. To allow the construction of multi-family dwellings in areas which do not dominate the visual character of the waterfront.

COMMERCIAL GROWTH

1. To encourage marine-related businesses, and the fishing industry in particular, in the harbor area.

2. To improve Boothbay Harbor's attractiveness and enhance its image as a tourist center.

3. To protect the unique character of the downtown and waterfront from overbuilding.

4. To work cooperatively to institute positive actions to reduce traffic congestion and ease the parking problems in the downtown.

5. To reduce congestion on the waters of Boothbay Harbor, as recommended by the Port Committee.

6. To discourage further development or expansion of non-water dependent uses along the waterfront.

POLICIES

MULTI-FAMILY DWELLINGS (3 or more dwelling units)

It is the recommended policy of the Town of Boothbay Harbor that:

1. Multi-family dwellings should be allowed in all areas of the community except:

a. The water side of the following roads: Atlantic Avenue, Union Street, Commercial Street, Townsend Avenue, West Street from its intersection with Howard Street to the head of Mill Cove, Western Avenue, and Sea Street.

b. The Downtown commercial zone, including the head of the harbor.

c. From St. Andrews Hospital to Roads End, all areas within 500 feet of the landward side of Western Avenue, West Street from its intersection with Howard Street to the head of Mill Cove, Atlantic Avenue, Union Street, Townsend Avenue north of Union Street to the Congregational Church, and Oak Street from the Meadow area commercial district to Union Street.

d. In all areas of the coast other than those mentioned in items "a, b and c" above, 500 feet from normal high water.

e. The area of land within 100 feet of all fresh water bodies.

f. The area within 300 feet of Route 27 north of the 27/96 intersection.

g. Special residential districts and islands.

COMMERCIAL DEVELOPMENT - WEST SIDE OF HARBOR/DOWNTOWN

It is the recommended policy of the Town of Boothbay Harbor that:

1. Commercial uses as specified in the 1985 zoning ordinance should be permitted in this area.

2. Single-family dwellings should be permitted.

3. Manufacturing activities which are not functionally water-dependent should be prohibited.

4. Wharves, piers and walkways for public pedestrian use should be permitted within 75 feet of the water.

5. Motels and hotels of more than 10 units should be prohibited.

6. Within 100 feet of the water, the following activities should be prohibited.

   a. The conversion of an existing building to a motel or hotel of any size.
   b. The expansion of a non-conforming use.
   c. The projection of second floor overhangs into required setbacks.
   d. Buildings constructed out over the water.
   e. Floating restaurants or commercial establishments.

COMMERCIAL DEVELOPMENT - EAST SIDE OF HARBOR

It is the recommended policy of the Town of Boothbay Harbor that:

1. Between the footbridge and the Congregational parsonage (Map 10 Lot 30) and the shore and Atlantic Avenue, uses which are not functionally water dependent should be prohibited.

2. The conversion of dwellings to non-permitted commercial uses should be prohibited.

3. The conversion of existing commercial establishments to motels or hotels of any size, or to multi-family dwellings or motel condominiums, should be prohibited.

4. The conversion of an existing, permitted use to a non-permitted use should be prohibited.

5. Wharves, piers and walkways for public pedestrian use should be permitted within 75 feet of the water.

EXCERPT FROM HARPSWELL'S COMPREHENSIVE PLAN

COMMUNITY LAND USE GOALS

Marine Related Activities - As change occurs in Harpswell, the Town should promote the retention of traditional marine related activities such as fishing, shell fishing, boat building, and marine supply and service by:

1. Assuring continued access to the water for fishermen and the public;

2. Protecting and improving the water quality of shellfish harvesting areas;

3. Requiring that "working" boats be given priority in traditional mooring areas; and

4. Allowing marine related activities throughout the community subject to reasonable regulations to minimize adverse impacts on neighboring properties.

EXCERPT FROM SCARBOROUGH'S COMPREHENSIVE HARBOR PLAN - 1987

OVERALL CONCLUSIONS

Pine point is the best area of the harbor to accommodate shoreside improvements. It is adjacent to the existing Federal channel, has existing marine uses and has land adjacent to existing public facilities which may be acquired for additional shoreside support. Shoreside improvements are possible on the Ferry Beach side, but only if parking and dredging issues are resolved. Some proposals for improvements at Pine Point are conditioned upon whether improvements are made at Ferry Beach.

This section lists recommendations regarding facilities, zoning and public acquisition of land or easements.

FACILITIES ALTERNATIVES

Pine Point

1. Seek U.S. Army Corps of Engineers support for maintenance dredging of Federal channel.

2. Widen existing public pier to accommodate pickup trucks.

Other Options:

a. Build new public pier in area of dilapidated pilings to accommodate commercial fishermen. Install floats.

b. Renovate existing public pier for recreational boating use. Install floats.

3. Provide the existing public pier with hoist, fuel and utilities.

4. Install floats at the end of the pier and alongside the pier to provide a central tie-up area for dinghies used by lobstermen and clam diggers.

5. Widen boat ramp to provide for dual use. Consider installation of floats. (Pursue this option only if no expansion is possible on the Ferry Beach ramp. Otherwise simply maintain the ramp.)

6. Install concrete-filled, metal pilings on the Jones Creek side of the public pier (in the area of the existing dilapidated pilings).

7. Install floats along the pilings to provide for transient tie-up by recreational boats. (The pilings anchor the floats during the boating season and break up ice floes during the winter.)

8. Acquire Pillsbury property for parking. Pillsbury property is also best location for marina.

9. Provide facilities for shoreside support services:

a. Public rest rooms
b. Chandlery-General Store providing basic supplies and food items for fishermen, recreational boaters and beach goers
c. Restaurant (breakfast; seafood; retail seafood)
d. Offices, meeting room, storage

Potential users: Harbormaster, fishermen, excursion/charter boat company, sailing instruction company, marine financial, accounting, legal services, boating sales office

Ferry Beach

1. Continue support for U.S. Army Corps of Engineers study of 3-acre anchorage for commercial boats.

2. Seek acquisition of Sanitary District property for parking.

3. If Sanitary District property is available for parking, consider widening and extending Ferry Beach ramp. Required dredging should be studied in conjunction with U. S. Army Corps of Engineers study of 3-acre anchorage. If anchorage is deemed unfeasible, seek ramp improvement individually. Consider installation of floats to accommodate transient tie-up by recreational boats. Establish water management system to provide public safety regarding potential beach use-boating conflicts.

4. If Sanitary District property is not available for parking, simply maintain existing ramp.

ZONING

1. Modify zoning to allow marine-related uses.

2. Modify shoreland protection and resource protection overlay districts to allow areas for marine-related development districts.

3. Modify zoning to allow by right storage of active, registered commercial fishing vessels and gear within home yard on seasonal basis.

4. Modify zoning to allow existing uses such as Country Club, Yacht Club or Oar and Paddle Club, which are considered by most to be desirable uses.

5. Modify site plan review ordinance to give sufficient control over any dimensional standards for marine uses allowed and over commercial uses along water.

6. In terms of residential uses, the Town should consider whether the likely direction of development which will occur under existing zoning ordinances is consistent with its own goals and consider whether changes in zoning district boundaries are appropriate.

LAND ACQUISITION/EASEMENTS

1. Expanded shoreline parcel along Ferry Beach to Ferry Rock.

2. Additional upland area at Ferry Beach (adjacent property and/or Sanitary District property) for expanded parking/support area.

3. The entire Western Beach or beach rights to it for the Town.

4. The Pillsbury parcel at Pine Point for maritime use, parking, or marina.

5. Additional land areas adjacent to upriver launching ramps to expand capacity of existing ramps.

6. E & R parcel or vacant Thurlow parcel to provide additional support area for Pine Point harbor.

7. The Wellahan parcel to provide additional area for the Pine Point Beach parking lot.

EXCERPT FROM YARMOUTH'S ZONING ORDINANCE

"WOC 1" – WATER ORIENTED COMMERCIAL DISTRICT*

PURPOSE

To provide an area not only to serve recreational and commercial marine interest, but also at the same time, to permit a diversity of activities that add interest and economic viability to the harbor. The intent is to preserve and maintain for the citizens of Yarmouth the harbor, including its scenic value, views from the land, its accessibility to the public, and its economic value or uses that are dependent on a harbor location. This District specifically prohibits commercial uses and activities which are more suited to highway location because of their scale and their need for access and parking facilities.

PERMITTED USES

1. Marinas and related services, such as:
   a. chandleries
   b. sail lofts
   c. boat brokerage
   d. boat building and repair
   e. retail boat and motor sales
   f. boat storage
   g. boat refueling
2. Single family detached dwellings.
3. Retail stores and craft shops.
4. Restaurant, including walk-up, takeout window.
5. Professional offices. (Limited to 2nd floor if non-marine related.)
6. Municipal uses.
7. Shellfish wholesaling in conjunction with on-site retail sales.
8. Boat charters and excursions. (Not regular ferry serices.)
9. Museum, art gallery, aquarium.
10. Fabrication, storage, and repair of fishing equipment.
11. Piers, docks, wharfs, bulkheads, retaining walls (subject to the provisions of Article II, Section 119.)

*Revised 1/12/84 & 3/5/87 & 5/14/87 & 9/15/87.

MINIMUM LOT SIZE - Single Family Detached

This lot shall be for the exclusive use of the single family dwelling and not used or counted for area of other uses.

Area	Width	Front	Side Min	SideCum.	Rear
2A	200 ft.	70	30	100	75

SPECIAL PERFORMANCE STANDARDS. For WOC I in addition to all other applicable standards in this Ordinance. For the purpose of lot density calculations, any land above mean high water shall be considered in the lot size.

1. The use must be consistent with the purpose of this District as stated above.
2. Buildings and paving shall cover no more than 75% of each lot.
3. Building foot prints shall cover no more than 20% of each lot.
4. No building built after the effective date of this Ordinance shall have a foot print greater than 4,000 square feet, except for buildings used entirely for boat building and repair and boat sales which may have a foot print up to, but not exceeding 8,000 square feet. Any building built after the effective date of this ordinance which isgreater than 4,000 square feet may not be used for any other use than boat building and repair and boat sales.
5. No building shall be more than two (2) stories or be taller than 35 feet.

6. There shall be no buildings, second floor decks or enclosed lst floor decks within 25 feet nor shall there be automobile parking areas, first floor decks or patios within 10 feet of normal high water, except for parking for boat slip access. There shall be no paving except for pedestrian walkways and launching ramps within 10 feet of normal high water. If any structures or paving are within 50 feet of normal high water, appropriate steps will be required to prevent any erosion of the banking.

7. Buildings within 75 feet of mean high water must be at least 50 feet from other buildings.

8. Buildings taller than 25 feet shall be positioned so as to minimize visual impact.

9. First floor building space may not be non-marine related offices.

10. Only pitched roofs with slopes not less than 3 in 12 are permitted.

11. At least sixty-five (65) percent of the square footage floor space of each building or complex of buildings under single ownership must be used for marinas and related services, shellfish wholesaling in conjunction with on-site retail sales, boat charters and excursions, fabrication, storage, and repair of fishing equipment, or marine related offices.

EXCERPT FROM ZONING ORDINANCE OF PORTLAND, MAINE

LAND USE

DIVISION 18.5 W-2 WATERFRONT ZONE

Sec. 14-313. Purpose.

[The purpose of the W-2 zone is:]

(1) To reserve a substantial portion of the waterfront for uses which are waterfront dependent, such as marine and fishing-related activities.

(2) To protect commercial water dependent uses from other competing but incompatible uses. (Ord. No. 427-83, Section 1, 4-25-83; Ord. No. 385-87, 4-6-87)

Sec. 14-314. Permitted uses.

The following uses are permitted in the W-2 waterfront zone:

(1) Marine:

a. Marine products, wholesaling and retailing;
b. Marine repair services and machine shops;
c. Tugboat, fireboat, pilot boat and similar services;
d. Harbor and marine supplies and services and ship supply such as fueling and bunkering of vessels;
e. Marine industrial welding and fabricating;
f. Shipbuilding and facilities for construction, maintenance and repair of vessels;
g. Marine transport services, including ferries, public landings, commercial vessel berthing and excursion services;
h. Cargo handling facilities, including docking, loading and related storage;
i. Boat repair yards;
j. Boat storage facilities;
k. Seafood processing;
l. Seafood packing and packaging; m. Seafood loading and seafood distribution;
n. Fabrication, storage and repair of fishing equipment;
o. Ice-making services;
p. Facilities for marine construction and salvage;
q. Facilities for marine pollution control, oil spill cleanup, and servicing of marine sanitation devices;
r. Fabrication of marine-related goods.

(2) Commercial:

a. Publicly-owned intermodal transportation facilities principally for vessels with regularly-scheduled destination service, and the on-premises provision of restaurant, retail and service establishments;
b. Retail and service establishments which are principally marine or fishing-related, excluding marinas and yacht clubs;.
c. Cold storage facilities;
d. Warehousing and storage of goods which are awaiting shipment via cargo carriers;
e. Professional, business or general offices which are principally marine or fishing-related.

(3) Public:

a. Utility substations, including sewage collection and pumping stations, water pumping stations, transformer stations, telephone electronic equipment enclosures and other similar structures;
b. Public uses including pedestrian parks and other similar outdoor pedestrian spaces.

(4) Other:

a. Accessory uses customarily incidental and subordinate to the location, function and operation of permitted uses. (Ord. No. 427-83, section 1, 4-25-83; Ord. No. 355-85, section 1, 1-7-85; Ord. No. 438-86; Section 1, 1-7-86; Ord. No. 385-87, 4-6-87)

Sec. 14-1315. Conditional uses.

The following uses shall be permitted as conditional uses in the W-2 waterfront zone, provided that, notwithstanding section 14-471(3), section 14-474(a), or any other provision of this Code, the planning board shall be substituted for the board of appeals as the reviewing authority, and provided, further, that in addition to the provisions of section 14-474(c)(2), they shall also meet the following additional requirements:

(1) Commercial:

a. Restaurants and other eating and drinking establishments, provided that they are part of and within the lot lines of a marine-related use, other than vessel berthing facilities;
b. Off-street parking lots and garages provided that they are a part of and within lot lines of a marine-related use.

(2) Industrial:

a. Storage of goods in existing structures;
b. Facilities for combined marine and general construction.

(3) Marine:

a. Fish by-products processing, provided that:
1. Only fish and no other by-products shall be processed;
2. There shall be no outside storage of processed or unprocessed product;
3. There shall be no offensive odor emissions beyond the property lines;
4. Unprocessed products shall be delivered by land only if in a completely sealed, leakproof container;
5. Unprocessed products shall be delivered by vessel only if it can be transferred to storage without delay;
6. Unprocessed products shall be stored in a temperature-controlled environment not exceeding thirty-eight (38) degrees Fahrenheit.

b. Marine museums and aquariums.
(Ord. No. 427-83, section 1, 4-25-83)

Sec. 14-316. Prohibited uses.

Uses which are not expressly allowed as permitted uses or conditional uses are prohibited. (ord. No. 427-83, section 1, 4-25-83)

Sec. 14-317. Dimensional requirements.

In addition to the provisions of article III, division 25 of this Code, lots in the W-2 waterfront zone shall meet or exceed the following minimum requirements:

(1) Minimum lot size: None.
(2) Minimum frontage: None.
(3) Minimum yard dimensions:
Front setback: None.
Side setback: None.
Rear setback: None.

Except setback from pier line: A minimum setback of five (5) feet from the edge of any pier, wharf or bulkhead shall be required for any structure. The setback area may be utilized for activities related to the principal uses carried on within the structure but shall not be utilized for off-street parking. The edge of any pier, wharf or bulkhead shall include any attached apron(s).

(4) Maximum lot coverage: One hundred (100) percent.

(5) Maximum building height: Forty-five (45) feet.

Except buildings or structures may be erected above the height limitations in accordance with the provisions of section 14-430 of this Code. (Ord. No. 427-83, section 1, 4-25-83)

Sec. 14-318. Performance standards.

All uses conforming or otherwise shall comply with the following standards:

(1) Outdoor storage of material: Outdoor storage of commodities and materials accessory to normal conduct of business, except pilings and/or cranes, shall be permitted to a maximum height of forty-five (45) feet, and such materials shall be entirely contained, including run-off contaminants and residual material, within a designated area within the lot boundary.

(2) Noise: Every use, except vessels, railroad traffic, air-raid sirens or similar warning devices, shall be so operated that the volume of sound inherently and recurrently generated, measured by a sound level meter and frequency weighing network (manufactured according to standards prescribed by the American Standard Association), at the off-premises source of complaint, does not exceed seventy-five (75) decibels, as measured on the A Scale.

(3) Vibration: Vibration inherently and recurrently generated shall be imperceptible without instruments at lot boundaries. This shall not apply to vibration resulting from activities aboard a vessel or from railroad vehicle activities, or from activities on a pile supported pier.

(4) Federal and state environmental regulations: All uses shall comply with federal and state environmental statutes and regulations regarding emissions into the air, except where provisions of this Code are more stringent.

(5) Discharges into harbor areas: No discharge into harbor water areas shall be permitted, except as permitted by the Department of Environmental Protection under a waste discharge license, and as approved by the Department of Parks and Public Works, as authorized by chapter 24, article III of this Code. All private sewage disposal systems or private waste water treatment works shall comply with the provisions of chapter 24, article II of this Code and federal and state environmental statutes and regulations regarding waste water discharges.

(6) Storage of vehicles: Storage of any unregistered automotive vehicle on the premises for more than sixty (60) days, and outdoor storage of any used automotive tires on the premises for more than thirty (30) days shall not be permitted.

(7) Landfill of docking and berthing areas: Landfill of docking and berthing areas shall be governed by the Alteration of Coastal Wetlands Act, M.R.S.A. Title 38, Section 471-8, and permitted only if the landfill does not reduce the amount of linear berthing areas or space, or berthing capacity. If approved, construction shall be undertaken using methods approved by the Department of Parks and Public Works and be accomplished in accordance with the provisions of division 25 of this article and in a manner so as to ensure that a stable and impermeable wall of acceptable materials will completely contain the fill material and will not permit any fill material to leach into docking areas or navigable waters.

(8) Off-street parking: Except where additional parking is required pursuant to article V (Site Plan), off-street parking is required at fifty (50) percent of the required number of parking spaces for specified uses as otherwise provided in division 20 of this article.

(9) Off-street loading: Off-street loading is required as provided in division 21 of this article.

(10) Shoreland regulations: No building or structure shall be erected, altered, enlarged, rebuilt or used, and no premises shall be used within the land area situated between the shoreland zone line and the normal high water mark of the waters of the Stroudwater River, Portland Harbor, Back Cove and the bays, coves, sounds, inlets and open waters of Casco Bay, as shown on the City of Portland Zoning Map, which does not comply with the requirements of division 25 of this article.

(11) Lighting: All lighting on the site shall be shielded such that direct light sources shall not unreasonably interfere with vessels transiting the harbor. (12) Roof signs: No roof sign which is not integral to the architectural form of a building roof shall be erected.

(13) Storage of pollutants and oily wastes: On-premises storage of pollutants and oily wastes shall not be permitted for more than forty-five (45) days. (Ord. No. 427-83; Ord. No. 174-87, section 2, 3-4-87)

Sec. 14-319. Definition.

For the purposes of the W-2 waterfront zone, a use shall be deemed to be "marine" or "marine-related" if a principal potion of the goods or services which it provides are derived from fishing or other water or waterfront dependent activities, or if a principal portion of the goods or services which it provides are designed to be used in connection with such activities. (Ord. No. 427-83, section 1, 4-25-83)

DESCRIPTION OF WATERFRONT DEVELOPMENT DISTRICT BEVERLY, MASSACHUSETTS

The Waterfront Development (WD) District is a mixed-use zone that provides a bonus in floor-area ratio (FAR) for any project that incorporates physical and visual public access and devotes twenty percent of the floor area to marine commercial uses or restaurant.

Water dependent uses, multi-family dwellings and restaurants are permitted by right. A range of non water dependent uses such as hotels, clubs, retail and office development are allowed by special permit. The Planning Board, through a special permit process, may grant an increase in the maximum FAR from .25 up to 1.0 in return for 1) construction and maintenance of a 12 foot wide public walkway along the water, 2) 50-foot wide spaces between buildings at least every 150 feet to afford views of the waterfront from the street, and 3) a minimum of 20% of the floor area for a restaurant or for office or retail space connected with a water dependent use. An additional density bonus up to a FAR of 1.5 may be granted for developing and maintaining public open space on an additional 10% of the site.

EXCERPT FROM "PORTLAND WATERFRONT, THE COMMERCIAL STREET WATERFRONT CORE, PUBLIC ACCESS DESIGN GUIDELINES"

ARCHITECTURAL GUIDELINES

Intent

Design and construct new buildings, additions, and infill to be compatible in use, scale, building materials, texture, structure, fenestration, detail, and color which characterizes the particular waterfront districts, i.e., northside Commercial Street, southside Commercial Street, mixed use zone, and marine zone.

New Construction and Adaptive Re-use

Building Heights and Setbacks

- Avoid changes in building height, particularly at eaves, along Commercial Street that would violate the typical four-story (45-foot) wall and provide additional building height through sloping roofs and unobtrusive dormers.
- Maintain the continuity of the street wall, particularly at the corners of side streets.
- Every effort should be made to preserve, without major modification, those buildings which contribute to the definition of the street and the prevailing massing and character of the buildings along it.
- In some areas where the continuity of street wall is not significant, corner set backs at buildings fronting the entrance to piers may heighten sense of entry along Commercial Street.
- Provide 15-foot minimum setback at edges of piers for public access in mixed-use zone. Step building back at each floor level above maximum height restriction where bonus provision is warranted.
- Provide infill development of vacant parcels, relating new construction to adjoining structures, particularly building height and general massing, materials, and scale of detail.

Signage, Lighting, and Materials

- Place mechanical equipment in inconspicuous locations, not visible from the public way or in view from the water, nor from waterfront view access points back toward the peninsula.Where mechanical systems are a significant function of the building, such as in fish processing, the expression of such systems as an integral architectural element or device is appropriate.
- Avoid exterior lighting and signage that detract from the strong building forms. Incorporate signage with architectural elements, as along the street floor lintels or defined brick coursing.
- Adapt current building technologies such as pre-engineered metal buildings in industrial uses to relate to waterfront location through customizing of window treatment, exterior color, material, and massing to echo older warehouse and industrial structures.
- Provide cloth awnings along retail frontages for color, texture, and scale.

Pedestrian and Vehicular Circulation and Parking

- Provide interior block service and pedestrian access ways, and, only if necessary, surface parking where it will least erode the continuity of building forms and massing.
- For the development of parking structures, provide compatible exterior treatment that will minimize the intrusion of decked parking. Wherever possible, even at the loss of additional parking, develop the street side for other uses, particularly at street level.
- Provide retail uses on street levels in any redevelopment within the mixed-use zone of present industrial, storage, marine or commercial uses, and office and residential uses on upper floors. Maintain continuity of street level occupancy activity.

Building Rehabilitation

- Utilize the Standards for Rehabilitation and Guidelines for Rehabilitation Historic Buildings prepared by the Secretary of the Interior, and published by the U.S. Department of the Interior, to guide the extent and nature of rehabilitation.
- Retain distinctive building features:

  a. gable, gambrel or flat roofs with major uninterrupted surfaces, simple party-wall parapets, masonry chimneys, scuttles and other minor roof penetrations, and delicately detailed eaves, gable ends, and cornices;

  b. large expanses of load bearing masonry, regularly fenestrated on street and alley facades by rectangular openings regulated by stone or flat arch lintels and the vertical transfer of loads to street floor column and lintel structure;

  c. masonry details, coursing and narrow jointing typical of simple, strong commercial buildings;

  d. street level structure, trabeation, usually granite lintels supported by granite or brick piers, large street level openings and storefronts, simple detail throughout with little ornamentation;

  e. sash, frames, and storefront millwork with simple lines and fine members, usually double-hung operable windows, muntins, and non-reflective glass;

  f. copper (verdigris) flashing, colors appropriate to the style and period of individual buildings.

- Inappropriate cleaning and repointing of masonry buildings in Portland pose the single greatest threat to their long-term preservation. Therefore, those standards for cleaning and restoration of masonry as outlined in the Secretary of the Interior's Standards for Rehabilitation should be carefully observed.
- Retaining existing historical materials and construction, replacing in-kind.
- Incorporating safety features in a way to minimize disruption of the historic character of the buildings

TOWN OF ROCKPORT HARBOR ORDINANCE
ADOPTED APRIL 29, 1981

SECTION I: PURPOSE

The purpose of this ordinance is to provide for the just and orderly operation of marine activities in Rockport Harbor.

SECTION II: HARBOR MASTER

The Harbor Master is appointed annually by the Board of Selectmen. Certain duties and responsibilities of this office are prescribed by Title 38, MRSA. He has the additional duty to administer and enforce the provisions of this ordinance with the authority granted by law and through his appointment as a constable of the Town of Rockport.

He may utilize the Town Office and Rockport Harbor Committee for assistance in the administrative aspects of his responsibilities.

SECTION III: HARBOR LIMITS AND CHANNEL

Harbor Limits

Rockport Harbor shall include that area of water to high tide level lying within the following described boundaries, West by true course form the Lowell Rock Light to the shore, northerly, easterly and southerly along the shore of Rockport to the most southerly tip of Beauchamp Point, south by true course to Indian Island hence by the westerly shore of said island to the most southerly point, and hence to the starting point.

Rockport Harbor Channel

The entrance to Rockport Harbor is 50 feet wide and runs from a point about 500 yards west of the Lowell Rock Light to the Goose River. The Channel center line passes through coordinates 69 deg 03 min 59 sec west longitude and 44 deg 09 min 46 sec north latitude and bears northerly 347 deg 30 min true (approximately 006 degrees magnetic). This line extended southerly intersects the light tower of the USCG Station at Owls Head.

SECTION IV: RULES OF HARBOR USE

Prudent Operation of Vessels

Vessels shall be operated in Rockport Harbor in a reasonable manner so as not to endanger persons or property or to cause excessive wash. In no case shall speeds exceed five (5) knots while operating in mooring or occupied anchorage areas.

Town Float

The intended use of the Town Float is solely for loading and unloading of vessels and for the mooring of skiffs.

No persons may leave a vessel on the westerly face of the float unattended or remain for a period of more than one-half (1/2) hour. Any person wishing to leave a skiff at the Town Float on a regular basis is required to notify the Harbor Master of this intention. If, at the discretion of the Harbor Master, skiff tie-off space becomes over-crowded, he may require that his specific permission be obtained for regular skiff mooring privileges. First priority for space is accorded to resident users.

Skiffs tied to the Town Float must be property maintained, be kept bailed, and must be secured so as to keep the westerly face of the float clear and not interfere with vessels landing and departing.

No skiffs or gear may be stored on the town Float for more than one tide.

Users are responsible for promptly cleaning up any spillage or untidiness resulting from their operations.

Failure to observe these regulations may result in loss of permission to use the facility and a penalty as set forth in Section VI.

An annual fee may be levied by the Town for each skiff tied at the Town Float if so determined by the Selectmen.

Traps in the Inner Harbor

No operation of traps of any kind will be allowed in the Harbor beyond a distance of 100 feet from the high water mark of shore, and northerly of a line drawn from Cramer Point to the northerly corner of the Wolfe cement retaining wall.

Record of Moorings

The Harbor Master shall maintain a written record of the basic information on each mooring including assigned location, identifying number, vessel description, owner, and any additional data deemed useful.

The Harbor Master will maintain a chart of the Harbor showing current mooring location assignments.

An annual fee may be levied by the Town for each mooring location if so determined by Selectmen.

Each mooring location will be assigned an identifying number which must be marked in a legible fashion on the marker buoy or log in at least three inch (3") numerals.

Precedence for Mooring Locations

The Harbor Master will maintain a chronological list of all vessel owners requesting mooring location assignment or re-assignment to a new location.

Within the space available, requests for a particular location or area of the Harbor will be treated in accordance with the following priority guidelines.

A) Resident shorefront owners' requests for location immediately adjacent to frontage.
B) Resident commercial vessel owners.
C) Resident pleasure vessel owners.
D) Resident commercial operators with rental moorings.
E) Resident vessel owners with multiple locations.
F) Non-resident commercial vessel owners.
G) Non-resident pleasure vessel owners.

Future mooring assignments will be on an availability basis (see Title 38, MRSA).

Large Vessel Location Limitation

Vessels of 40 feet or greater overall length will not ordinarily be assigned a mooring location in the more crowded head of the Harbor. The head of the Harbor is defined as any location northerly of a line drawn from the spindle adjacent to Penobscot Boat Works to the southerly corner of the granite Appolonio pier.

SECTION VI: PENALTIES

Violation of any of the provisions of this ordinance shall be deemed a civil violation. They are enforceable by the Harbor Master or any other law enforcement officer with jurisdiction in Rockport by a civil action in the District court to recover a fine not to exceed the sum of $100 each violation.

Penalties for violations of the laws of Maine with regard to speed restrictions, reckless operation of a vessel, and operation of a vessel while under the influence of liquor or drugs shall be as provided in Title 38 MRSA, Sections 281 thru 255.

If the Harbor Master incurs costs in the conduct of his duty as a direct result of the failure of a vessel owner or operator to comply with the laws and regulations, the Harbor Master may recover those costs and reasonable remuneration for his time by filing a civil complaint against such owner or operator in District Court.

SECTION VII: DEFINITIONS

Vessel

The word "Vessel" as used herein shall include boats of all sizes powered by sail, machinery or hand, scows, dredges, lobster, crab and shellfish cars, and craft of any kind.

Commercial Vessel

A vessel from which the owner obtains a substantial portion of his income.

Resident

The word "resident" shall have its ordinary meaning and shall include a person owning or renting real residential property in Rockport and who uses that property for his home for a substantial part of the year.

SECTION VIII: SEPARABILITY

If any provision or clause of this ordinance or application thereof to any person, persons or circumstances is held invalid, such invalidity shall not offset other provisions or applications of the ordinance which can be given effect without the invalid provision or application, and to this end provisions of this ordinance are declared to be separable.

EXCERPT FROM SCARBOROUGH'S COMPREHENSIVE HARBOR PLAN:

MARINE RESOURCES

The impact of marine resources is felt throughout Scarborough. While the jobs generated may not be large in number, the number of businesses which rely on marine resources is significant, especially when compared to other communities in the area. Excluding Portland, the number of licensed wholesale seafood establishments between Brunswick and Kennebunkport is highest in Scarborough - 13. Reasons include Scarborough's proximity to tourism-related businesses and the good transportation links the town enjoys to major highways. In addition, several companies which rely on seafood products, such as processors and restaurants, have either recently expanded or are planning to expand.

For the most part, marine resources in Scarborough Harbor means the lobster and clam industries. This section provides background and recommendations regarding each industry and the respective shoreside support.

Information for this section was compiled from interviews with local fishermen and processors, state fisheries officials, and operators of fishing facilities in other ports; statistical and planning information published by various state agencies and the U.S. Army Corps of Engineers; previous reports or studies concerning the fishing industry in Maine; and industry information from trade publications.

THE LOBSTER INDUSTRY

1. Overview

Because Maine's lobster industry began its major period of development in the late 19th century, it makes sense to date Scarborough's lobster economy from the same era. The presence of the Army Corps of Engineers beginning in the 1950's indicates the importance of the fishery to the local area, and the need for a harbor of refuge in Southern Maine. Trends over the last 10 years indicate a small but economically significant industry.

Scarborough's lobster fleet is an inshore industry, meaning that most of the product comes from within three miles of the shore. A few boats are also outfitted for shrimping, groundfishing, scalloping or surf clamming, depending upon the season.

The lobster fleet generally fishes in Saco Bay, around the area of Bluff Island, Stratton Island and Three Tree Ledge (see Figure I). The fleet fishes an average of 110 days a year, mostly between April and October. Most of the catch is landed in Pine Point. The three biggest buyers are the Pine Point Fisherman's Cooperative, Bayley's Lobster Pound and Thurlow's Shellfish. Much of the lobster is wholesaled in Scarborough and Southern Maine to local restaurants, retail seafood market and lodging establishments involved in the tourism economy.

2. Facilities:

Pine Point Side:

- A 15-acre Federal anchorage;
- A publicly-owned boat ramp;
- A publicly-owned parking lot (50 spaces);
- A publicly-owned pier.

Ferry Beach Side:

- A publicly-owned boat ramp;
- A publicly-owned parking lot (100 spaces);

3. Number of vessels, fishermen, traps:

- Over the past nine years, the number of commercial vessels in the harbor has been:

  1978 – 33
  1981 – 38
  1987 – 40

A rule of thumb for the Harbor is that one half of the total number of boats represents boats involved in lobstering as a full-time job. (An exception is 1978, when 21 of 33 boats were full-time). Another rule of thumb is that two people are employed for each full-time boat. The full-time lobstermen use an average of 600 traps apiece.

4. Landings and economic impact:

The counting of boats and jobs is only part of the assessment necessary to illustrate the economics of the fishing industry. A clearer economic picture is illustrated by the value of landings and the economic multiplier attached to those landings. On average, Scarborough's landings are conidered to represent 9 percent of Cumberland County's landings.

	Cumberland County		Scarborough	
	Vol. (lbs)	Value ($)	Vol. (lbs)	Value($)
1981	5,128,222	9,802,863	461,540	882,248
1982	5,261,568	10,730,106	473,541	965,709
1983	4,415,481	9,816,913	397,393	883,522
1984	4,338,344	10,718,705	390,451	964,683
1985	4,533,636	9,801,714	408,027	882,154
1986	4,849,236	11,080,754	436,431	997,268

As the chart shows, Scarborough lobstermen land product worth nearly $1 million at the dock. Models used to estimate the statewide impact of the lobster industry estimate a multiplier of 2 when describing the total amount of income generated in the harvesting and processing sectors from lobster landings. However, economists believe the statewide multiplier overstates income in local ports.

One of the key calculators of the multiplier relates to the percentage of income lobstermen and wholesalers spend in their community on goods and services related to their business operations. Because Scarborough industry members purchase most of their industry related goods and services in Portland, the estimated multiplier for the landings would be far less than 2. However, a reasonable range of economic impact is achievable because even a small percentage of purchases made locally would push the income figure beyond the landed value estimate of $997,268. For general planning purposes, Scarborough's $997,268 worth of landings generates income over $1 million, probably in a range between $1 million and $1.5 million.

The figure does not include further income derived from the retailing of lobster, of which no detailed analysis is available. However, retailing income is very significant, given the numerous restaurants, food stores and lodging businesses in Scarborough servicing the large percentage of the tourist market in Southern Maine. While no breakdown is available for lobster, U.S. annual consumption of seafood is at a record 14.5 pounds, up from 12.8 in 1980, an increase of 13 percent. Maine supplies half of the lobster landings in the United States, and to many summer visitors, a lobster dinner is the ultimate experience during a vacation. It is no small symbol that the state's license plate features a lobster.

It is impossible for Scarborough's landings alone to meet the demand for product. Scarborough wholesalers supplying the area buy additional product from Portland and other Maine ports, and from Canada.

5. Future of the industry:

The future of the industry in Scarborough is much the same as that of the industry in the state as a whole.

Statewide, lobster landings have recently been recovering from relatively displaced levels of the mid-1970's. Landings in the early 1980's have returned to approximately the same level as the early 1960's, although a decline has been occurring since 1982. The level of fishing effort has been steadily increasing since the 1960's; nearly 4 million traps are now employed to catch what 2 million traps caught 25 years ago. This is partly due to more trap intensive methods of fishing, in which more traps are placed in order to establish territories, and partly as a result of the

tendency towards overharvesting in all fisheries. In any event, harvesting and natural mortality take a combined 90 percent of a given year class of the fishery during its first year of exposure to fishing. Fortunately, the amount of recruits which have entered the fishery appear to have remained more or less constant (+ -20%) over the past decade or so.

In general, all of Maine's fisheries experienced rapid expansion during the late 1970's, in response to the 200-mile limit. Despite losses in clam and worm harvesters, fish harvesting in Maine grew from about 4,000 fishermen in 1980 to 7,000 in 1985. The 1984 World Court decision on the U.S./Canada maritime boundary excluded Maine and other U.S. fishermen from the rich northern third of the Georges Bank in the Gulf of Maine. This exclusion and the resulting surplus in Maine groundfish harvesting capacity suggests that fisheries employment will see at least a moderate decline over the next decade, as the industry to decline from its 1985 estimate of 7,000 to 6,000 by 1995, a decline of 14 percent.

The overall state data suggests the number of Scarborough lobster fishermen will maintain its current cycle. If there are 60 people working on lobster boats today, (two people per 20 full time boats and one person per 20 part time boats), a 14 percent decline by 1995 would leave 52 lobster fishermen, roughly the same amount who fished out of Scarborough Harbor in the late 1970's.

However, over the next several years the average size of a lobster boat fishing out of Scarborough is expected to increase. Currently ranging from 24 to 36 feet, more vessels are expected to be 30 feet and over, reflecting a trend of more traps, longer trips and fishing in deeper water to remain competitive in the industry.

6. Issues:

A favorite story of one Scarborough lobsterman concerns a friend who fishes out of Portland. The friend mentioned one day that he wondered how Scarborough lobstermen get excited to get out of bed each day because of the manual labor it takes to prepare for and end a day at sea.

The point was this: In many ports, lobstermen can drive a truck on to a pier providing equipment and services. Traps are loaded or unloaded with relative ease, thanks to hoists, and the availability of fuel is just a few feet away.

In Scarborough, lobstering is not so convenient.

About seven fishermen reside on the Ferry Beach side of the Harbor. Most do not moor their vessels near Ferry Beach because shoaling has led to groundings, and vandalism became a problem because of easy access to boats at low water. And as much as one hour of work time can be lost due to waiting for higher water.

Many of the Ferry Beach fishermen who moor off Pine Point travel 24 miles to use their vessel, losing an hour of work given the time of a round trip commute. Some operate small boats which they use to go retrieve their boats off Pine Point and then return to meet the rising tide off Ferry Beach so they can load for a trip. A handful of the Ferry Beach fishermen actually land their product in Portland, reflecting both business considerations and convenience.

Issues applicable to both sides of the harbor involve substantial amounts of time hauling bait, traps and the day's catch by hand. From example, it is not unusual for a fisherman to purchase bait in a barrel, load the barrel onto his truck, drive the truck to the parking lot, unload the bait from the barrel to a plastic tote, carry the tote to a skiff, row the skiff to his vessel and load the bait on to the boat. Any while each fisherman easily obtains fuel, he must carry the necessary gallonage in cans aboard his truck in order to transport it from the fuel dealer to the boat.

7. Recommendations:

1. Improve dockage facilities, including a hoist, fuel services and utilities at Pine Point;

2. Continue town support for a U.S. Army Corps of Engineers' dredging study of a proposed 3-acre anchorage off Ferry Beach;

3. Interest the Corps once again in conducting a maintenance dredge of the Federal navigational channel near Pine Point.

SHELLFISH CONSERVATION ORDINANCE TOWN OF SCARBOROUGH

Adopted 12/4/85, amended 1/6/86

1. Authority. This Ordinance is enacted in accordance with 12 M.R.S.A., Section 6671.

2. Purpose. To establish a shellfish conservation program for the Town of Scarborough which will insure the protection and optimum utilization of shellfish resources within its limits. These goals will be achieved by means which may include:

a. Licensing
b. Limiting the number of shellfish harvesters
c. Restricting the time and area where digging is permitted
d. Limiting the minimum size of clams taken
e. Limiting the amount of clams taken daily by a harvester

3. Shellfish Conservation Committee. The Shellfish Conservation Program for the Town of Scarborough will be administered by the Shellfish Conservation Committee consisting of 7 members to be appointed by the Council for terms of 3 years.

The Committee's responsibilities include:

a. Establishing annually in conjunction with the Department of Marine Resources, the number of shellfish digging licenses to be issued.
b. Survey the clam flats to maintain current information on shellfish resources.
c. Submitting to the Board of Selectmen, proposals for the expenditures of funds for the purpose of shellfish conservation.
d. Keeping this ordinance under review and making recommendations for its amendments.
e. Securing and maintaining records of shellfish harvest from the town's managed shellfish areas and closed areas that are conditionally opened by the Department of Marine resources.
f. Recommending conservation closures and openings to the Board of Selectmen or Council in conjunction with the Area Biologists of the Department of Marine Resources.
g. Submitting an annual report to the Municipality and the Department of Marine resources covering the above topics and all other committee activities.

4. Definitions:

a. Resident - the term "resident" refers to a person who has been domociled in the municipality for at least three months next prior to the time his claim of residence is made.
b. Non-resident - the word "non-resident" means anyone not qualified as a resident under this ordinance.
c. Shellfish, Clams - When used in the context of this ordinance, the words "shellfish and clams" mean softshell clams **MYA ARENARIA.**
d. Municipality - refers to Town of Scarborough, Maine.

5. Licensing - Municipal Shellfish Digging is required. It is unlawful for any person to dig or take shellfish from the shores and flats of this municipality without having a current license issued by this municipality as provided by this ordinance.

A commercial digger must also have a valid **STATE OF MAINE COMMERCIAL SHELLFISH LICENSE** issued by the Department of Marine Resources.

A. Designation, Scope and Qualifications.

1. Resident Commercial Shellfish License. The license is available to residents of the Town of Scarborough and entitles the holder to dig and take any amount of shellfish from the shores and flats of this municipality and reciprocating municipalities.

2. Non-resident Non-reciprocating Commercial Shellfish License. The license is available to non residents of this municipality and entitles the holder to dig and take any amount of shellfish from the shores and flats of this municipality.

3. Residential Recreational Shellfish License. The license is available to residents and real estate taxpayers of this municipality, and entitles the holder to dig and take no more than one peck of shellfish in any one day for the use of himself and his facility.

4. Non-resident Non-reciprocating recreational Shellfish License. The license is available to any person not a resident of this municipality and entitles the holder to dig and take not more than one peck of shellfish in any one day for the use of himself and his family.

5. License must be signed: The licensee must sign the license to make it valid.

B. Contents of Application. Any person may apply to the Town Clerk for the license required by this ordinance on forms provided by the municipality.

1. Contents of the Application. The application must be in the form of an affadavit and must contain the applicant's name, current address, birth date, height, weight, signature and whatever other information the municipality may require.

2. Misrepresentation. Any person who gives false information on a license application will cause said licensee to become invalid and void.

C. Fees. The fees for the licenses are as stated below and must accompany in full the application for the respective license. The Town Clerk shall pay all fees received to the Town Treasurer. Fees received for shellfish licenses shall be used by the Town for shellfish management, conservation and enforcement.

RESIDENTIAL COMMERCIAL	$100
NON-RESIDENT NON-RECIPROCATING COMMERCIAL	150
RESIDENT - OVER 65	FREE
RESIDENT RECREATIONAL	15
NON-RESIDENT NON-RECIPROCATING RECREATIONAL	150
DEALER'S LICENSE	25

D. Limitation of diggers. Because the shellfish resources are limited and because a commercial or recreational digger can be expected to harvest a certain volume of clams per year, the number of diggers must be controlled. This number will vary from year to year depending upon estimates of the resource capabilities and management requirements consistent with food resource utilization. The following procedures will be followed to exercise control.

1. Prior to March 1, the Town Shellfish Conservation Committee with the approval of the Commissioner of Marine resources will establish the number of Commercial or non-commercial licenses to be permitted.

2. The Shellfish Conservation Committee will notify the Town Clerk, in writing, prior to March 1, of the number of licenses to be issued. No reservations will be accepted by telephone.

3. The Town Clerk shall issue commercial licenses to residents only until June 1, after which licenses shall be issued to residents and non-residents on a first-come, first-serve basis.

E. License expiration date. Each license issued under authority of this ordinance expires at midnight the 30th day of April next following the date of issue. (Except the first issue - these will expire on 4/30/87.)

F. Reciprocal Harvesting Privilege. Licensees from any other municipality cooperating with this municipality on a joint shellfish management program may harvest shellfish according to the terms of their management program may harvest shellfish according to the terms of their licenses.

G. Children 12 years or younger may accompany a recreational license holder. The recreational license holder and accompanying children are entitled to dig no more than the previously stated amount, "One peck of shellfish in any one day for the use of himself and his family".

H. Suspension. Any shellfish licensee having one conviction for a violation of this ordinance shall have his shellfish license automatically suspended for a period of 30 days. Any shellfish licensee having two convictions for a violation of this ordinance shall have his shellfish license automatically suspended for the balance of the year.

1. A licensee whose shellfish license has been suspended pursuant to this ordinance may reapply for a license only after the suspension period has expired.

2. The suspension shall be effective from the date of mailing of a Notice of Suspension by the Town Clerk to the Licensee.

3. Any licensee whose shellfish license has automatically been suspended pursuant to this section shall be entitled to a hearing before the Shellfish Conservation Committee upon filing of a written Request for Hearing with the Town Clerk within 30 days following the effective date of suspension. The licensee may appeal the decision of the Shellfish Committee before the Board of Selectmen/Town Council by filing a written request for Appeal with the Town Clerk within 7 days of the decision of the Shellfish Conservation Committee.

I. Only clam forks shall be used in the taking shellfish. No shovels or spading forks may be used.

6. Opening and Closing of Flats. The Municipal Officers, upon the approval of the Commissioner of Marine Resources, may open and close the areas for shellfish harvest. Upon recommendation of the Shellfish Conservation Committee and concurrence of the Department of Marine Resources area biologist that the status of the shellfish resource and other factors bearing on sound management indicated that an areas should be opened or closed, the Municipal Officers may call a public hearing on ten-days notice published in a newspaper having general circulation in the Town, stating the time, place, and subject matter of the hearing, and shall send a copy of the notice to the Department of Marine resources. The decision of the Municipal Officers made after the hearing shall be based on findings of fact.

7. Penalty. A person who violates this ordinance shall be punished as provided by 12 MRSA Section 6671.

SAMPLE EASEMENT GRANTING PUBLIC ACCESS TO PRIVATE LAND

NOTE: This example was provided by the Maine Coast Heritage Trust.

An easement can be held by the town, by a non-profit conservation organization or other government entity. The following clause from an agreement deals with the public access issue. Other terms or clauses would set the duration (usually perpetual) of the public access easement.

PUBLIC OUTDOOR RECREATION

The general public shall have a right of physical access over the Protected Property for day use for hiking, to gain access to _____for fishing and swimming, and for other forms of passive outdoor recreation, subject to all applicable laws and regulations concerning such activities, provided, however, that motor vehicles shall not be allowed on the Protected Property except in emergency or as necessary to exercise the reserved rights of Grantor herein. No overnight camping or open fires are allowed without the express permission of the Grantor. Neither the Grantor nor the town of_____, Holder herein, assume any obligation to maintain the Protected Property, its roadways or trails for public use. This grant of public access shall not be construed as an invitation or license, and the Grantor and Holder assume no liability to the general public for accidents, injuries, acts, or omissions beyond that defined by the standard of care owed by landowners to ordinary trespassers under Title 14 MRSA Section 159A, and as limited by the Maine Tort Claims Act. Notwithstanding the grant of public use herein contained, the Grantors reserve for themselves, their heirs and assigns, the right to control and prohibit, by posting or other means, any use by the public which is destructive (i) to the natural values to be conserved by this Conservation Easement, or (ii) to other members of the general public or to their non-destructive, quiet use of the Protected Property, or (iii) to the reasonable quiet use and enjoyment of private property by the owners of the Protected Property, by owners of property neighboring the Protected Property, including their families, guests and invitees.

EXCERPT FROM BOOTHBAY HARBOR'S ZONING ORDINANCE

MULTI-FAMILY DWELLINGS

In addition to other provisions of the ordinance, multi-family dwellings shall be subject to the following:

Density:

In sewered areas where they are permitted, the lot size requirement of 10,000 square feet may be reduced to 6 units per acre as a density bonus with the approval of the Planning Board. Planning Board approval shall be based upon a determination that the development meets all other requirements of the ordinance and that it will result in a benefit to the public, such as public waterfront access, a public boat ramp, or additional public parking.

EXCERPT FROM BRUNSWICK'S SUBDIVISION REGULATIONS

506.9 Public Open Space

1. **Reservation of Land.** The Planning Board shall require the reservation of land for parks, playgrounds, or conservation areas to benefit the residents of the proposed development. The reserved land must be of suitable dimension, topography, and general character for the proposed recreational use and must be reasonably accessible to residents of the development. It must be designated on the plan as "Reserved for Conservation or Recreation Purposes". The area to be reserved must be determined according to the following table:

Average Size	Percentage of Land to be Reserved for Recreation Purposes
Single Family Lots	
80,000 s.f. or greater	1.6%
40,000 s.f.	3.3%
20,000 s.f.	6.5%
15,000 s.f.	8.7%
10,000 s.f. or less	13.0%
Multiple Family Units	1,300 s.f. per unit

2) **Land improvement.** The applicant shall improve the reserved land according to the requirements of the Planning Board. In determining these requirements, the Board shall consider the Comprehensive Plan and the long-range plans of the Recreation Department and Conservation Commission.

3) **Fee in lieu of land.** Where a developed recreation area near a proposed subdivision already exists, an applicant may make a cash contribution to the Town in lieu of land reservation for the purpose of further improving the recreational area to benefit the proposed development. The contribution must equal the per acre value of an undeveloped housing site, as set by a disinterested, appraiser satisfactory to the Planning Board, multiplied by the required area for reservation according to the table in section 502(3)(j) (1) above. The funds must be used for improvement of the recreation or conservation area, as mutually agreed by the applicant and the Planning Board.

4) **Recreation Land Ownership.** As soon as the use of the recreation or conservation land has been established, the means of future ownership and control must be determined. The following alternatives are available, as agreed upon by the applicant and the Planning Board:

1) The land may be held and maintained in common by the future owners of the development, under the bylaws of a homeowners' association, as approved by the Planning Board.

2) It may be held and maintained in perpetuity by a conservation trust or other suitable private organization.

3) It may be deemed to the Town for future maintenance and improvement, if acceptable to the Town.

INITIATING A LOCAL DEVELOPMENT CORPORATION, STOCKTON SPRINGS, MAINE

Background

The Stockton Springs Development Corporation was formed for three principal reasons:

First, the Town's vital interests are at stake in two key areas of the community - Stockton Harbor and Sandy Point Beach. In Stockton Harbor a public boat landing facility is located on private land with only an informal and somewhat tenuous arrangement with its present owner - The Bangor and Aroostook Railroad - for its continued use. There is, moreover, considerable sentiment within the community for maintaining this long-standing point of access for fishermen and for enhancing the area by developing a marina and related facilities.

Second, the Stockton Springs Sandy Point Beach area has long been an important recreational resource for the town and region. It presently faces considerable development pressure. Central Maine Power Company owns key parcels of land in the area, including the Beach itself. Making sure this recreational facility remains available to townspeople is an important objective.

Third, a local Development Corporation was seen as the only vehicle reasonably able to coordinate all the many public and private interest involved in both areas. A local development corporation can be a flexible organizational entity that can be molded to fit specific local needs. Because a development corporation is formed for public purposes and will not itself accrue profit from its operation, it is tax exempt, and can be fueled by any combination of member dues, private or public grants, state and federal loans, and in-house revenues.

Formation of the Stockton Springs Development Corporation brings local government into partnership with the private sector in the pursuit of environmental protection, and economic and recreational development for the area. Assuring continued public access to two prime coastal areas in Stockton Springs were strong motivating factors for forming the Stockton Springs Development Corporation.

Prerequisites to Formation

In order for a local Development Corporation to succeed it must have a clearly defined mission and a committed, organized constituency. Recent surveys undertaken as part of the Stockton Springs' comprehensive planning revealed that as many as 76% of townspeople would like to see recreational facilities expanded and developed in town. Adding a marina was the type of facility that most of those who were surveyed said they would like to see developed first. 81% of the people according to the survey said they would like to see shoreland property acquired for public use and 72% were even willing to see taxes increased to accomplish such a goal.

One of the first steps in the initial efforts of the Development Corporation was to clearly articulate a statement of purpose, a mission for the organization. Whether the organization was to become essentially single-purpose oriented, or whether it was to pursue a somewhat broader charge were important topics of discussion, early on. In general, the group felt that if relevant social issues could be addressed, in the context of the project, that the Development Corporation should do so. Thus, in addition to the immediate objectives of preserving public access, and protecting environmental resources, two other objectives were to be pursued as part of the mission of the organization: the provisions of affordable housing and the creation of area jobs.

As a result of these discussions the following goals and objectives were arrived at:

> The specific objectives of the Stockton Springs Development Corporation is to plan, locate and execute developments in Stockton Springs in such a manner so as to minimize the impact on the natural environment of the Community and to maximize the returns for the economic and social wellbeing of the citizens of the Town.

The specific objectives of the Stockton Springs Development Corporation are to:

1. Assure that the Sandy Point Beach area remains open and available for public use by Townspeople.

2. Develop, or arrange for the development, of areas adjacent to the beach to be done in an aesthetically pleasing, environmentally sound manner, respecting the interests of adjacent property owners and the townspeople, while contributing, to the maximum extent possible, to the town's tax, employment and affordable housing base.

3. Forge solid working partnership with commercial interests, land owners and the town to protect public water access and to stimulate the development of a marina and related activities in the Stockton Harbor area.

4. Facilitate and administer the development of both areas in accordance with a detailed, community- backed, long term plan acceptable to all interests involved.

5. Accomplish its goals by: **a)** negotiating long term land purchase agreements with CMP and B&A Railroad, **b)** utilizing current and projected value of the properties as leverage for operating and development funds, and **c)** targeting income from its activities to support debt service for the project and, to the extent possible, accomplish other important community objectives in housing, recreation and employment.

In short, the Corporation was established to protect important and valuable coastal areas for future generations and to arrange for the wise use of certain, other associated areas through carefully planned recreation, housing and harbor developments.

Organization

The chronology of events in the development of the Stockton Springs Development Corporation occurred roughly as follows:

1. Organizing a constituency

- As a result of the preparation of a comprehensive plan key assets of the Community were identified and the threat to their continued existence articulated.
- A willingness was expressed on the part of local officials to explore the formation of a development Corporation to deal with the threat to these Community assets.
- Preparation of a concept paper explaining the basic workings of a development Corporation was made available.
- Examples of what local development corporations elsewhere have accomplished was also circulated.
- Commitment of local funds was made to procure staff to explore the notion further. (In this case a State Planning Office Grant helped match local funds to more fully explore one of the project areas selected. In addition EMCD/PVCOG contributed an additional $1,500.00 specifically to help establish the development Corporation).
- A Committee was appointed by local officials to explore the formation of the local development Corporation, most of whom in this case, later became the organization's Board of Directors.
- Several public hearings were held, along with associated newspaper articles, to obtain public feedback on the Concept.

2. Incorporating the Organization.

- Based on public feedback and the Committee's deliberations a more detailed organizational mission statement was prepared.
- Articles of incorporation and by-laws were prepared.
- A Board of Directors was appointed by local officials.
- The first organizational meeting was convened, including the appointment of officers.
- Legal assistance was obtained in the preparation on an application for non-profit organization status.

3. **Managing early operations.**
   - Property appraisals were obtained for both parcels from local area appraisers.
   - Purchase offers were formulated for the properties and strategies for negotiations were prepared.
   - Review of general site features and conditions based on readily available information was prepared.
   - Beginning investigations of grant and loan fund sources available were made for property acquisition and site development purposes.
4. **Marking**
   - Fund raising strategies were developed including the appointment of a fund-raising committee.
   - News releases and interviews arranged with area newspapers on Corporation activities.
   - Meeting with area legislators and town officials were arranged to explain the purpose of the development corporation.
   - Further Town financial support was obtained for staff related efforts to continue the work of the organization (in May of 1988, the Town of Stockton Springs voted at a special town meeting to appropriate $10,000.00 for the Development Corporation's activities).
   - Phone conversations and letters to state and regional officials were sent to solicit project support.
5. **Beginning project coordination and implementation**
   - Meetings were held and follow-up correspondence with CMP real estate personnel was sent to explore further site purchase options.
   - Financial analysis for project components for the Sandy Point Beach Project was compiled.
   - Meeting and follow-up correspondence with David Hughes, President of the B&A Railroad were arranged to explore possibilities for joint efforts in Stockton Harbor.
   - A grant proposal was submitted to EDA in conjunction with the Waldo County Job Opportunity Zone designation, for purposes of scoping out the affordable housing and job creation options in conjunction with the Development Corporation activities (a grant in the amount of $30,000 was obtained).
   - Interviews were set up with Landscape Architects to obtain additional expertise for more detailed site planning related work.
   - A proposal for financial and organizational assistance was submitted to Coastal Enterprises Inc. (assistance agreed to be provided).

In summary, formation of the development Corporation and the development of an associated action plan has required three key ingredients:

1. A focus on valued assets of the community. A beach and a boat landing and the quality of the environments both were situated in, provided a strong basis for rallying town officials and citizen interest in measures to protect those assets and qualities.

2. A clear vision of what these two key areas of the Community could be. A marina in Stockton Harbor with associated development and a Community recreation area and wildlife preserve in Sandy Point were well articulated pictures of what was possible, which helped to galvanize town-wide support for the Corporation thereby creating a momentum for action.

3. The availability of persistent individuals who were willing to spearhead efforts to realize the Community's vision for what these two areas could become: In this case, an active, knowledgeable and experienced Board of Directors with a strong commitment to 'making the project work'.

EXCERPT FROM YARMOUTH'S ZONING ORDINANCE

"RPD" – RESOURCE PROTECTION DISTRICT (RIVER CORRIDOR)*

It is the intent of this District to protect fragile shoreline and natural areas, including flood plains and wetlands, in which development would lower water quality, disturb essential natural plant and animal relationships, or general scenic and natural values.

The Resource Protection District shall include tidal marsh wetlands in addition to all areas within the 100 year floodplain of the Royal River, the Cousins River and Pratt's Brook as indicated on the Flood Insurance Rate Maps prepared by the Federal Emergency Management Agency dated November 15, 1984 or all lands within 100 horizontal feet of the normal high water mark of the Royal River, the Cousins River and Pratt's Brook, whichever of the two is greater. The Resource Protection District as defined above, does not extend into the Water Oriented Commercial (WOC) zone. Determination of the location of the RP District shall be based on the Current Zoning Map maintained in the Town Office.

Permitted Uses	Special Exceptions
1. Agriculture	1. Piers, docks, wharves, ways, 1. ramps and floats.
2. Filling or other earthmoving activity of less than 10 cubic yards. (Building Inspector permit required).	2. The following shall be located at least 250 feet from the normal high water mark. a. Swimming pools. b. Tennis Courts.
3. Filling or other earthmoving activity of more than 10 cubic yards (Planning Board permit required).	3. Municipal uses.
4. Farm animals for personal use.	

*Revised 11-12-85 & 3-13-86 & 2-12-87

EXCERPT FROM CAPE ELIZABETH'S ZONING ORDINANCE

Sec. 19-2-8. Resource Protection District.

a) The resource Protection District shall consist of the following lands:

1. Any land situated within 250 feet of the normal high water mark of Great Pond, of Little Pond or of Causeway Brook (extending from Great Pond to or toward Little Pond), provided, however, that the boundary of this District shall not extend farther from Great Pond than 100 feet in perpendicular distance toward Great Pond from the nearer sidelines of Fowler Road and of Fenway Road. [Amended eff. 1/13/82]

2. Any land situated within 100 feet of the thread of Alewife Brook, extending from Great Pond to the Atlantic Ocean;

3. Any land within the limits of the Spurwink Marsh, the limits of which shall be defined as the line apparent due to the contiguous different character of the soil and/or vegetation where the level ground extending away from the Spurwink River, and from its tributaries flowing southwesterly from the vicinity of the Cape Elizabeth High School and flowing southeasterly across Sawyer Road along the Scarborough Town line, characterized by brackish waters and marsh grasses, begins an upward incline with terrestrial growth.

4. All other land so designated on the official zoning map, and any apparent wetlands contiguous thereto, and contiguous to the lands designated in 1-3 above, as "wetlands" are defined in Circular No. 39 "Wetlands of the United States", prepared by the U.S. Fish and Wildlife Service, or in the "Wetlands Inventory for Use in Shoreland Zoning", prepared by the Maine Department of Inland Fisheries and Game, Feb. 13, 1973, unless the applicant for a permit for use or development of any land within the foregoing descriptions shall demonstrate by way of an on-site survey that the land does not constitute either "wetlands" as defined above, or "Sebago Mucky Peat" type soil, or coastal dunes. [Added, eff. 1/13/82]

EXCERPT FROM BRUNSWICK'S ZONING ORDINANCE RELATING TO UNUSABLE LAND

201 Definitions. The listed terms as used in this Ordinance are defined as follows.

201.65 Unusable Land. An environmentally sensitive area which if disturbed or destroyed, can adversely affect unique ecological balances in the environment. Although specific areas require a case-by-case analysis, the following factors may be included in the determination of unusable land:

a. Areas of slope in excess of 25%.

b. Areas of very poorly drained soils, experiencing year round water within 15" of the surface as identified by the most current version of the "Soil Survey: Cumberland County, Maine", Soil Conservation service;

c. Any area within 250 feet of the normal high water mark of a salt water body, lake or pond in excess of 10 acres in size;

d. Any area identified as a wetland area as identified by the State of Maine in accordance with Chapter 38 M.R.S.A. Sections 405-510;

e. Any area within the 100-year flood boundary as delineated on the Flood Insurance Rate Map of the National Flood Insurance Program;

f. Unique wildlife areas as identified in the review process.

401.3 Cluster Housing Provisions for Suburban Residential and Mixed Use Zone 2. The cluster housing provisions for the Suburban Residential and Mixed Use districts are as follows:

a. Permitted uses. The following uses are permitted:

Dwelling, Single-Family
Dwelling, Two-Family
Dwelling, Multiple-Family
Dwelling, Manufactured housing-in the Mixed Use District, only.

b. Minimum lot size: with public sewer - 6,000 s.f.; without public water and public sewer - not permitted.

c. Dimensions. Dimensions for dwellings single-family, two-family dwellings and manufactured housing may be reduced to the following:

1) Minimum lot width:	65'
2) Yard depths:	
a) Front	15'
b) Rear	15'
c) Side	15'
3) Maximum height:	35' or 2 1/2 stories

d. Maximum percent of total available land set aside for development: 60%

e. Maximum percent of total available land required to be set aside as open space: 40%

f. Residential Density Factor: The residential density factor in the Suburban Residential and Mixed Use Zone remains the same.

g. Maximum Gross Density Factor for land set aside for development only: 35%

h. Unusable Land Factor: Where land within the proposed site is deemed to be unusable, the following provisions apply:

1) If the base site area consists of not more than 15% unusable land, there is no effect on overall density.

2) If the total land area consists of more than 15% unusable land, 50% of the unusable land must be removed from the total available land in arriving at the total number of dwelling units permitted in the development.

EXCERPT FROM ZONING ORDINANCE, HILTON HEAD, SOUTH CAROLINA

SECTION 16-7-485. WC WATERFRONT CORRIDOR OVERLAY ZONING DISTRICT: AUTHORITY AND PURPOSE

A Waterfront Corridor Overlay Zoning District is hereby established, consistent with recommendations contained within the 1985 Comprehensive Plan for the Town of Hilton Head Island and pursuant to authority granted by Titles 5 and 6 of the S. C. Code of Laws (1976), as amended, including, but not limited to, such authority granted pursuant to S. C. Code Sections 6-7-710 and 6-7-720. The purpose of establishing this overlay zoning district is to protect the aesthetic and visual character of lands on Hilton Head Island adjacent to the waterfront and marshfront, as defined herein. All development proposed within this overlay zoning district shall be subject to the procedures and standards specified in the following sections, in addition to those pertaining to the particular base zoning district in which the development occurs. In particular, the purpose of the Waterfront Corridor overlay Zoning District is to encourage and better articulate positive visual experiences along the Island's waterfront and marshfront and to provide for the continued preservation and conservation of these waterfronts. This will be accomplished through evaluation of proposed developments within this zoning district by a Corridor Review Committee (CRC), as established under Municipal Code Section 16-1-60, which shall review the location, character and appearance of new development in a positive manner. It is the purpose of such review to determine, in a cooperative fashion with the applicant, whether the proposed plan meets the guidelines and other standards of this zoning district.

SECTION 16-7-486. Delineation of Zoning District

(a) The Waterfront Corridor Overlay Zoning District includes all lands within 500 feet landward of the Coastal Council Critical Line within the Town of Hilton Head Island and within the Conservation District. The approximate boundary of this zoning district shall be shown on the Official Zoning Map, and shall be shown as a surveyed line by the applicant on each property subject to CRC review.

(b) Affected Development. All development plan applications for development located in the Waterfront Corridor Overlay Zoning District shall be reviewed by the Corridor Review Committee, except for subdivisions, single-family detached houses and structures over 2,000 feet from navigable water or over 2,000 feet from land on the other side of the marsh. All changes subject to approval by the Committee shall receive such approval before proceeding. If a portion of the Corridor will not be visible from the waterfront once the project is completed, the Committee may waive architectural review of that portion. The Committee may also review preliminary development plans or design development drawings at the request of the Planning Commission or the applicant, so that major redesign of final plans by the applicant shall not be necessary.

SECTION 16-7-487 Development Activity Permitted

(a) There shall be no alteration of the existing condition of the lands, uses or structures within the Waterfront Corridor Overlay Zoning District from the date of enactment of this section henceforth except as provided for by this section or by other sections of this chapter.

(b) Protection of Trees. All sections of the Tree Protection regulations of Article IX shall apply to all applicable development within the Waterfront Corridor Overlay Zoning District.

SECTION 16-7-488 Minimum Visual Buffer Standards

(a) Retention of and/or creation of a Minimum Visual Buffer along the waterfront.

1) Each approved application for development shall provide a minimum visual buffer between the Coastal Council Critical Line and all proposed structures and parking areas to soften the appearance of structures and parking from the waterfront. The buffer shall be no less than the depth of the required setbacks from wetlands or from the beach as specified in Article IX, sections 16-7-915 (d) and 16-7-925(a).

2) If the Minimum Visual Buffer area already has mature trees, its preservation is required. If predevelopment buffer vegetation is insufficient, additional trees and shrubs with a variety of species appropriate for the Island climate shall be required, consistent with Tree Protection regulations in Article IX. While complete screening is not required, sufficient plant material shall be installed to accomplish the softening effect required in (a) above. Minimum height and caliper of new trees shall be consistent with provisions of the Tree Protection regulations in Article IX and new shrubs shall be two and one-half (2 1/2) feet.

(b) Permitted Activity in Minimum Visual Buffer before and after development.

1) No existing vegetation of any type, size or origin shall be altered or removed unless it satisfies the require- ments of the Tree Protection sections of Article IX.

2) Within the Minimum Visual Buffer there shall be no development, clearing, grading or construction activity with the following exceptions:

a) Provision for water, sanitary sewer, storm drainage, electrical, telephone, natural gas, cable, etc. service lines provided they run approximately perpendicular to the waterfront. Permission for easement and right-of-way disturbance and clearings for such services shall be more favorably considered when such activity is consolidated with vehicular access routes.

b) Pedestrian and bicycle paths designed to provide continuous connection along the waterfront corridor, boardwalks, decks and gazebos provided that they can be constructed without reducing the screening and visual softening capacity of the vegetation buffer.

c) Lighting fixtures if, for safety reasons, they cannot be placed outside the buffer and only when electric utility lines serving these fixtures and necessary easements can be established and constructed without reducing the screening and visual softening capacity of the vegetation buffer and without disturbing nesting sea turtles.

d) Signage in accordance with the sign regulations in Article X.

e) Beach-related structures consistent with the Architectural Review Guidelines and overall intent of the Waterfront Corridor Section of this Article.

f) The addition of planting, earth forms or other visual buffers which, in the opinion of the Committee, would better achieve the purpose set out in Section 16-7-485 than would otherwise be the case.

SECTION 16-7-489 Architectural Review

a) **Guidelines.** The compatible relationship of architecture along marshfronts and waterfronts in the Waterfront Corridor Overlay Zoning District is of critical public concern for any structures or site improvements. The intent of the design review is not to stifle innovative architecture but to assure respect for and reduce incompatible and adverse impacts on the visual experience from the beach and waterfront. To accomplish this the Corridor Review Committee, or other board designated by the Planning Commission, shall exercise the following guidelines in reviewing proposed structures, site improvements, signs, streetscape and waterfront improvements:

1) Proposed development shall avoid excessive or unsightly grading, indiscriminate earth moving or clearing of property, and removal of trees and vegetation which could cause disruption of natural water courses or disfigure natural land forms.

2) Proposed development shall be located and configured in a visually harmonious manner with the terrain and vegeta- tion of the parcel and surrounding parcels. Structures shall impede, as little as reasonably practical, scenic views from the beach and waterfront or from existing structures and the natural environment. Structures shall not dominate any general development or natural landscape in an incompatible manner.

3) The architectural design of structures and their materials and colors shall be visually harmonious with the overall appearance, history and cultural heritage in the neighborhood, with natural land forms and existing vegetation, and with other development plans already approved by the Town in the neighborhood. The height, mass and exterior finishes should be compatible with the neighborhood character. Long, monotonous facade designs for any buildings, including, but not limited to, those characterized by the unrelieved repetition of shape or form or by the unbroken extension of line, are not acceptable. Pitched roofs and roofs having light reflective properties less than those of unfinished sheet metal are strongly encouraged.

4) The landscape plans for the proposed development shall provide visually harmonious compatible settings for structures on the same lot and on adjoining or nearby lots and shall blend with the surrounding natural landscape, including resistance to exposure to saltwater spray and other waterfront phenomena. If the surrounding landscape has been cleared, new planting shall meet the applicable height and variety requirements.

5) To the extent that they relate to aesthetic considerations, the design and construction techniques of the proposed development should respond to energy consumption and environmental quality considerations such as heat loss, heat gain, air emissions and runoff water quality. Construction materials shall be resistant to saltwater spray and waterfront phenomena.

6) The structures and improvements shall be appropriate in scale, style and appearance for a waterfront setting and the location shall respect the historical beach erosion trend projected over the next thirty (30) years.

7) Signs, Waterfront-Related Improvements and External Changes:

a) Signs, waterfront-related improvements and external changes shall include a visually compatible appear- ance and avoid garish and inappropriate material, lighting, colors, shapes and sizes. The amount of information on signs shall be no more than is neces- sary to provide reasonable information to persons using the beach.

b) Signs: Since the exact occupants and types of signs may not be known at the time the applicant completes the rest of his architectural review with the Corridor review Committee, the applicant may reapply later for review of his proposed sign(s) by the Corridor Review Committee. Also, applicants for new or replacement signs in this Overlay Zoning District shall apply to the Committee for review. Only applicable items of the Minimum Application Requirements will need to be submitted for sign review alone, with no additional fee required. The Corridor Review Committee is hereby authorized to approve or disapprove the appearance features of such proposed signs and the Administrator's approval shall be given only after the Committee's approval. In order to get a permit, signs must also be in compliance with the Town's Sign Regulation. Signs shall not be permitted if directed to a salt water body, except that signs shall be permitted only for commercial structures such as hotels, the use of which and the signage for which shall relate directly to identification only, and for

facilities serving watercraft or for signage giving directions or warnings for watercraft.

c) Minor External Changes: External changes to waterfront improvements and existing structures and sites subject to review by the Committee shall be consistent with all Guidelines and Standards in this Section. External changes of a minor nature include external color and structural materials changes, parking lot additions and alterations, relocation of accessory structures, and similar minor changes as determined by the Administrator. Some minor external changes may also require development plan approval (see Article II, Part B).

d) Following Project Completion. All appearance features required by the Town or shown on approved plans shall be maintained in good condition by all subsequent owners of the property. Changes beyond the owner's control shall be restored by the owner, unless otherwise provided. Changes proposed by the owner shall require approval by the Committee.

EXCERPT FROM CAPE ELIZABETH'S ZONING ORDINANCE

Section 19-3-11. Transferable Development Rights [Added, eff. 1/13/82.]

a) **Application.** The residential density applicable to land within the Residence C District may be applied to land within the Residence A District, but only for the land included in a specific development proposed within the Residence A District which meets the following requirements for eligibility:

1. the development is otherwise consistent with the Comprehensive Plan,
2. the development is to be located on a tract containing not less than ten (10) acres of land,
3. all sanitary sewage from the development, can and will be discharged to existing public sanitary sewers, and
4. in connection with such development, easements have been approved by the Planning Board as satisfying the requirements set forth in subsection (b) of this Sec. 19-3-11 and have received preliminary approval by the Town Council;

provided, however, that land within the Residence A District shown on the Transfer Zone Map as appropriate for conservation or recreation easements, as provided for below, shall not be eligible for such increased density.

b) **Transfer Zone Map.** The Transfer Zone Map shall be established and may be altered or revised from time to time by the Planning Board, after consultation with the Conservation Commission, subject to approval by the Town Council in accordance with the charter procedures for adoption and amendment of ordinances. The Map shall indicate tracts of land within the Town which are appropriate for conservation in substantially their existing condition, by reason of one or more of the following attributes:

1. their use for agricultural purposes,
2. their importance for water quality protection,
3. their important or unique natural or historic features,
4. their sensitive or fragile natural areas,
5. their importance in furthering "greenbelt" or other objectives of the Conservation Commission, and
6. their scenic value either for their own natural beauty or for the scenic views which they permit from public land or ways.

The Map shall indicate the acreage of each tract of land so included and whether it is included for conservation or recreation easement suitability. Any such tract exceeding 20 acres in size shall, whenever possible, be divided into two or more separate, contiguous tracts for purposes of the application of subsection (c), below, provided that each such resulting tract shall satisfy separately the criteria for inclusion on the Map.

c) **Easement Reservation.** The Residence C District residential density shall be effective for an eligible development in the Residence A District from and after the transfer to and acceptance by the Town Council of one or more conservation easements and/or easements for park and recreation purposes in a tract or tracts of land shown upon the Transfer Zone Map as suitable for such easements, which easements satisfy the following requirements:

1) Each such easement shall be perpetual, subject to the terms of subsection (d), below, except that a conservation easement may be for a term of 25 years;
2) The aggregate of the net residential acreage of land subject to such perpetual easements, plus 50% of the net residential acreage of land subject to 25-year easements, shall be not less than the net residential acreage of the eligible development;
3) More than one easement, upon different tracts of land, for conservation or recreation purposes and having different durations, shall be acceptable provided that the requirement of paragraph 2, above, is met.

d) Easement Provisions. The form and conditions of each easement shall be determined by the Planning Board, and approved by the Town Council. Every easement shall provide:

1) that it may be transferred only to an entity for which the administration and enforcement of the easement is consistent with its primary purpose, and

2) that the easement may be terminated, or terminated early, regardless of the ownership thereof, only upon approval by the Planning Board after consultation with the Conservation Commission, or by any town board or commission succeeding to its functions, and by the affirmative vote of not less than 80% of the full membership of the Town Council, or of its successor as the legislative authority of the Town.

EXCERPT FROM DENVER, COLORADO'S VIEW PROTECTION ORDINANCE

ARTICLE IV

RESTRICTIONS ON STRUCTURES WITHIN AREAS NECESSARY TO PRESERVE MOUNTAIN VIEWS

Section 10-56. Purpose.

Upon consideration of a recommendation that an ordinance be enacted for the purpose of preserving and protecting the health, safety and general welfare of the people of the city and their property therein situate, the council finds:

1) That the protection and perpetuation of certain panoramic mountain views from various parks and public places within the city is required in the interests of the prosperity, civic pride and general welfare of the people;

2) That it is desirable to designate, preserve and perpetuate certain existing panoramic mountain views for the enjoyment and environmental enrichment of the citizens of the community and visitors hereto;

3) That the preservation of such views will strengthen and preserve the municipality's unique environmental heritage and attributes as a city of the plains at the foot of the Rocky Mountains;

4) That the preservation of such views will foster civic pride in the beauty of the city;

5) That the preservation of such views will stabilize and enhance the aesthetic and economic vitality and values of the surrounding areas within which such views are preserved;

6) That the preservation of such views will protect and enhance the city's attraction to tourists and visitors;

7) That the preservation of such views will promote good urban design;

8) That regular specified areas constituting panoramic views should be established by protecting such panoramic views from encroachment and physical obstruction. (Code 1950, Section 645.1)

Section 10-57. Prohibitions.

No land shall be used or occupied and no structure shall be designed, erected, altered, used or occupied except in conformity with all regulations established in this article and upon performance of all conditions herein set forth. (Code 1950, Section 645.3-1)

Section 10-58. Cranmer Park.

a) Adoption of map. The attached map shall be and hereby is approved and adopted and the portion thereon indicated by shading or crosshatching shall be and hereby is determined to be and is designated as an area necessary for the preservation of a certain panoramic view. The restrictive provisions o this article shall be in full force and effect as to the portion of the attached map indicated by shading or crosshatching.

b) Limitations on construction. No part of a structure within the area on the attached map indicated by shading or cross-hatching shall exceed an elevation of five thousand four hundred thirty-four (5,434) feet above mean sea level plus one foot for each one hundred (100) feet that the part of a structure is horizontally distant from the reference point. Wherever a structure lies partially outside and partially inside of the area on the attached map indicated by shading or crosshatching, the provisions of this section shall apply only to that part of the structure that lies within the area indicated on the map by shading or cross-hatching

c) Reference point. Reference point is a point having an elevation of five thousand four hundred thirty-four (5,434) feet above mean sea level and established at the mountain view indicator in Cranmer Park which point is identified on the attached map and which point is indicated in the aforesaid Cranmer Park by a cross set in the top step of the aforesaid mountain view indicator.
(Code 1950, Section 645.4-1)

HOW TO CONDUCT INVENTORY OF SCENIC AREAS

PROPOSED METHOD FOR INVENTORYING AND EVALUATING VISUAL RESOURCES IN CAPE ELIZABETH, MAINE

Developed for the Town of Cape Elizabeth, Maine
By Visual Resource Management Consultant Holly Dominie
June 1988 (Funded, in part, by the Maine Coastal Program)

NOTE: This document was developed and used by the consultant, along with intensive discussions concerning the rationale for the method and measures appropriate to protect visual resources, to train the town's Visual Resource Working Group and the local resident who conducted the field work. It was developed specifically for the Town of Cape Elizabeth and cannot be transferred to another town without revising the view rating criteria.

INTRODUCTION

Three aspects of the town's visual resources will be mapped and assessed: **special features, views from public places, and visual character.** The method proposed for conducting field work and other analysis is as follows:

SPECIAL FEATURES MAP

1. Types of special features to be included:

a. Cultural landmarks - any visually prominent place with strong symbolic meaning, such as buildings or districts with historic or architectural value, monuments, lighthouses, community facilities, locations of important events, or subjects of art work. (Code "C")

b. Activity centers - any area with strong visual interest such as harbors, farms, and recreation areas, including trails. (Code: "A")

c. Natural features - undeveloped or naturally appearing places such as beaches, islands, estuaries and other water bodies, prominent hills, or highly configurated shorelines. (Shorelines with coves, points, islands, bays and peninsulas, are more configurated than those with straight uncomplicated shores.) (Code "N")

d. Road alignments - winding roads, especially those that change elevation or that are canopied by tall trees; road alignments comprised of long straight sections which abruptly change direction; roads with distances greater than 1/4 mile of undeveloped wooded or pastoral character. (Code "R")

e. Gateways - the point along a road where one perceives to have arrived or departed from the heavily settled portions of town or from one town to the next. (Code: "G")

f. Scenic areas documented as being of state or regional significance. Cape has one area of regional significance identified in: "A Proposed Method for Coastal Scenic Landscape Assessment" written by Dominie and Droege in 1987 for the Maine State Planning Office. (Code: "S")

g. Miscellaneous features with symbolic meaning or known to contribute to visual interest such as long stretches of stone walls or unique vegetation (tree forms, orchards, elm trees, etc.) or geologic features (road cuts, cliffs).

2. Inventory Procedure:

The extent of these features should be plotted on the base map and coded by category and site number. Some areas will be quite large such as the entire "viewshed" of the Spurwink River estuary or Great Pond. Use the first letter of each category for the code (i.e. "C" for cultural landmarks). Start the numbers over for each category (i.e. C 1-7 and N 1-5). Complete the field form for each feature included (not included in this Handbook). Describe the feature and why it is special. List any distinguishing characteristics such as conditions or characteristics that detract. Also list public places it can be viewed from or show this on the map.

If the viewer is sufficiently informed, he or she should complete the columns relating to significance, visibility, and sensitivity during the site visit. We should discuss these columns and agree upon the standards for high, medium, and low before the work is done. The inventory should be done first in the office, based upon the existing Comprehensive Plan Map of Areas of Local Significance.

SPECIAL VIEWS MAP

1. Types of views to be included

The view must be seen from a public place such as the water, road, park, trail or other location where people gather. Only show views from the water if there are sites where people boat because of special scenic qualities.

Noteworthy views include those where the dominant landscape feature is:

a. any water body - ocean, pond, stream, estuary or wetland. (Code: "W")
b. farmland, either existing or abandoned. (Code: "F")
c. any landmark, activity center
d. the landscape where one can see at least 1/2 mile away. (Code "L")

2. Inventory Procedure

The team should plot potential views first in the office, relying upon the old Areas of Local Significance Map, the new Special Features Map, USGS topo maps, and personal knowledge. Each view should be marked with a symbol indicating the viewing point(s); and direction, duration and distance of view. The views should then be field checked and adjustments made as needed on the map and inventory form (not included in Handbook). Views should be coded and numbered. A view can include more than one type of special feature and should be coded accordingly.

3. View Rating Procedure

Once accurate information is collected, view quality can be rated according to a ranking system. The rating results for all the views should then be plotted to identify clusters of views with relatively equal significance. They should be grouped into three categories: outstanding, distinctive, and scenic.

VISUAL CHARACTER MAP

1. Character types

Once the landscape types and characteristics are mapped and rated, they can be classified. A system of landscape classification allows a community to better understand how the various parts of town are visually distinct from one another and how each may need different treatment in land use planning and management to protect its special attributes. Generally, visual character types are based upon combinations of vegetation, land use, land form, and water body characteristics.

In Cape Elizabeth an example of a visually distinct part of town is the Spurwink River Estuary. The watershed is visually open with a broad flat river course and wetland system, abutted by old farms and fields. New

development is highly visible, mostly along roadways. Only the highest areas in the watershed are wooded.

2. Inventory procedure

The team should get together and delineate the town into character types using a topographic map and aerial photos (if available). You need to decide how fine you wish to make distinctions. For instance, the coastal shoreland could be one character type or it could be broken down into subsections such as:

a) developed beach system
b) undeveloped beach system
c) rocky developed shoreline
d) rocky undeveloped shoreline
e) rocky, cliff-faced, developed shoreline
f) etc.

The differentiating characteristic for each area should be recorded.

DATA ANALYSIS

Once we complete the inventory and view rating work, we should meet to analyze the results and their implications. We can overlay the special views and special features maps with the character classification map to see which areas are particularly diverse, sensitive, significant or whatever. We'll discuss whether development trends or particular land use types pose problems for each area, views or special features. This analysis will serve as the foundation for developing a protection strategy.

EXCERPTS FROM FREEPORT'S ZONING ORDINANCE

Section 104. Definitions

Shared Parking: Parking spaces open to the general public and not restricted to customers or employees of specific non-residential activities.

Section 412. Village Commercial "VC-I"

D. Other Standards:

1. The requirements for off-street parking in the Village Commercial I Zone shall be seventy five percent (75%) of those stated in Section 514 for retail trade, restaurant, restaurant-carry out, commercial sales and service and convenience store with gas pumps provided that the Shared Parking concept is utilized. Restricted parking would require one hundred (100%) of Section 514 requirements. Parking in the VC-I District is further subject to the provisions of Section 514.A.10 of this Ordinance.

2. A Buffer Zone as required by Article V, Section 506 shall be at least 20 feet in depth, and shall be required whenever new construction or renovation requiring a building permit are applied for. Where existing structures are within the 20-foot area, no further encroachment shall be permitted.

3. Parking lots located in the V-I District, which were developed and existing on May 6, 1986, may be used to satisfy the parking requirements for the conversion of a use in the VC-I District, made nonconforming by the enactment of this Ordinance, to a use permitted in the VC-I District.

EXCERPT FROM PROPOSED ZONING ORDINANCE FOR HALLOWELL, MAINE

10.13 CRITERIA FOR CERTIFICATION OF PLANNING BOARD APPROVAL FOR NEW CONSTRUCTION IN HISTORIC DISTRICT.

The following standards and requirements shall be used in review of applications for Certificates of Approval. Design considerations and structural factors related to maintaining historic structures in good condition shall be the Planning Board's primary area of focus.

A. General Recommendations

1. Every reasonable effort shall be made to provide a compatible use for a property which requires minimal alteration of the building, structure, or site and its environment, or to use a property for its originally intended purpose.

2. The distinguishing original qualities or character of a building, structure, or site and its environment shall not be destroyed. The removal or alteration of any historic material or distinctive architectural features should be avoided when possible.

3. All buildings, structures, and sites shall be recognized as products of their own time. Alterations that have no historical basis and that seek to create an earlier appearance shall be discouraged.

4. Changes that may have taken place in the course of time are evidence of the history and development of a building, structure, or site and its environment. These changes may have acquired significance in their own right, and this significance shall be recognized and respected.

5. Distinctive stylistic features or examples of skilled craftsmanship which characterize a building, structure, or site shall be treated with sensitivity.

6. Deteriorated architectural features shall be repaired rather than replaced, wherever possible. In the event replacement is necessary, the new material should match the material being replaced in composition, design, color, texture, and other visual qualities. Repair or replacement of missing architectural features should be based on accurate duplications of features, substantiated by historic, physical, or pictorial evidence, rather than on conjectural designs or the availability of different architectural elements from other buildings or structures.

7. The surface cleaning of structures shall be undertaken with the gentlest means possible. Sandblasting and other cleaning methods that will damage the historic building materials shall not be undertaken.

8. Every reasonable effort shall be made to protect and preserve archaeological resources affected by, or adjacent to, any project.

9. Contemporary design for alterations and additions to existing properties shall not be discouraged when such alterations and additions do not destroy significant historical, architectural, or cultural material, and such design is compatible with the size, scale, color, material, and character of the property, neighborhood, or environment.

10. Wherever possible, new additions or alterations to structures shall be done in such a manner that, if such additions or alterations were to be removed in the future, the essential form and integrity of the structure would be unimpaired.

B. Visual Compatibility

New and existing buildings and structures, and appurtenances thereof, that are moved, reconstructed, materially altered, or repaired shall be visually compatible in terms of:

1) Height. The height of the proposed buildings and structures shall be visually compatible with adjacent buildings.

2) Proportion of front facade. The relationship of the width to the height of the front elevation shall be visually compatible with buildings, public ways, and places to which it is visually related.

3) Proportion of openings. The relationship of the width to height of windows shall be visually compatible with buildings, public ways, and places to which the building is visually related.

4) Rhythm of solids to voids in front facades. The relationship of solids to voids in the front facade of a building shall be visually compatible with buildings, public ways, and places to which it is visually related.

5) Rhythm of spacing and buildings on streets. The relationship of a building or structure to the open space between it and adjoining buildings or structures shall be visually compatible with the buildings, public ways, and places to which it is visually related.

6) Rhythm of entrance porch and other projections. The relationship of entrances and other projections to sidewalks shall be visually comparable with the buildings, public ways, and places to which it is visually related.

7) Relationship of materials, texture, and color. The relationship of the materials, texture and color of the facade shall be visually compatible with the predominant materials used in the buildings and structures to which it is visually related.

8) Roof shapes. The roof shape of a building shall be visually compatible with the buildings to which it is visually related.

9) Walls of continuity. Building facades and appurtenances, such as walls, fences, and landscape masses, shall, when it is a characteristic of the area, form cohesive walls of enclosure along a street, to ensure visual compatibility with the buildings, public ways, and places to which such elements are visually related.

10) Scale of a building. The size and mass of buildings and structures in relation to open spaces, windows, door openings, porches, and balconies shall be visually compatible with the buildings, public ways, and places to which they are visually related.

11. Directional expression of front elevation. A building shall be visually compatible with the buildings, public ways, and places to which it is visually related in its directional character, whether this be vertical character, horizontal character, or non-directional character.

10.14 CRITERIA FOR CERTIFICATION OF PLANNING BOARD APPROVAL FOR DEMOLITION OR REMOVAL OF HISTORIC LANDMARKS OR BUILDINGS IN HISTORIC DISTRICT.

A certification of Planning Board approval shall not be issued for the whole or partial demolition or removal of a Historic Landmark or a structure which is located in a Historic District unless such is found by the Board to conform to one or more of the following criteria:

A. The structure is of limited architectural or historic value as part of the visual character of the street on which it is located.

B. The structure presents an immediate hazard and a possibility of harm to the neighborhood.

INTRODUCTION

The purpose of this section is to guide you to reliable sources of information and assistance available in Maine. The focus is on marine and coastal organizations and sources of funds.

This section consists of three parts:

A. A description of "Coastlinks", a resource guide for the Maine coast published by the Maine Coastal Program;

B. A listing of Public and Private Agencies involved in coastal issues and programs; and

C. A list of Grant Programs available to municipalities.

A. COASTLINKS - A Resource Guide to Maine's Marine-related Organizations

This 65 page guide provides valuable information about Maine's non-profit organizations, associations and State agencies. It provides background information on each organization, describes their services and research activities, and includes names, addresses and phone numbers of people to contact.

The table of contents for *Coastlinks* is reproduced here. Copies can be obtained, at no cost, from:

Maine Coastal Program
State Planning Office
State House Station 38
184 State Street Augusta, Maine 04333

Phone: 207/289-3261

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B. PUBLIC AND PRIVATE AGENCIES

The following information is drawn from the Maine Association of Conservation Commission's (MACC) handbook titled: Natural Resources Handbook, a Planning Tool for Maine Communities. (July, 1987)

The Handbook is available from MACC, 74 Main Street, Yarmouth, Maine 04096, phone 846-3329. It is a useful publication for communities wishing to inventory their natural resources. Public and private agencies offering assistance to coastal communities are listed below:

Regional Agencies

Regional agencies include regional planning commissions or councils of government, soil and water conservation districts, the soil conservation service, and the Cooperative Extension Service of the University of Maine.

1. Regional Councils. These regional agencies are designed to serve in an advisory capacity to local planning boards, and in some cases, conservation commissions. Mapping facilities, project review, shoreland zoning procedures, planning assistance, comprehensive plan and natural resource inventory assistance, flood-plain information, open space and recreation planning, and subdivision regulations are only a few of the many services available to municipalities.

Regional Councils serving coastal communities include:

Greater Portland Council of Governments Tel: 774-9891
233 Oxford Street, Portland, Maine 04101

Hancock County Regional PLanning Commission Tel: 667-7131
69 Main Street, Ellsworth, Maine 04605

Eastern Mid Coast Regional Planning Commission Tel: 594-2299
9 Water Street, Rockland, Maine 04841

Lincoln County Planning and Resource Tel: 882-6312
Office, Lincoln County Courthouse, Wiscasset, Maine 04578

Eastern Maine Development Corporation, Tel: 942-6389
Penobscot Valley RPC, 10 Franklin Street, Bangor, Maine 04401

Southern Maine Regional Planning Commission Tel: 324-2952
Box Q, 2 School St., Sanford, Maine 04073

Southern Kennebec Valley Planning & Tel: 622-7146
Development Council, 125 State Street, Augusta, Maine 04330

Washington County Regional Planning Commission Tel: 255-8686
63 Main Street, Machias, Maine 04654

2. Cooperative Extension Service. The Cooperative Extension Service is a part of the University of Maine at Orono. Its function is to help Maine people improve their economic and social conditions through informal education programs.

This is done by providing technical field assistance and publishing a wide variety of educational materials.

Offices of the Cooperative Extension Service serve every county in Maine, with specialized staff based primarily at the University of Maine at Orono.

Cumberland - 96 Falmouth Street, Tel:780-4205
Portland, Maine 04103

Hancock - RFD #5, Boggy Brook Road, Tel: 667-8212
Ellsworth, Maine 04605

Kennebec - 125 State Street Tel: 622-7546
Augusta, Maine 04330

Knox-Lincoln - 375 Main Street Tel: 594-2104
Rockland, Maine 04841

Penobscot - Court House Annex Tel: 942-7396
Bangor, Maine 04401

Waldo - RFD #1, Box 83 Tel: 338-1651
Belfast, Maine 04915

Washington - 5 Cooper Street Tel: 255-3345
Machias Maine 04654

York - Court House Annex Tel: 324-2814
Alfred, Maine 04002

State Agencies

At the State level, many agencies are concerned with different aspects of coastal management.

1. *Department of Conservation.* State House Station 22, Augusta, Maine 04333 (Parks and Recreation is Station 19.)

Bureau of Parks and Recreation	Tel: 289-3821
Bureau of Forestry	Tel: 289-2791
Bureau of Public Lands	Tel: 289-3061
Bureau of Geology	Tel: 289-2801
Land Use Regulation Commission	Tel: 289-2631

2. *Department of Economic and Community Development*
State House Station 59, Augusta, Maine 04333
(Office of Comprehensive Planning is Station 130)

Office of Business Development	Tel: 289-2656
Office of Community Development	Tel: 289-3154
Office of Comprehensive Planning	Tel: 289-3154
Office of Tourism	Tel: 289-5710

3. *Department of Environmental Protection.*
State House Station 17, Augusta, Maine 04333 Tel: 1-800-452-1942

Bureau of Air Quality Control	Tel: 289-2437
Bureau of Land Quality Control (Shoreland Zoning)	Tel: 289-2111
Bureau of Solid Waste	Tel:582-8740
Bureau of Water Quality Control	Tel: 289-3355
Bureau of Oil and Hazardous Materials Control	Tel: 289-2651

4. *Department of Human Services* Tel: 289-3826
State House Station 11, Augusta, Maine 04333

Division of Health Engineering can provide information on the State Plumbing Code, waste water, and and water supply programs

5. *Department of Inland Fisheries and Wildlife,* Tel: 289-2871
State House Station 41, Augusta, Maine 04333

6. *Department of Marine Resources,* Tel: 289-2291
State House Station 21, Augusta, Maine 04333

7. *State Planning Office* Tel: 289-3261
State House Station 38, Augusta, Maine 04333

8. *Bureau of Taxation*, Department of Finance and Administration, Tel: 289-2011
State House Station 78, Augusta, Maine 04333

The Bureau provides bulletins explaining many property tax laws, including the Farm and Open Space Tax Law and Tree Growth Tax Law.

9. *Maine Historic Preservation Commission,* Tel: 289-2139
State House Station 65, Augusta, Maine 04333

Among other responsibilities, the Commission assists local groups with conducting surveys of community historic resources.

10. *Land and Water Resources Institute,* Tel: 581-1490
University of Maine at Orono, Maine 04473

A wide range of environmental information is available from this office.

Federal Agencies

1. *Federal Emergency Management Agency,* Tel: 1-617-223-2617
Office of Federal Insurance and Hazard Mitigation, Boston, Mass.

or Washington, D.C. Tel: 1-800-424-8872

This Agency administers the federal flood insurance program. It assists local officials with the interpretation of local flood hazard ordinances, with the amendment of those ordinances, and with interpreting and changing boundaries on local flood hazard maps.

2. *U.S. Army Corps of Engineers,* Tel: 1-800-343-4789
   Regulatory Branch, New England Division,
   424 Trapelo Road, Waltham, Mass 02154

   The Corps administers the Clean Water Act of 1977, Section 404 (33 USC section 1344) which requires a permit for most activities involving the discharge of dredge or fill material into certain

   tidal and non-tidal waters and adjacent wetlands.
   Augusta Office, Federal Building, 40 Western Avenue,
   Augusta, Maine 04330 Tel: 622-8246

Private Organizations

The "Coastlinks" publication contains an exhaustive listing of private organizations that offer assistance. Two organizations that are particularly helpful are:

1. *Maine Coast Heritage Trust,* Box 120,
   U.S. Route 1, Falmouth, Maine 04105; Tel: 781-3157
   Summit Road, P.O. Box 426,
   Northeast Harbor,Maine 04662 Tel: 276-5156

   Maine Coast Heritage Trust deals with conservation easements as a tool for land preservation. In addition, it assists in the creation of local land trusts.

2. *Maine Municipal Association,* Community Tel: 623-8428 Drive,
   Augusta, Maine 04330 Tel: 1-800-452-8786

   MMA offers a wide variety of services, including legal assistance, budgetary advice, ordinance review, and a monthly magazine called "The Maine Townsman".

C. GRANT PROGRAMS

Several grant programs are available to financially assist municipalities interested in planning for or undertaking community development or preservation projects. Here is a brief description and a contact person for each of the programs.

MAINE'S COASTAL PROGRAM

Coastal Planning Grants are available for municipal comprehensive waterfront planning to develop management plans that will guide future development activities in waterfront/ harbor areas. In recent years, other eligible activities have included preliminary engineering and site designs for low cost waterfront construction projects, such as park or waterfront facilities that improve public access; and regional code enforcement officer programs.

Waterfront Action Grants are available for the acquisition and development of shorefront land to improve public access; for low cost construction projects on waterfront land; and for the rehabilitation of municipally-owned piers.

Contact: Francine Rudoff, Office of Comprehensive Planning, Department of Economic and Community Development, 289-3154

COMMUNITY DEVELOPMENT BLOCK GRANT PROGRAM (CDBG)

Community Revitalization Grants are available for downtown revitalization, housing rehabilitation, public facilities improvements and other local programs that benefit low and moderate income people.

Contact: Leonard Dow, Office of Community Development, Department of Economic and Community Development, 289-3154

OTHER PROGRAMS

Land and Water Conservation Fund (LAWCON) grant program is available to support the acquisition and/or the development of outdoor recreation facilities. Projects funded through this program include waterfront parks, ball fields, tennis courts, and others.

Contact: John Picher, Office of Comprehensive Planning, Department of Economic and Community Development, 289-3154

Wallop-Breaux is a federal program administered by the Department of Inland Fisheries and Wildlife and funded by a motor-boat fuel tax. Ten percent of the monies - approximately $120,000-$140,000 per year - is dedicated to public boat access projects.

These projects must be public, but a fee can be charged to cover costs of operation. these monies are allocated on a 75 percent federal matching basis.

Contact: Peter Bourque, Department of Inland Fisheries and Wildlife at 289-5261.

Boating Facilities Funds are derived from the State gas tax and are administered by the Bureau of Parks and Recreation in the Department of Conservation. Grants are awarded for the development, acquisition, and improvement of State, regional, or local boat access sites. This year, 1988, the fund has approximately $727,000.

Contact: Richard Skinner, Bureau of Parks and Recreation, Department of Conservation, 289-3821

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