

New Policy Directions and Governance Frameworks

Overview

The U.S. Commission on Ocean Policy report takes note of the slow pace of progress on coastal and ocean protection, restoration, information systems and research which it sees as a result, to some extent, of disconnected and/or overlapping agency and program purviews and a lack of communication and coordination among similar coastal and ocean programs and initiatives. It recommends actions that amend current legislation or agency practice and also proposes that a new ocean and coastal decision-making framework be put into place. Rhode Island comments point to existing federal policies in pollution control and living resources management that hinder the states' ability to manage effectively. The Commissioners' comments support recommendations that target priority issues identified through the R.I. Governor's Bay & Watershed Planning Commission process such as nutrient reductions, managing nonpoint source pollution, fisheries management, impacts of growth/development and the need for coordinated, collaborative action at both the federal and state level. The need to adapt an ecosystem-based management paradigm and to support and sustain watershed-based initiatives at both the federal and state level is a common theme in Rhode Island comments. There is also expressed in the comments a concern about how and why new management frameworks would be developed and that, along with consideration of building new frameworks, the U.S. Commission on Ocean Policy, the federal government and the states examine ways in which the current framework can be improved and made more effective, making it possible to retain processes and programs that work well in their current forms and institutional settings.

Specific Recommendations

Reauthorize or revise federal legislation such as the Coastal Zone Management Act and the Clean Water Act

- Incorporate a watershed-based focus into federal programs and legislation;
- Provide financial, technical, and institutional support for watershed initiatives;
- Address the cumulative impacts of growth and development on coastal and ocean systems.

Improve the operations and planning of the U.S. Army Corps of Engineers, other federal agencies, and states

- Ensure that the selection of least-cost disposal options reflect a more accurate accounting of environment and economic costs and benefits with special consideration of beneficial reuse of dredged material, and;
- Develop disposal options using a better system of rating and prioritizing projects based on net economic and environmental return that is more comprehensive and accurate than current cost-benefit analysis practices.

Strengthen water quality improvement strategies

- The Environmental Protection Agency (EPA) and the states should require advanced nutrient removal for wastewater treatment plant discharges into nutrient-impaired waters after Total Maximum Daily Loads (TMDLs) or other appropriate analyses to determine acceptable nutrient limits are completed;
- Development of a prioritized plan for replacing or repairing aging wastewater and drinking water infrastructure.
- Establish more effective mechanisms to address mercury deposition and its public health impacts including from fish consumption.

Revise federal and state policies that support water quality

- Increased enforcement of existing policies, laws and ordinances to protect ocean and coastal resources;
- Modernized permitting information and tracking systems;
- Development of regional mechanisms to address atmospheric deposition.

Increase effectiveness in addressing nonpoint source pollution through:

- Establishment of national nonpoint source pollution goals and objectives that will result in significant pollution reduction in impaired watersheds, focused on meeting human health-related and ecosystem-based water quality standards;
- Ensuring that stormwater management programs are based on comprehensive, ecosystem approaches that include accurate assessments, best management practices, monitoring, public education, sufficient resources (financial and technical assistance) and an adaptive management approach.

Increase federal and state support for and effectiveness of watershed-based initiatives

- Building the capacity of watershed efforts to address pollution, habitat and growth issues by providing technical, financial and institutional assistance;

Limit vessel pollution and improve boating safety

- The U.S. Coast Guard developing a comprehensive policy guidance and contingency plans for places of refuge for vessels in the United States;
- While requiring improved marine sanitation device technologies, ensure that No Discharge Zone designation is the priority method for reducing pathogen and other waste inputs resulting from boating.

Address the threat of introduced marine aquatic species

- Employing a more vigorous federal response that includes ensuring that federal ballast management law includes uniform, mandatory national standards based on sound science and includes a process for revision as new technologies emerge. The policy on ships with no declared ballast should be subject to an interagency review.

Make progress on the goal of sustainable fisheries

- Improving the federal fisheries management process through elimination of redundant and unnecessary requirements which prolong the development of fishery management plans;
- To reinforce a commitment to using ecosystem-based management, renaming the Regional Fisheries Management Councils as the Regional Fisheries Ecosystem Management Councils;
- Allowing Regional Fisheries Management Councils to set allowable catch limits for each fish stock in order to give the RFMCs some flexibility in considering the social, economic and environmental consequences of fisheries decisions;
- Contrary to the recommendation that saltwater fishing licenses should be federally required, the issuance of recreational licenses should be the exclusive purview of each state, not a federal mandate;
- Opposing any federal requirements that state and interstate fishery management plans mirror the structure and requirements of the Magnuson Act due to the inefficiencies of the federal fishery management process;
- Opposing recommendations that call for Rhode Island to relinquish significant planning responsibility and authority to a regional fisheries council that covers the Atlantic seaboard from Cape Cod to Hatteras.
- Supporting increased funding for multi-jurisdiction Joint Enforcement Agreements.

Reform Ocean and Coastal Governance and/or Create New Governance Frameworks

- Where effectiveness and coordination can be significantly improved, creating new well-planned governance frameworks that defragment both federal and state coastal programs and authorities;
- Recommending that the U.S. Commission on Ocean Policy develop options not only for new institutional frameworks but also for reform of existing systems to improve coordination, communication, joint action and use of resources; an analysis of existing mechanisms for effectiveness should be conducted through a multi-interest effort.
- Contrary to the recommendation that all coastal programs be consolidated under NOAA, the National Estuary Program should remain linked to the Environmental Protection Agency in order to maintain the unique watershed-coast-ocean perspective of the NEP and its history of bringing EPA and other federal resources to address coastal and ocean issues as well as its ability to work in watershed areas beyond the extent of public trust resources;
- Developing alternative funding mechanisms in addition to the proposed Ocean Policy Trust Fund. Reliance mainly on one source and on purely extractive industry revenues may have unintended consequences, potentially leading to a dependency on activities that may cause ecological problems or conflict with stated ecosystem goals.

Strengthen Science and Research

Overview

Impartial, reliable and timely scientific information is the foundation of effective policy. Such information requires investment; there is no shortcut. Return on investment in basic research is commonly greater than 20%. Resources are necessary to develop the necessary infrastructure to collect and manage data and to explain scientific results in practical terms to decision makers, educators, and the general public. Despite the declining health of our oceans and coasts, federal investment in ocean research has decreased over the past 25 years from 7 percent of the total federal research budget to 3.5 percent. As a result, our knowledge about the oceans and our coasts has not keep pace with our impacts on these regions, and the U.S. has slipped as the world leader in ocean research, exploration, and technology development. The present level of funding is below the level needed to take advantage of our academic capacity and to provide information essential to policy makers.

Over the next five years, the annual federal investment in ocean and coastal research should double from today's \$650 million, and additional investments should be made in technology development and ocean exploration.

To meet growing information needs, the U.S. should also implement a national Integrated Ocean Observing System (IOOS) based on an interconnected U.S. regional ocean observing systems and linked to the international Global Ocean Observing System. The IOOS will significantly improve our ability to observe, monitor, and forecast ocean conditions and Earth observing capabilities. The information will have valuable economic, societal, and environmental benefits. Such a system requires investment (\$138 million in start-up costs, and \$650 million annually to maintain and operate the system), but as a nation, we will realize an annual savings of \$1 billion through enhanced weather forecasts, resource management, and safer and more efficient marine transportation.

Specific Recommendations

Beaches

- Entities should develop a coordinated strategy to research, assess, and monitor beach nourishment.

Contaminated Sediments

- Entities should develop a coordinated strategy to conduct research on contaminated sediments, such as how they are created, transported, dredged and treated.

Aquaculture

- Congress should increase support for sustainable marine aquaculture research, development, training, extension, and technology transfer programs. Emphasize on-shore, finfish systems.

Human Health

- NOAA, NSF, and other entities should develop and implement improved methods to monitor and identify pathogens and chemical toxins in ocean waters and organisms.

Basic Research

- The U.S. should double its annual funding on ocean science and a portion should be used to support research directed by the regional information collection programs and to enlarge the National Sea Grant College Program.

Research Infrastructure and Vessels

- The academic fleet is the most crucial resource used by researchers. Without a dependable seagoing capability, we cannot explore new regions and respond to exciting and scientifically important opportunities. The fleet must be maintained to address most acute needs of the marine science enterprise and to deploy and maintain an IOOS. Unless funds are appropriated to construct the next generation of research vessels equipped with cutting-edge technology and instrumentation (to which RI can contribute significantly) our ability to systematically probe the ocean interior will suffer or be surrendered to other nations.

Data Management

- The U.S. should implement an ocean data management system.

Observing and Monitoring

- Congress should fund the IOOS through NOAA, subject to National Ocean Council direction and approval. IOOS funds should be appropriated without fiscal year limitation. NOAA should develop a streamlined process for distributing IOOS funds to other partners. Emphasis should be placed on ocean ecosystem health with attention to coastal watershed and near coastal waters.

Ecosystem-Based Management

Overview

Urgent and immediate action is necessary to arrest and reverse the decline in ocean ecosystem health. Conservation of estuary and coastal resources must be an essential part of any sound strategy to conserve and restore ocean health. A more comprehensive focus on ecosystem-based management will need to involve constituencies from government, universities, the public and the private sector, in order to strengthen the U.S. collaborative ocean research enterprise.

- Watershed management should be integrated into coastal resource conservation. However, there should be recognition that a significantly greater investment in watershed management will be needed to make it optimally effective.
- Habitat restoration needs to be more fully developed as a top-level strategy to conserve the coastal marine environment.
- Support the recommendation regarding the need for states and the EPA to require advanced nutrient removal for wastewater treatment facilities discharging into nutrient impaired waters. This is the most significant report recommendation for Narragansett Bay.

Specific Recommendations

Regional Management

- Support recommendations for a regional scale, ecosystem approach to coastal and ocean management in which priorities and recommended actions are regionally driven and implemented. This recommendation is in keeping with the approach taken by the Governor's Narragansett Bay and Watershed Planning Commission and in support of the efforts of Rhode Island to work with the Governors of Connecticut and Massachusetts on a ecosystem-based approach to coastal and ocean management.

Watershed Funding

- Support the Report recommendations to better fund watershed approaches, especially additional funding to states for watershed-based planning and action, based upon clearly identified performance agreements.

Federal Support for Habitats

- The federal government should commit to stemming the loss of coastal habitat. Habitat goals should be more than just acres and have clear connection to larger objectives such as restoring fisheries, improving water quality, etc. Increase support for state and regional habitat coordination mechanisms: States and regions have used a variety of planning and implementation mechanisms that could be enhanced by federal support. The Rhode Island Habitat Restoration Team is an existing coordination model; with

additional support on a performance agreement basis, it could demonstrate planning, goal-setting, and progress at the state level.

Land Conservation

- Amend the Coastal Zone Management Act to authorize and provide sufficient funding for a dedicated coastal and estuarine land conservation program. Amend the Ocean Commission recommendation as follows “Existing federal conservation funding programs should emphasize the importance of riparian habitat protection, restoration and/or enhancement, with respect to primary tributaries to coastal habitats.”

Wetlands Protection

- A more comprehensive wetlands protection program should be developed that is linked to coastal habitat and watershed management efforts and the integration of the Section 404 permitting process. Specifically, the consideration of cumulative impacts from issuing multiple individual permits must be addressed at both the federal and state level. Suggest strengthening the language here to change the sentence from “the NOC *should* coordinate development,” to “the NOC *will* coordinate development.”

Water Quality Monitoring

- Federal agencies should develop a national water quality monitoring network that coordinates existing and planned monitoring efforts, including monitoring of atmospheric deposition with secure federal funding support. This network should be designed to be consistent with states’ monitoring needs and would not reduce the need to fund and enhance existing state monitoring programs. The monitoring network should include dedicated support for both research and management needs identified through inclusive processes and should include near shore, coastal, tributary and estuarine areas in order to fully represent the human/land/ocean interaction.

Enhance Education, Outreach and Information Dissemination

Overview

Education, outreach and dissemination of information to decisionmakers and the general public is at the core of a successful oceans and coastal policy framework. Fact-based decisionmaking built on the best available science—and constantly increasing knowledge—is a must for making the proper choices in future planning and management. It is also important to share that science with the public in layman’s terms to further build the knowledge base. The cross-societal impacts of any oceans and coastal initiatives must demonstrate how they do not just affect the ecosystem, but involve the economy, society, culture and every facet of day-to-day quality of life, in order to build a constituency for policy decisions and create stewardship among all groups from government to the grassroots. A long-term focus on the education side should include integrating information on ocean and ecosystem issues into informal and formal education programs, including school curriculum. This is designed to extend the reach of the initiative among a new generation to increase its ongoing future impact.

Specific Recommendations

Ocean and Coastal Science Education

- Support for strengthening ocean and coastal science education, especially experiential education connected to applied research, and public education closely integrated with extension and outreach. Rhode Island recommends that the mandate of the NSF COSEEs be expanded to include undergraduate and graduate education in the portfolio of K-12 programs, and that additional funding be made available for greater interactions between universities, NSF, NOAA and ONR to accomplish this mandate.

Regional Ocean Information Program

- Support for the creation of a Regional Ocean Information Program where Congress would establish regional boards to administer regional ocean information programs throughout the nation.

Collaborative Community Strategies

- Community knowledge of the marine environment and problems affecting it needs to be increased. Strategies to address this should include drawing on the expertise of nongovernmental entities, and encouraging and linking informal and informal education initiatives. Education efforts should foster a marine conservation ethic while respecting a diversity of viewpoint on the best ways to achieve conservation and restoration goals.

Accessibility of Data

- Share and make easily accessible all monitoring and research data, and assessment and evaluation results, publicly and widely to increase the knowledge of decisionmakers and the citizenry to guide public policy decisions and ensure public accountability for actions.

Sciences Technology and Industrial Development of Marine Life

Overview

The Preliminary Report of the U.S. Ocean Policy Commission addresses the potential economic benefits of pursuing technology and industrial development from marine life sciences. However, Rhode Island's own investigation into marine life sciences as a potential economic development opportunity identified an important national constraint for the future development of this technological platform: appropriate infrastructure for the inhibitors to company formation (and subsequent economic development) is the lack of facilities, research parks or incubators that can manage pilot-scale or proof-of-concept type testing. The risk is substantial for products requiring a marine environment during the analytic or primary processing stage. Secondly, in some cases, it is our understanding that fermentation of marine microbes that have pharmaceutical or industrial uses can require the use of seawater based processes. These require specialized water treatment and wastewater systems that typically do not exist in most commercial real estate venues.

Additionally, to fully maximize the economic potential of marine organisms requires that attention be paid to both the cultivation techniques and forms of aquaculture in order to protect wild species from overexploitation. Examples of concern in this connection are certain marine plants, sponges and other organisms which have rare chemical compounds difficult to synthesize and recreate. Cultivation and aquaculture techniques for these types of organisms still need to be developed and, in many cases, may require facilities or technologies that are presently not available.

Specific Recommendations

Federal Support

- The Federal Government should develop programs and assist states in providing the type of physical infrastructure required to support commercialization of marine life science technologies.
- Basic research infrastructure alone will not be sufficient to drive the development of these technologies and subsequent commercialization which will create substantial new economic development in the future.