



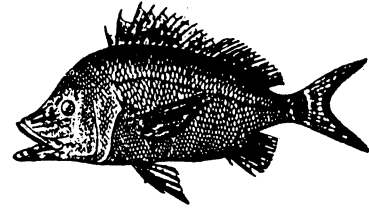
COASTAL BRIEF

One in a series of technical bulletins published by the
Massachusetts Office of Coastal Zone Management

No. 2, October, 1987

MCZM HARBOR PLANNING PROGRAM

by Barbara Ingram



Along the Massachusetts coastline, many uses compete for limited and sometimes fragile resources. Development pressures for both water-dependent and non-water-dependent uses have exceeded the management capacity of many communities in the Commonwealth. Through the Harbor Planning Program, Massachusetts Coastal Zone Management (MCZM) assists communities in handling the problems of one of the areas of greatest pressure: the harbor. MCZM's Harbor Planning Program encourages communities to seek a balance between preservation of natural resources and traditional, water-dependent activities and development of retail shops, restaurants, housing and other non-water-dependent activities. Within the comprehensive harbor planning process, a community can seek to:

- o Organize uses of the water area to resolve conflicts between moorings, swimming, shellfishing, or boating,
- o Achieve higher standards of water quality to protect recreational boating or shellfishing in the harbor,
- o Impose controls on building design and configuration to encourage visual and physical access to the waterfront, or
- o Determine the extent and location of water-dependent uses on and

along the water to avoid overcrowding or "squeezing out" of maritime uses.

MCZM has developed a Harbor Planning Program that offers various types of assistance to coastal communities that are developing comprehensive harbor plans. One major component of this program is staff technical assistance through which communities can obtain legal, planning, engineering and scientific advice on harbor issues. Another component of the program is regional conferences where local officials and MCZM staff exchange information about harbor management problems specific to a region.

The MCZM staff has also developed a document to assist communities in developing comprehensive harbor plans. The Preliminary Discussion of Harbor Planning Guidelines recommends a process for developing Harbor Plans. In addition to technical assistance and Guidelines, the MCZM Boston office serves as a clearinghouse of information on harbor planning achievements in the New England area. Communities are invited to use the resources of our main office to learn about harbor planning efforts in other communities and states.

The Coastal Facilities Improvement Program, (CFIP), a state grants program, offers funds to qualifying towns that wish to construct or improve facilities on the waterfront or complete comprehensive harbor management plans.

The Comprehensive Harbor Planning Process

Comprehensive plans examine the current and projected need for all activities in a defined harbor area. By planning the future of the waterfront and the harbor together, communities may examine the cumulative impacts of development on all local resources.

MCZM's Harbor Planning Guidelines describe the planning process and the considerations important to completing a comprehensive plan. The Guidelines can assist communities in addressing critical issues facing Massachusetts' harbor areas. The following section describes the major elements of an effective comprehensive harbor plan.

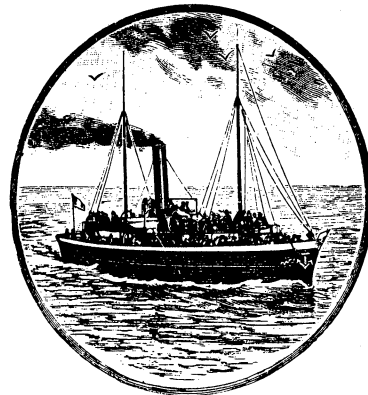
Comprehensive Goals and Objectives

Cities and towns must decide what aspects of their harbor area they want to develop and preserve and what problems they want to address. Community consensus on these topics can lead to formulation of harbor goals and objectives. These will guide the planning effort and future decision-making. MCZM recommends that goals and objectives comprehensively address all of the issues of the harbor area.

Public Participation

Many communities are learning that a planning approach that actively involves all of the interests significantly impacted by or concerned about the harbor is more likely to succeed than a process that excludes significant interest groups. MCZM recommends inviting officials, agencies and interested citizens to contribute to the plan from the beginning of the planning process. For example, cities and towns may wish to begin the planning process by establishing goals and objectives in a community workshop. Public participation in the planning process is described in detail in the Guidelines and a Technical Appendix on Open Planning. These documents suggest groups that should be invited to participate in planning and strategies for getting a divergent group to work together effectively.

Broad public participation in planning has several advantages. First, a plan that adequately addresses the needs of affected local interests should be a better plan for the whole community. With broad-based input, the plan will more likely have the support of the community. This support may make the plan more acceptable to local officials and thus have a greater likelihood of being implemented.



Boundary Definition

An important initial step in harbor planning is defining the harbor planning boundaries. Effective analysis and management of the harbor requires specific delineation of the planning area. MCZM suggests several minimum criteria to ensure that any interest affected by activities in the harbor is included in the planning area.

Specifically, the Guidelines suggest that harbor boundaries include all adjoining areas relevant to the use and management of the harbor. Activities should be included that have the potential to promote or impair water-dependent activity, public use or enjoyment of waterways and shorelands, or water quality objectives. Management of the harbor will include coordination of activities with other communities in shared harbor situations.

Once the planning area has been defined, the lines of jurisdictional authority (both regulatory and non-regulatory) should be identified. Some of the areas of interest will be: marina districts, harbormaster lines, mooring areas, shellfish beds, public beaches, recreational areas, open space and historic districts.

Inventory

Another important element in developing a comprehensive harbor plan is completing an inventory of the natural and man-made features of the harbor area. An inventory provides a clear picture of the harbor at present and assists in identifying problems, assessing resources, and establishing achievable goals for the future.

MCZM recommends computerizing the inventory of each parcel of the harbor area. Identification and description of each parcel should include mention of ownership, permits, natural features, special designations, and industrial, residential, commercial or agricultural uses.

In addition, harbor plans should include an inventory of the harbor's environmental resources. Some of the resources that should be included are: bays and estuaries, salt marshes, coastal dunes, barrier beaches, land containing shellfish, floodplains, rivers, streams and creeks.

Compilation of this material will enable communities to consider the needs of the harbor area and define specific strategies to achieve the goals and objectives agreed upon.

The Action Plan

The Action Plan should describe the immediate and long-term activities to be pursued by the community or harbor planning group. As these activities are completed, the harbor area will approach the goals and objectives outlined. At least five types of actions may be considered by communities as avenues for reaching harbor goals and objectives.

Waterfront Development Controls

Many communities will want to examine existing development controls and assess whether these can achieve waterfront goals and objectives. In many communities, conventional zoning may be inadequate to meet the large number of objectives and the additional constraints that accompany development along the waterfront.

For instance, communities may want to consider changing local zoning or developing new controls to protect traditional maritime activities. Zoning changes, such as density or height limitations, may be useful for directing the pattern of development. Design review is another tool for achieving specific goals for waterfront development.

Financial Planning

Without adequate financial resources to implement the plan, a harbor plan may sit idle. Thus financial planning is a key component. Budgets delineating expected rev-



COASTAL ZONE MANAGEMENT LOCATIONS

Harbor planning information may be obtained at the following MCZM locations.

BOSTON OFFICE -- 727-9530

MCZM
Saltonstall Building
100 Cambridge Street
Boston, MA 02202
CONTACT: Barbara Ingrum

CAPE COD -- 362-2511

MCZM Cape Cod Regional Office
First District Courthouse
Barnstable, MA 02630
CONTACT: Jack Clarke

NORTH SHORE -- 283-0598

MCZM North Shore Regional Office
159 Main Street
Gloucester, MA 01930
CONTACT: Fara Courtney

SOUTHEAST -- 994-9728

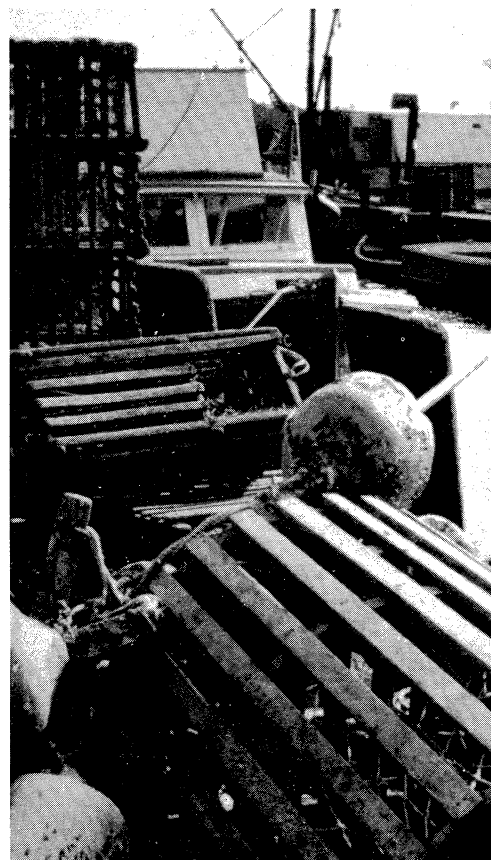
MCZM Southeast Regional Office
100 Old Westport Road
North Dartmouth, MA 02747
CONTACT: Susan Moor

SOUTH SHORE -- 659-4909

MCZM South Shore Regional Office
Town Hall
345 Main Street
Norwell, MA 02061
CONTACT: Lori Thayer

MARTHA'S VINEYARD -- 693-3453

Martha's Vineyard Commission
P. O. Box 1447
Olde Stone Building
New York Avenue
Oak Bluffs, MA 02557
CONTACT: Melissa Waterman



COASTAL BRIEF

Commonwealth of Massachusetts
Michael S. Dukakis, Governor

Executive Office of Environmental Affairs
James S. Hoyte, Secretary

Massachusetts Coastal Zone Management
Richard F. Delaney, Director
100 Cambridge Street
Boston, Massachusetts 02202
or call (617) 727-9530

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enue and expenditures will be necessary for planning capital improvements along the waterfront. Maintenance of public facilities, such as wharves, piers, docks, floats, bulkheads, buoys, mooring areas, ramps, and septic and fuel facilities, is critical to the proper functioning of harbor areas. A strategy for enlarging the revenue stream to improve facilities may be necessary.

Water Management Planning

Most coastal communities in Massachusetts are already concerned with overcrowding problems and the management of the water itself. An effective water management plan allocates the space and resources of the harbor to meet the needs of those who use the water. The primary users might include: commercial fishermen, industrial shippers, shellfishermen, aquaculturists, recreational boaters, windsurfers and swimmers. The management plan may include a needs assessment for additional anchorage areas, passive and active recreational use, current and future natural shellfish beds, and future aquaculture development.

Dredging Master Planning

A comprehensive assessment of the dredging needs of a harbor is essential to assure safe passage of vessels. The process for analyzing dredging is threefold: 1) complete an inventory, 2) develop a needs assessment, and 3) determine disposal alternatives.

Dredging master planning begins with an in-depth review of historical records to determine the areas that have been dredged, dredge frequency, and disposal methods and locations. Once an inventory has been completed, the community must assess the need for future dredging by estimating the amount and location of material that is projected to be dredged within a given period of time. Finally, the community must identify appropriate disposal sites for all dredged materials identified in the first two steps. MCZM's Dredging Handbook should be helpful in this evaluation.

Water Quality Management

Degradation of water quality is a growing concern in Massachusetts coastal communities. Larger areas of shellfish beds are being closed to harvest due to bacterial contamination. Cities and towns face problems of storm water run-off carrying bacteria, metals, and hydrocarbons into their coastal waters. Marina operations and communities may want to install pump-out facilities, but may not be able to dispose of waste once it is pumped out of a vessel. Harbor managers must also cope with the spills of fueling operations.

In many communities, improving water quality will be integral to successfully planning a harbor. To accomplish this, current water quality conditions should be identified. The community should then set specific objectives to be achieved over time and design actions that, once implemented, will reach the objectives. For example, communities can limit the number of vessels berthed in the harbor area, regulate the density of waterfront development, or provide enforcement officers to monitor the sources of water pollution.

Implementation

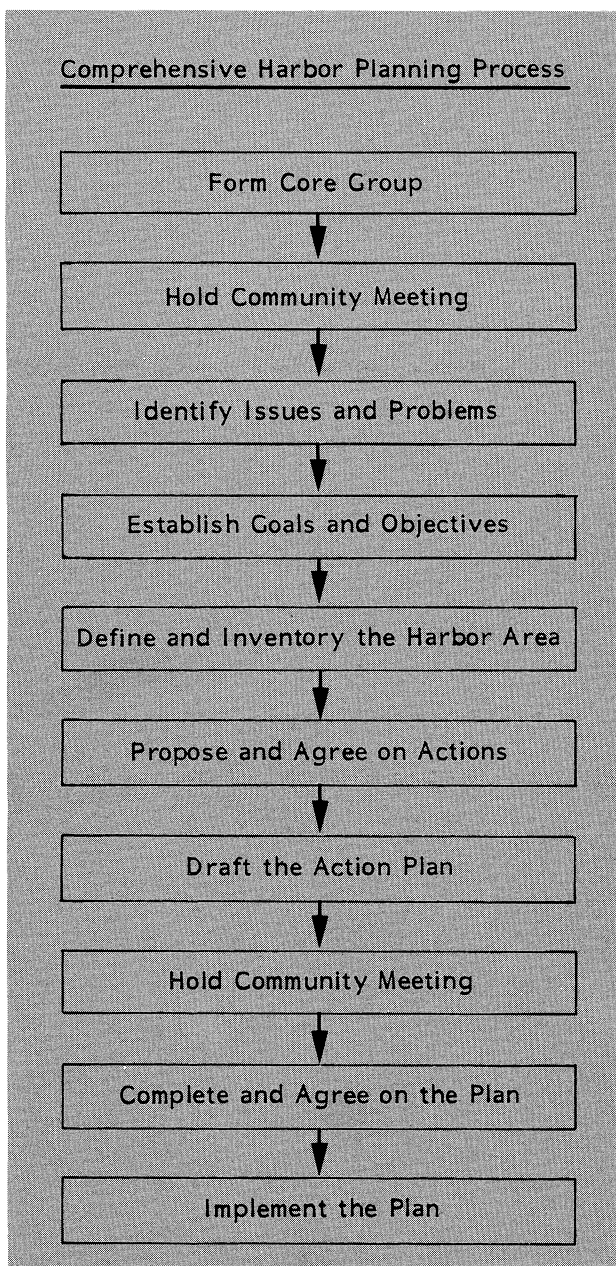
It is a known fact that many well-intentioned, comprehensive plans merely sit on shelves in planning offices. MCZM believes that avoiding this circumstance requires that communities begin implementation of harbor plans early in the planning process. Implementation may be defined in two steps: 1) the development of public support for a harbor plan as a preliminary step to, 2) putting the plan into action. Implementation begins with the first community meeting on harbor goals and objectives where local support for the harbor plan is fostered. If broad-based input is continued, support for the plan should grow, leading to quick adoption of the actions recommended in the plan. MCZM recommends that one central group assume responsibility for seeing that public support is attained and recommended actions are taken.

Some communities will want to establish a harbor management authority or commission to implement the plan. Other cities and towns may utilize an existing municipal group. Whatever a community's approach, a strategy for plan implementation may include: recommending appropriate by-laws, assisting in the development of sub-plans such as mooring and anchorage plans, coordinating among public agencies and private organizations, coordinating with other communities for upkeep of the harbor, and reviewing proposed waterfront developments.

Staff Technical Assistance

Planners, attorneys, geologists, engineers, biologists, and regulatory specialists are available to help in the design and implementation of harbor plans. The office provides technical assistance in the following areas:

- o Legal assistance on environmental laws governing activity along the coast, such as the Wetlands Protection Act, Wetlands Restriction Act, Federal Water Pollution Control Act, and the Ocean Sanctuaries Act;
- o Management assistance on issues such as mooring plans, dredging, waterfront infrastructure needs and repairs, designated port areas, marina/boatyard maintenance, and ferry system operation;
- o Planning guidance on natural resource protection, Chapter 91 licensing, Coastal Facilities Improvement Program grants, community planning and citizen participation, the state permitting and licensing process, and local zoning tools for preserving the waterfront, public access and open space;
- o Services as an information clearinghouse on local innovations in harbor planning and management as practiced in Massachusetts and other states.



MCZM maintains five regional offices in addition to the central office in Boston. These offices bring the resources of the Boston office closer to coastal communities. They also allow for more direct local input into the state planning process. Planning boards, conservation commissions, harbor planning committees, and citizen groups are encouraged to use the regional offices as a first source of information for questions on the topics listed above.

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Comm. from Richard F. Delaney, Director, Mass.
Coastal Zone Management Office, transmitting
a copy of the October, 1987 edition of Coastal
Brief Re; its Harbor Planning Program.

In City Council,

November 23, 1987

Placed on file

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