U.S. COMMISSION ON OCEAN POLICY

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Introduction to Policy Options

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Chapter I. Our Oceans: A National Asset

A. State of the Oceans
B. Challenges and Opportunities
C. Goals of a National Ocean Policy
D. Guiding Principles

Guiding Principles

The major ocean laws that currently exist contain guidelines for particular issues or resources, but there are no overarching principles to guide the development of a national ocean policy. The following is a list of guiding principles the Governance Working Group offers for consideration by the full Commission as principles that can guide that development.

We believe that the development and implementation of a National Ocean Policy should be guided by the following principles:

Stewardship: Ocean resources are held in the public trust. The government has special obligations to its citizens based on the public trust nature of ocean areas and resources and the government's responsibility to protect the interest of the public. The public should understand the importance of coastal and ocean waters and that their actions impact marine areas and resources. The public should recognize that they are citizen stewards of the oceans.

Sustainability: Ocean policy should be designed to meet the needs of today without compromising the needs of tomorrow.

Best Available Science: The decision making process should be based on an understanding of natural and social processes and influences that impact the marine environment.

Participatory Governance: Our coastal and ocean ecosystems should be governed such that all stakeholders are an integral part of the decision making process, reflecting the importance and value of these resources to the nation.

Transparency: Decisions and their rationale should be clear and available to all.

Timeliness: Governance systems should operate with enough effectiveness, efficiency, and predictability to respond in an expeditious manner.

Accountability: Responsibility for actions or tasks should be clear and unambiguous to all. Those who are involved in decision-making and implementation should be held accountable for their actions.

Adaptive Management: Management systems should be designed to meet clear goals and continually improve the scientific basis for future management. Reevaluation of goals and effectiveness of management measures and the incorporation of new information in implementing management revisions is essential.

Multiple Use: The oceans provide a wide range of current and future opportunities for economic activities, conservation, recreation, and other human endeavors. Management must recognize these multiple uses and objectives and balance competing interests.

Precautionary Approach: A precautionary approach should be used in developing and implementing the required management plans for coastal and ocean resources and activities. As used by the USCOP, the "precautionary approach" means the following:

The Precautionary Approach is applying judicious and responsible management practices, based on sound scientific research and analysis, proactively rather than reactively, to ensure the sustainability of ecosystems for the benefit of future as well as current generations. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing action in order to prevent environmental degradation. Each management plan developed using the precautionary approach should include scientific assessment, monitoring, potential for mitigation to reduce environmental risk, and appropriate periodic review of the scientific basis for precautionary restrictions, and the restrictions themselves.

Ecosystem-Based Management: The term "ecosystem-based management" means managing human activities and their potential impacts on species or resources within the context of their interactions with other species and the physical environment. The management framework should be multi-species and cross physical boundaries.

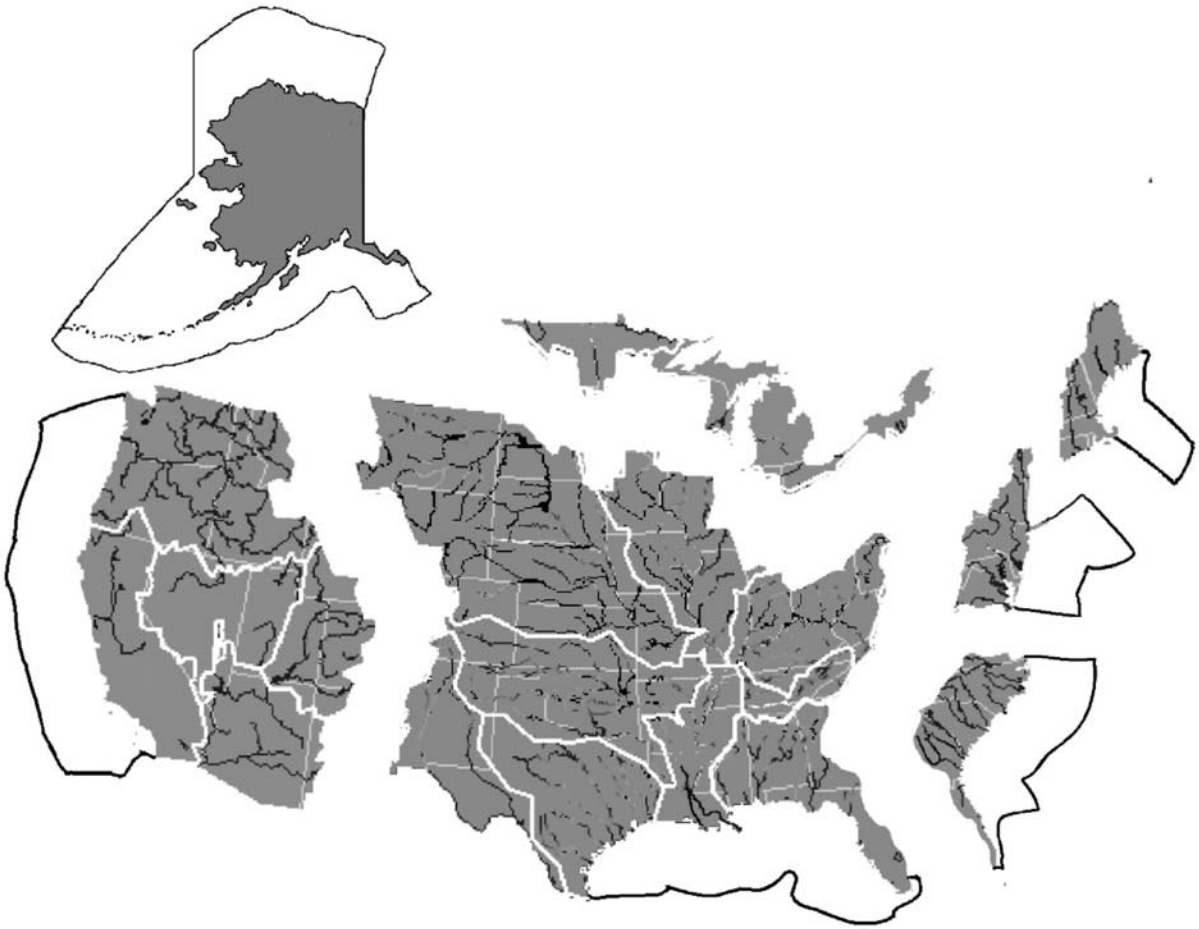
Ecosystem-based management is substantially different from the more traditional practice of managing as if marine species were separate and independent entities.

Implementation toward ecosystem-based management will require changes phased in over several years, but is important to start the process now.

Ecosystem-Based Management (cont.): Our policy making processes should include an appropriate regional ecosystem framework.

The regional geographic boundaries for ecosystem-based management are delineated as follows:

- On the ocean side by the boundaries for the current Regional Fishery Management Councils under the Magnuson-Stevens Act.
- On the land side by the boundaries of the watersheds that drain into the waters under the jurisdiction of each council.
- A “Great Lakes Eco-Region” would have to be created.



Biodiversity: The Stewardship Working Group believes that we need to reverse trends in biodiversity reduction where they exist with a desired state of maintaining or recovering natural levels of biological diversity and ecosystems services.

The United States government should develop a comprehensive research program to study marine biodiversity at 3 scales: genetic diversity, species diversity, and ecosystem diversity.

Beyond mere enumeration, the program should explore the range of causes for declining biodiversity and potential solutions to ameliorate declines.

Conservation of biodiversity should be an explicit consideration of any ecosystem-based management regime.

Chapter II. Enhancing Ocean Value and Vitality

A. Comprehensive & Coordinated Approach
B. Living Marine Resources
C. Coastal Management
D. Petroleum and Other Minerals
E. Other Uses of the EEZ
F. Marine-Related Commerce and Transportation

Regional Fishery Management Councils

Use and Review of Scientific Information

- Require Regional Fishery Management Councils (RFMCs) to form and use Scientific & Statistical Committees (SSCs). Members appointed by National Marine Fisheries Service Director from a list submitted by the Councils and the Ocean Studies Board.

- The SSCs would set Allowable Biological Catch (ABC); the RFMCs may lower this level, but not raise it.

Use and Review of Scientific Information (Cont.)

- Allowable Biological Catch (cont.)
  - If the SSC cannot come to consensus on ABC in time to set seasonal harvest levels, the NMFS' Regional Science Center Director would be required to set ABC.
  - If there is insufficient time for the NMFS' Regional Science Center Director to calculate ABC before the start of the fishing year, fishing for that species would be prohibited until ABC was calculated, and subsequently, the RFMC determines Total Allowable Catch.

Use and Review of Scientific Information (cont.)

- Require NMFS to develop a standard peer-review process at three levels:
  - A “standard” procedure for annual stock assessment determinations.
  - An “enhanced” procedure for evaluation of the assessment models themselves, to be done on a 3-5 year cycle. The peer review panel should include members external to the region of the fishery being reviewed.
  - A “crisis” procedure to be used in the case of extremely controversial results, or when the normal peer-review process would be too slow.

Use and Review of Scientific Information (cont.)

- Require the RFMCs to develop an annual list of management information needs and provide this list to the NMFS and the SSC; NMFS/SSC would be required to incorporate these needs in the design of research programs to the maximum extent possible.

Nomination & Appointment for RFMC Members

- For each vacancy of an appointed RFMC seat, require the Governors to submit a slate of at least 2 candidates each from the commercial fishing industry, the recreational fishing sector, and the general public.

- A national authority would make the appointments and would be required to create RFMCs that reflect a balance of interests.

Nomination & Appointment for RFMC Members (cont.)

- New appointees would be required to take training within 6 months of appointment
  - The training would be conducted by an entity outside, but paid for by the Federal government.
  - Specific areas of training would include: fishery science, legal requirements, and the required public processes for RFMCs.

Fishery Management Jurisdiction

- For every fishery management plan, one management authority should be designated to take the lead in developing the plan.

- For interjurisdictional fisheries that occur primarily within state waters, state fishery commissions should take the lead for management both within state waters and the EEZ:
  - For the Atlantic coast, this could be done using authorities in the Atlantic Coastal Fisheries Cooperative Management Act (ACFCMA).
  - For other areas, new Congressional authority, similar to the ACFCMA, would be required.

Fishery Management Jurisdiction (cont.)

- For fisheries that occur primarily in the EEZ, the councils should take the lead.

- For fisheries that are shared substantially between the jurisdictions of two or more RFMCs, the decision on would which council would take the lead would be made at the national level.

- Management of Highly Migratory Species should remain at the national level.

Cooperative Research

- NOAA should create a new nation-wide program of Cooperative Research.

- The program would be responsible for coordinating efforts to get scientists, commercial and recreational fishermen and other non-scientists to work together on appropriate collaborative projects.

- A significant portion of the federal funding for cooperative research should be disbursed according to priorities set by the RFMCs and Interstate Marine Fisheries Commissions to ensure that their management information needs are met.

Dedicated Access Privileges

- The US government has the responsibility to manage and maintain the living marine resources of the United States EEZ for the overall benefit to the nation.

- Congress should remove the moratorium on Individual Fisherman Quotas (IFQs) (i.e. Dedicated Access Privileges) programs in the Magnuson-Stevens Act and allow their use as tools for fishery management.

- Congress should provide national guidelines for DAPs, while still allowing for regional flexibility in implementation.

Reducing Capacity

- Congress should revise or repeal the federal programs that promote overcapitalization in fisheries.

- Congress should institute programs that permanently reduce vessel and effort capacity in overcapitalized commercial fisheries to sustainable levels, with involvement of affected fishermen in consultation with fishery managers.

Reducing Capacity (cont.)

- To the maximum extent practicable, buyouts should be funded by those that benefit from capacity reduction programs -- the fishermen remaining in the fishery.

- Federal funding of buyout programs should only be considered in conjunction with fishery management regimes which will not allow additional effort to return to the fishery.

Marine Protected Areas

Marine Protected Areas

- Definition: A Marine Protected Area (MPA) is a specified area of the marine environment that has been set aside for the purpose of conservation of natural or cultural resources.

- The Congress should establish national standards for the development of marine protected areas for the conservation for natural and cultural resources. These standards should be used to guide national, regional, and local efforts to develop marine protected areas. Any national initiative to create an MPA must involve regional and local coordination. Standards for MPA management plans should include prerequisite scientific or cultural assessment, a monitoring plan and review for MPA continuation/modification.

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Coastal Management Framework

- Propose a second generation of coastal management for the U.S.
- Tightly integrate or consolidate the many small programs currently doing aspects of coastal management (to be accomplished through a transition process)
- Redefine coastal management programs, including:
  - A holistic planning process
  - Restatement of national goals
  - Recognition of regional characteristics
  - State, local and tribal implementation

Coastal Management Framework (cont.)

- Enhance funding of improved coastal management programs
- Establish Regional Management/Science Centers
- Improve how cumulative impacts are addressed in coastal management programs

Habitat Protection and Restoration

- Elevate attention to importance of habitat protection and restoration in coastal areas

- Encourage greater use of land conservancies in coastal management

Natural Hazards

- Gather more information, encourage more planning, protect undeveloped flood and erosion hazard areas

- Change National Flood Insurance Program and USACE Civil Works programs and other federal programs to reduce federal incentives for development in high hazard areas

Sediment Management

- Encourage U.S. Army Corps of Engineers to enhance sediment management programs

- Encourage regional and state entities to take sediment management into account

Chapter IV. Advancing our Understanding of the Ocean

A. Comprehensive & Coordinated Approach
B. National Coastal and Ocean Observing and Prediction System
C. Technology Development
D. Data Management
E. Existing and Required Infrastructure
F. Summary of Recommendations

Rational Investment Strategy for U.S. Ocean Sciences

- Nation lacks established mechanism to manage its science investment to address priority issues
- Develop a multi-sector body to develop a process for the identification, funding and implementation of high priority national science needs
- Use National Oceanographic Partnership Act (NOPA) as a model for meeting the goals and objectives of a national investment strategy

Research Partnerships and Roles

- Ocean sciences community has great capacity to conduct basic and applied research but lacks clear vision of what are appropriate roles of the various sectors

- NOPA is a good model – it must be used as intended by the Act to accomplish goals and objectives of a national ocean research policy

- National Oceanographic Partnership Program (NOPP) agencies must invest in the NOPP process "up front" and sustain that commitment over time

Integrated and Sustained Coastal and Ocean Observing and Prediction System

- Need integrated observing system to address myriad coastal and ocean challenges facing the nation even though technology exists
- Task National Ocean Research Leadership Council (NORLC) to develop inventory of existing systems and coordinate integration of them
- Adopt and support NORLC plan and request $138 million to implement it: must be new funds

Integrated and Sustained Coastal and Ocean Observing and Prediction System (cont.)

- NOAA should be lead agency and leverage off Navy's ocean data capabilities and infrastructure
- Other NOPP agencies, especially NSF and NASA, must be integrally involved
- NSF's Ocean Observing Initiative should be implemented in tandem with operational system and clear plan for transitioning research and development to operations

Integrated and Sustained Coastal and Ocean Observing and Prediction System (cont.)

- Must be a “whole earth” system: need to understand ocean-atmosphere-land couplings

- Must address needs of multi-sector users: marine operations; research; education; monitoring

Data Management

- A robust, integrated data archiving, assimilation, modeling and distribution system is needed to deal with vast data streams nation is collecting

- Request Congress task the National Research Council to:

1. Review the Navy model and make specific recommendations for its application to civilian data needs
2. Develop recommendations for a national data management governance framework
3. Develop inventory and assessment of existing and planned national data “centers” and infrastructure
4. Develop recommendations for investment in infrastructure including human resources

Chapter V. Promoting Ocean Awareness & a Stewardship Ethic

A. Comprehensive & Coordinated Approach
B. K-12 Education
C. Higher Education
D. Continuing Education
E. Informal Education
F. Summary of Recommendations

K-12 Education

- Goal is to weave ocean sciences into the National Science Education Standards and ensure science teachers have basic understanding of ocean sciences

- Commend NSF for Centers for Ocean Sciences Education Excellence (COSEE) Program and recommend NSF and other federal agencies enhance and sustain COSEE

- Place COSEE under purview of NOPP

K-12 Education (cont.)

- Include ocean sciences case studies in the 2005 revision of the standards
- Federal ocean agencies have education as integral component of their missions and support ocean education initiatives and training programs
- Provide support for increased involvement by underrepresented groups in science education including ocean sciences

Ocean Sciences Graduate Education and the Workforce

- Nation must have an ocean sciences workforce capable of meeting the many diverse ocean-related societal needs now and in the future

- Federal ocean agencies develop strategic vision for meeting federal and non-federal workforce needs

- NOAA track graduate student support and production and share with other agencies

Ocean Sciences Graduate Education and the Workforce (cont.)

- Federal agencies adjust stipends/salaries for ocean sciences students to be commensurate with other science disciplines

- Encourage expanded use of currently existing post-graduate career fellowships in non-research areas or leading to non-research careers (e.g., Sea Grant Fellowships)

- Federal ocean agencies, working with universities and private sector as appropriate, boost visibility of many diverse career paths open to ocean sciences students