

# GOVERNANCE OF OCEAN RESOURCE MANAGEMENT



# GOVERNANCE

For centuries, Massachusetts' men and women have turned to the sea for their livelihoods as fishermen, sailors, traders, and ship builders. These activities continue, but now a growing number of people use our offshore waters for boating, swimming, whale-watching, and other recreational activities. Commercially, the ocean floor is increasingly being used for such things as aquaculture, electric power cables, fiber optic cables, and gas lines. Recent proposals include offshore energy generation facilities, as well. Use of the state's public ocean resources - and everything below the low tide mark is considered within the public domain - have historically been determined on a "first come, first served" basis, but that dictum no longer satisfies multiple competing uses and access to the ocean resources of the Massachusetts coast.

With each new use, a public area of the ocean that had once been thought of as limitless is gradually experiencing the pressure of development, competing uses, and in some cases, over-use. Currently, we lack the formal governance processes to determine how best to tackle this problem. Should we be setting aside parts of the ocean for specific types of activities or projects? Is first-come, first-serve the right way to manage a public trust resource? How should we balance the clean energy value of ocean-based wind farms against the aesthetic effects on the nearby coastline? How should we balance the tensions between laying pipelines and transmission cables and fishing interests? How should we balance the various values associated with fishing and the need for sustainable populations of multiple fish species?



Governance structures for ocean resources, particularly those that cross jurisdictional boundaries, have historically been focused on single resources or activities, such as navigation, whales, commercial

fishing, and ocean disposal. Comprehensive approaches to ocean management are difficult to develop, based on the large number of resources involved, their often migratory and multi-dimensional characteristics, and the tensions created by the vast economic potential of these resources. But given the realities of a limited resource base in the face of demands for competing uses and resource protection needs, we believe it is imperative that we develop new ocean governance structures to implement fair and sustainable ocean management approaches.

The Technical Report reviews key statutes most likely to apply to large coastal projects and other uses of the oceans, and further addresses the increasing number of development proposals for a variety of uses of our ocean resources. In this section, we summarize our recommendations for **governance** of our state's ocean resources, as a framework for developing and administering various management tools (described in the following section).

## We recommend:

1. the passage of a Comprehensive Ocean Resources Management Act;
2. ocean management coordination among federal, state, and regional agencies;
3. adoption and implementation of a climate change action plan; and
4. revisions to the Ocean Sanctuaries Act.

# GOVERNANCE RECOMMENDATIONS

## Governance Recommendation #1: Comprehensive Ocean Resources Management Act

### Recommendation

The Ocean Management Task Force recommends that the Secretary of Environmental Affairs introduce legislation for a new, comprehensive Ocean Resource Management Act. The centerpiece of this act would be the creation of new Ocean Resource Management Plans that set forth management objectives and strategies for various discrete ocean planning areas and activities within the state waters of the Commonwealth.

The Act that we envision would retain and strengthen existing environmental protections associated with the ocean as a public trust resource while streamlining the array of existing statutes governing the use and protection of the Commonwealth's oceans. State laws and regulations that would likely be affected under the Act to improve coordination and strengthen resource protection include the Chapter 91 program at the Department of Environmental Protection (DEP), the program to implement the Ocean Sanctuaries Act at the Department of Conservation and Recreation (DCR), and the state's Coastal Zone Management (CZM) program. In addition, under the new legislation that we are recommending, the Division of Marine Fisheries (DMF) would be involved (along with other agencies) in the development of comprehensive ocean management plans and would retain jurisdiction of day-to-day fisheries management activities.



If an Ocean Resource Management Act were adopted, it would supercede several of the policy-related recommendations that appear later in this report that are designed to improve the existing mechanisms for managing the state's ocean resources in the absence of a new law.

The Ocean Resource Management Act would have the following key components:

- ▶ Preamble - articulating the compelling need for comprehensive ocean resource management;
- ▶ Ocean Resource Management Principles - presenting the principles to guide subsequent regulations and ocean resource management plans;
- ▶ An explanation of the state-wide interests that should be addressed in Ocean Resource Management Plans including, but not limited to, protecting fisheries; preserving public access; enhancing biodiversity and ecosystem health; addressing climate change and sea-level rise; fostering the growth of marine industries, trade and economic opportunity; and supporting needed infrastructure for the Commonwealth's economy;
- ▶ A statement of legal authority (which would likely modify the Ocean Sanctuaries Act and perhaps other authorities as needed to reduce inter-statutory conflicts, redundancies and overlap, while also preserving necessary protections that reside in those existing statutes), in order to:
  - ▶▶ Develop Ocean Resource Management Plan(s), with primary responsibility at the state level assisted by strong municipal and citizen participation;
  - ▶▶ Streamline governance of the public trust ocean resources by providing compulsory guidance and coordination to relevant state agency actions upon approval of an Ocean Resource Management Plan for a certain area;
  - ▶▶ Establish basic standards for allowable uses, impact control, and resource protection - including which different uses and impacts allowed and/or controlled in particular areas of the state's oceans that are governed by an Ocean Resource Management Plan;
  - ▶▶ Establish authority and in some cases requirements for data collection and dissemination;

- ▶▶ Establish authority for the collection of fees tied to permission to use the state's ocean resources for infrastructure and other development projects that are subject to licensing by the state;
- ▶▶ Establish a dedicated fund for Ocean Resource Management in which certain fees (Chapter 91 program), fines, settlements, and private revenues could be deposited to carry out the regulatory responsibilities and research activities authorized under the Act;
- ▶▶ Assign the authority to develop, adopt, and enforce Ocean Resource Management Plans to some entity within state government (see below); and
- ▶▶ Develop an appeal mechanism, including the use of citizen suits, to ensure accountability under the Act.



The Task Force recommends developing an internal organizational/decision-making structure within the Executive Office of Environmental Affairs (EOEA) to be responsible for implementing the Ocean Resource Management Act and for developing Ocean Resource Management Plans. Under the new Act that we envision, the Secretary of Environmental Affairs would be charged with the ultimate authority for approving Ocean Resource Management Plans with an inter-secretariat concurrence mechanism. The Secretary would be assisted by an advisory committee to help advise on the development and implementation of Ocean Resource Management Plans. Licensing decisions by state permitting and resource-management agencies would need to be consistent with approved plans.

The Ocean Resource Management Plans authorized by the new Act would be developed through a public stakeholder process and adopted by the state, with common elements that will be articulated through agency guidelines. These common elements might include efforts to:

- ▶ Define a planning area (e.g., the geographic scope of a particular ocean resource management plan, and the activities or systems covered by the plan);
- ▶ Define the ocean resource management vision, goals and objectives;
- ▶ Characterize the current resources and uses of the planning area: an inventory and analysis of resources and uses (historic, existing, potential, future); an inventory of the tools available for public management of these resources and uses;
- ▶ Identify natural, social, cultural, and economic opportunities / constraints, with conflict areas, with particular consideration for environmental justice, smart conservation, cumulative impacts, sustainability, and adverse economic impacts;
- ▶ Identify any areas of the state's oceans in a particular planning area that have resources of significant statewide interest (such as special fisheries habitat protection, sensitive or unique flora and fauna and habitats, venues for public access, viewsheds with high historical or cultural significance, certain unique and valuable physical resources, such as prime wind resources, designated port areas, important shipping channels), and provide for means to protect those resources or the particular uses of them;
- ▶ Develop alternative management scenarios based on Ocean Resource Management Principles, vision, state and regional goals and objectives, and analysis of features, from which a final management strategy would be chosen;
- ▶ Adopt the preferred ocean resource management approach for a particular planning area;
- ▶ Articulate the mechanisms through which the plan will be implemented (e.g., connections to subsequent regulatory or other agency action(s) that must be consistent with the plan, appeals of agency actions, state budgetary process and elements, coordination with various federal actions, etc.);
- ▶ Develop management guidance for applicable regulations;
- ▶ Establish a process and schedule for the subsequent updating of the plan(s); and
- ▶ Clarify authority for permitting, licensing, and construction of development projects.

The ocean management planning process will be staffed by appropriate EOE and agency personnel. Ocean Resource Management Plans adopted under the Act should be periodically reviewed and renewed (such as on a five-year cycle), with public input, and with requirements that certain agency regulatory and budgetary actions be consistent with the ocean resource management plans. In developing the Act, the Secretary and the legislature should also further examine opportunities to consolidate or strengthen the administration of certain regulatory programs to improve coordination and transparency; these programs include Waterways (MGL Ch. 91), the Ocean Sanctuaries Act (MGL Ch. 132A, sec. 12A), and the Coastal Zone Management Act (MGL Ch. 21A).



## Justification

The Task Force believes that due to the high value and unique nature of ocean resources and uses, as well as the public trust character of these resources, the Commonwealth needs a comprehensive Ocean Resource Management Act to plan and regulate our ocean resources. The ocean waters, water-sheet, and lands under the waters of the Commonwealth are currently managed through an ad hoc collection of single-sector oriented laws, regulations and policies. Recent proposals to construct energy and telecommunications infrastructure and other projects in our ocean waters have revealed gaps, overlaps, and inconsistencies in authority, as well as gaps in the ability of the state to plan for - rather than simply react to - certain types of developments in the state's oceans.

Comprehensive legislation will give state agencies clear direction and stronger authority to establish a solid foundation for the protection and management of ocean resources. By requiring the development of Ocean Resource Management Plans, the Act contemplates a proactive approach to managing ocean resources, as opposed to the current approach of reacting to proposed projects on a "first-come, first-served" basis. And rather than having adverse public reaction and user conflicts over proposed projects, ocean planning can provide guidance to users well in advance by defining areas for fisheries use and protection, renewable energy development where prime wind and wave resources may exist, important shipping channels, or special viewsheds of documented scenic and cultural significance. Planning will also give clear direction to permitting agencies to streamline proposed uses that are consistent with approved Ocean Resource Management Plans. Through a proactive planning process, the Commonwealth can engage the public, municipal officials, industry representatives, and other stakeholders in articulating a shared vision for the appropriate use and protection of our ocean resources.

## Implementation Plan

We recommend that the Secretary convene an interagency working group to draft legislative language for a new Ocean Resource Management Act, and to begin to work with interested groups and the legislature to shape a legislative package for the Act. Because we do not mean for this process to chill appropriate development in the state or stall the timing, adoption, and implementation of a new Act, we do not recommend that any moratoriums be imposed during the pendency of this process. We do, however, recommend that the state move expeditiously to draft, enact, and implement a new Act and prepare the subsequent plans so that they can play the important roles in the future that we envision for the protection and appropriate use of the state's ocean resources.

**Legislation Required:** A Comprehensive Ocean Resources Management Act (CORMA) should be developed by the Secretary and submitted to the Legislature for consideration.

**Next Step:** The Secretary should convene a working group to develop legislative, administrative, and regulatory changes needed to implement this recommendation.

**Timing:** A CORMA bill should be drafted immediately.

**Funding Required:** To implement the provisions of this Act, we recognize that public resources will be required and should be allocated to this purpose.

**Potential Sources of Funding:** The Task Force recommends the creation of a dedicated account for certain fees (Chapter 91 program), fines, settlements, and private revenues, which would be used to fund this recommendation, supplemented as needed by state operating funds.

## **Governance Recommendation #2: Ocean Management Coordination**

### **Recommendation**

Massachusetts should pursue ecosystem management of offshore waters through federal, regional, and state coordination and cooperation. The Task Force recommends that the Commonwealth:

1. develop cooperative ocean management plans with federal agencies for offshore waters, for example in portions of the Gulf of Maine or Nantucket Sound.
2. review and revise the state's enforceable coastal policies, based on the passage of the proposed Comprehensive Ocean Resources Management Act or other state legislation, existing statutes, and formal approval by the National Oceanic and Atmospheric Administration (NOAA);
3. continue to apply enforceable coastal policies through federal consistency to activities in state waters, coastal watersheds, and adjacent federal waters;
4. expand cooperative frameworks for project review, such as the U.S. Army Corps of Engineers' Joint Processing meetings;
5. support regional and international ocean management councils, such as the Gulf of Maine Council on the Marine Environment; and
6. develop and/or expand existing cooperative agreements with adjacent states.

### **Justification**

Massachusetts has a long history of asserting its position about how offshore resources should be used - whether it be questioning and ultimately halting Georges Bank oil drilling, successfully gaining fishery management jurisdiction for Nantucket Sound, championing the designation of the Stellwagen Bank National Marine Sanctuary adjacent to state waters in the early 1990s, or today applying federal consistency review over a proposed offshore wind farm in nearby federal waters. Massachusetts is economically, ecologically, and culturally invested in the ocean and, while we recognize the limits to state jurisdiction in the legal sense, we have always considered the continental shelf to be intrinsically linked to our state and our interests in terms of its integrated geological formations and ecosystems, the wealth of life it supports, and the foundation it provides to many of our industries.

The federal/state boundary dividing the ocean is derived from law, not by virtue of oceanographic or other natural systems or processes. New ocean management structures are needed to promote consistent, coordinated ocean management policies and to ensure that the geographic divisions among federal and state management authorities support rather than prevent sound ecosystem management across a variety of jurisdictions.



## Implementation Plan

Massachusetts is fortunate that regional and federal/state frameworks to assist in ocean management activities already exist, but their scope is generally limited to single-issue-specific purposes. EOEA should proactively continue to expand these frameworks and review and amend its enforceable coastal policies with assistance and approval of federal partners.

**Legislation required:** This recommendation does not require any additional legislation, although the development of certain enforceable coastal policies relating to the state's oceans will depend in part on passage of a CORMA bill or other legislation. In addition, legislation may, in the future, strengthen and codify Massachusetts' participation in region ocean management councils.

**Next Steps:** CZM, in conjunction with an ocean management advisory panel and working with other state agencies, should review existing state laws to develop potential new enforceable coastal policies; future laws should similarly be reviewed. EOEA should pursue mechanisms to develop cooperative management agreements with federal and neighboring state agencies for adjacent waters, continue and strengthen joint review frameworks with federal agencies, and promote the use of regional organizations for ocean management.

**Timing:** CZM should conduct a review of existing state laws and propose new potential enforceable coastal policies by July 2004. Subsequent reviews should be on-going. Discussions with federal officials on joint management agreements have already begun.

**Funding Required:** Funding would be required to initiate federal/state cooperative management planning.

**Potential Sources of Funding:** State operating account, NOAA CZM grant.

## Governance Recommendation #3: Climate Change Plans

### Recommendation

Given the important interactions between global climate change and the conditions of our ocean resources, the Task Force recommends that the state include in its Climate Change Action Plan various elements relating to effects of climate change on our coasts and oceans, measures to mitigate effects on such things as coastal flooding and sea level rise, and policies to reduce greenhouse gas emissions. The Task Force supports the state's efforts in this regard and recommends the collection of information about trends relating to climate change impacts in Massachusetts (e.g., sea level rise, ocean and coastal storm frequency, ocean salinity, inventories of certain species within state waters, coastal flooding, inventory and location of wind and tidal resources). Furthermore, any Ocean

Resource Management Plans developed under new statutory authority (described in Governance Recommendation #1) should be developed in coordination with and in consideration of the state's Climate Change Action Plan. The Task Force further supports policies that decrease the Commonwealth's reliance on energy resources that emit greenhouse gasses.

### Justification

Over the next century, climate change is projected to profoundly impact coastal and marine ecosystems, both in Massachusetts and around the globe. Such trends as sea-level rise, increased coastal flooding, inundation of wetlands, and changes in ocean and atmospheric circulation are predicted to occur.

These effects have been observed in many recent reports, including those recently issued by the Conference of New England Governors - Eastern Canadian Premiers in their Climate Change Action Plan (August 2001):

The Intergovernmental Panel for Climate Change (IPCC), an international body of atmospheric scientists, in its *Third Assessment Report*, states that "There is new and stronger evidence that most of the warming observed over the last 50 years is attributable to human activities".... and that if no action is taken, average rates of warming by 2100 will "be greater than any seen in the last 10,000 years." Such instability will increase the incidence and severity of extreme weather events such as storms, droughts, floods, and heat waves; cause sea levels to rise; shift and/or expand certain disease and pest vectors; and further stress already vulnerable species and ecosystems.

In the *Canada Country Study, Atlantic Region Report*, for example, scientists predicted that sea level rise is the impact with the highest degree of certainty associated with it and will lead to predictable and dramatic impacts. Many of these impacts would be common to the Eastern Canadian provinces and to New England states. The warming would stress our common natural resources-especially in the areas of agriculture, fisheries and forestry. Another recent analysis of regional impacts of future climate change in the United States, concluded that key issues for New England ...were likely to include an increase in weather extremes; stresses on estuaries, bays, and wetlands; changes in precipitation rates impacting water supply and food production; multiple stresses on urban areas; and recreation shifts.... Rising sea level and elevated storm surge levels-with associated problems of coastal erosion and saltwater inundation-would likely have severe impacts on our harbors, islands, and for the many communities located near the region's shoreline.

Clearly, as a state with significant ocean and coastal resources, Massachusetts will need to adapt to effects such as these. But more immediately and in addition, Massachusetts is taking a leadership role along with other states in the Northeast and with the Eastern Provinces of Canada to reduce the region's emissions of greenhouse gases that contribute to climate change. Over the past two years, as part of regional commitments of the New England Governors Conference/Eastern Canadian Premiers, Massachusetts has committed to take steps to reduce its greenhouse gases to 1990 levels by 2010, to reduce them 10 percent further by 2020, and to reduce greenhouse gas emissions sufficient to eliminate any dangerous threat to the climate. Pursuant to these commitments, Massachusetts is developing a state-wide Climate Change Action Plan that, among other things, calls for the development of renewable resources as one way to reduce the greenhouse gas emissions associated with fossil energy use. These commitments provide an important backdrop for the need for the Commonwealth to include clean, non-fossil fuel energy resources such as wind and tidal resources at appropriate sites, as well as plan for the adaptation of the state's (and region's) economic resource base and physical infrastructure to address the consequences of climate change.

## Implementation Plan

The Secretary should ensure that ocean issues are well represented in the state's climate change action planning efforts and should task CZM with participating in Plan development and implementation as it affects coastal and ocean issues as well as coordination with similar federal initiatives.

**Legislation required:** No legislation is required.

**Next Step:** CZM should comment on draft Climate Change Action Plan to ensure strong focus on ocean issues.

**Timing:** Immediately

**Funding Required:** No cost for initial steps. Implementation of Climate Change Action Plan as it relates to ocean issues will require funding.

**Potential Sources of Funding:** NOAA grant funds.



## Governance Recommendation #4: Ocean Sanctuaries Act Revisions

### Recommendation

The regulations implementing the Ocean Sanctuaries Act (OSA) (302 CMR 5.00) should be updated unless or until a new Ocean Resource Management Act is enacted and implemented - at which time, the more comprehensive Ocean Resource Management Act could be written specifically to replace the OSA, since the purposes of a new Ocean Resources Management Act as we envision it would encompass those of the original OSA. The OSA regulations should be updated to clarify for the regulated community, the public, and the agencies, the range of permitted and prohibited activities and the environmental performance standards that guide project review in Ocean Sanctuaries. We also recommend that the Massachusetts Board of Underwater Archeological Resources (BUAR), DEP, DCR, DMF, Energy Facilities Siting Board, and the Massachusetts Environmental Policy Act (MEPA) office develop a Memorandum of Understanding (MOU) governing protocols for interagency coordination on project reviews involving projects in Ocean Sanctuary areas.



### Justification

The OSA and its implementing regulations were drafted to prohibit certain activities (i.e., offshore oil and gas leases). However, the protective principles of the OSA are expressed in sometimes-oblique terms without a strong tradition or precedent for interpreting what these terms mean in practice. For example, among the factors to be considered in determining public necessity are "whether the proposed facility will serve the public interest" and "whether...the public demonstrates a need for

the facility." And, contrary to the general perception, the OSA does not prohibit most offshore development (except in the waters off the Outer Cape). Rather, most offshore development - including industrial facilities, but excluding oil and gas development - may be permissible under the OSA, subject to the application of review standards that do not always provide clear guidance. The OSA and its regulations have generated questions from the regulated community and other permitting agencies with regard to issues of compliance with the OSA. Updating the OSA as part of a wider ocean resource management effort should be a top priority. Even in the absence of new statutory changes, there is a need for updating the regulations implementing the OSA, as well as the need for better coordination among agencies with responsibilities for reviewing projects in existing ocean sanctuaries. That said, our preference would be to focus parallel efforts on adoption of a comprehensive Ocean Resources Management Act, which would be written in a way to supercede the need for the new OSA regulations once it were adopted and implemented.



### Implementation Plan

We recommend that the Secretary convene a workgroup to develop recommended revisions to existing OSA regulations. Specific issues to address include, but are not limited to, clarification of the Public Necessity and Convenience Test for the purposes of considering whether to allow certain development projects within the ocean sanctuaries, the definition of and standards relating to "significant alteration," and the development of guidance or standards relating to aesthetic impacts. As a subset of the workgroup process, an interagency workgroup should be convened to draft a Memorandum of Understanding that specifies and formalizes the roles and responsibilities of agencies that participate in OSA implementation. This workgroup process should keep up-to-date on the status of enactment of a new Ocean Resources Management Act, in order to assure that the drafting of such legislation incorporates and addresses the types of protections set forth in the OSA, and then also provides for the elimination of the OSA upon enactment of such an Ocean Resources Management Act with such provisions.

**Legislation required:** The proposed CORMA would require legislation, which we recommend be drafted in a way to incorporate our recommended changes to the Ocean Sanctuaries Act. Updating the Ocean Sanctuaries Act regulations themselves would not require new legislation.

**Next Step:** The Secretary should convene an interagency working group, co-chaired by DCR and CZM, to develop proposed regulatory changes and to develop an interagency MOU on coordination of project review in Ocean Sanctuaries.



**Timing:** The Secretary should convene the working group as soon as possible, concurrent with the implementation of the recommendations for the Comprehensive Ocean Resources Management Act.

**Funding Required:** Implementation of the regulatory changes and MOU may require additional resources.

**Potential Sources of Funding:** State capital funds.