U.S. COMMISSION ON OCEAN POLICY

Washington, D.C. April 2-3, 2003

Introduction of Draft Policy Options

ACADEMIC RESEARCH FUNDING IN OCEAN SCIENCES

- The Administration should propose, at a minimum, a doubling of the Federal ocean research budget from today's \$630M to \$1.3B over the next 5 years to bring it back to its 7% parity level with 1982.
- Recommend a Federal research policy which urges Congress to demand the Administration develop coordinated 5-year science plans to improve stability in the research base. The NORLC should be responsible for implementation and oversight of the policy.
- Recommend Federal ocean agencies adopt a unified grants process within each agency which also employs 3-year grants.
- The NORLC should develop a mechanism that provides for transition of academic research results to agency mission needs. NOAA should lead this effort. Pattern after ONR's funding strategy.

EXPLORATION

- Recommend support of the President's Panel on Ocean Exploration and the NRC panel report for the establishment of a robust and long-term effort in global ocean exploration.
- Recommend that the program be bold and innovative to garner a broad consensus on its benefits to the Nation.
- Exploring and mapping of the continental margin and EEZ of the U.S. should be a program component.
- Recommend a national policy which asserts that ocean research, education, and exploration are inextricably linked to expand our understanding of the oceanic realm.

INTERNATIONAL LEADERSHIP IN OCEAN SCIENCES

- The U.S. needs to increase its commitment to and participation in global ocean science, technology, and education; especially its participation in large cooperative projects of critical importance to global environmental health and discovery.
- The U.S. should call for and lead a new long-term oceans initiative similar to the highly successful IDOE Program but with an enduring commitment.
- The U.S. needs to expand and maintain its international capacity-building role in education, research and exploration, infrastructure, and dataexchange.
- The Department of State needs to improve communications while streamlining its coordination of U.S. participation in marine research, operations, and education within the international arena.

TECHNOLOGY DEVELOPMENT

- The Federal government should establish and support a national system of virtual marine technology development centers to meet national needs and mission requirements for the 21st century.
 - These centers should be federal-academic-private sector partnerships
 - These centers could be modeled after the NSF "centers of excellence"
- A key priority of the centers should be technology in support of an ocean and coastal observing system.
- Federal funding for technology should be on a par with the requested increase of \$630M for ocean research to ensure the Nation has the requisite tools to conduct a rigorous program of ocean science.

EXISTING AND REQUIRED OCEAN SCIENCE INFRASTRUCTURE

- The Administration should immediately implement an inter-agency planning process for a national ocean facilities strategy as called for by the Senate Appropriations Committee, including the Great Lakes.
- The Administration should request, and the Congress should appropriate funding for critical ocean infrastructure needs, particularly the UNOLS Fleet Replacement Plan, deep submergence assets, and other platform requirements including coastal remote sensing.
- The Administration should elevate ocean science infrastructure to a higher priority within NSF and at the same levels of investment identified for all science sectors by the National Science Board in its 2002 report.

National Ocean Research Leadership Council

<u>ISSUE:</u> The Council needs to be given additional responsibilities and greater accountability to achieve the goals of the original National Oceanographic Partnership Act.

PROPOSAL: Amend the NOPA to enhance NORLC as follows:

- 1. Delete "Research" from its name to indicate a broader mandate
- 2. Expand its mandate to include coordination, integration and planning of Federal marine facilities and operations as appropriate (e.g., mapping and charting).
- 3. Give it explicit responsibility for the national Integrated and Sustained Ocean and Coastal Observation and Prediction System.
- 4. Expand membership to include USDA, NIH and Smithsonian.
- 5. Specify it reports to and takes direction from the national ocean council with respect to implementation of ocean policy.
- 6. Establish a full-time Federal support office adequately staffed and funded to meet its mandated responsibilities

National Polar-orbiting Operational Environmental Satellite System

- The "converged" NPOESS managed by the IPO needs to develop a clear and long-range vision for:
 - Calibration/validation of the satellite data for climate and ocean research applications
 - Design of science data and products archives that focus on integration of the new data with historical satellite data for climate and ocean assessments
 - High spatial and temporal resolution adequate for coastal management
 - An altimetry program that is based on lessons learned

Aquaculture

- Potential for expanding US aquaculture industry is hindered by:
 - Burdensome permitting regime
 - Lack of process to permit/lease offshore areas
 - Environmental concerns
- These concerns should be addressed so that aquaculture can expand in an environmentally sustainable manner
- The National Ocean Council, overseeing the activities of the Joint Subcommittee on Aquaculture, should be responsible for developing a comprehensive and coordinated National Policy for Marine Aquaculture.

Aquaculture (cont.)

- The NOC should develop:
 - National Standards for Operating Procedures
 - A streamlined Federal aquaculture permitting process, including recommending any necessary statutory changes.
 - A process for inclusion into Regional Ecosystem Plans
- This Nation's ocean agency should be designated the lead agency for marine aquaculture and establish an Office of Marine Aquaculture, with a permanent National Aquaculture Coordinator

Aquaculture (cont.)

Regional Coordinating Bodies should:

- Work to incorporate aquaculture into regional ecosystem management plan, including working with the National Ocean Agency and other Federal agencies to develop a streamlined, "1-stop shopping" permit process.
- Consider establishment of regional standards consistent with the national standards; use as base conditions for permitting aquaculture facilities in public waters.

International Management of Living Marine Resources

Domestic action alone will be insufficient to address many of the problems facing US living marine resources. In fact, for some issues (sea turtle bycatch, whale ship strikes, marine mammal bycatch, highly migratory species fisheries), the primary problem can only be addressed by coordinated international action.

The United States, because of its international economic, scientific, and educational leadership role, has the ability to improve the management of living marine resources that cross many nations' jurisdictions.

USCOP supports the Administration's recent efforts at the recent World Summit on Sustainable Development; we urge the State Department to begin to implement the plans developed at the summit.

International Management of LMR (cont.)

Short-Term Recommendations

Working through auspices of NOC:

- The resource agencies (e.g. NOAA, FWS, EPA) should support State Department efforts to better manage living marine resources;
- Based on this work, the NOC should arrange for technical agencies to support DOS in its role as lead US agency in international matters. Specifically, NOC should arrange to support DOS in review of international agreements, for scientific accuracy and ecosystem considerations.

International Management of LMR (cont.)

Medium- to Long-term Recommendations

The National Ocean Council should:

- Develop a coordinated Federal plan to increase institutional capacity in less developed countries in a sustained manner.
 - Scientific & technological expertise
 - Funding for conservation and research activities
 - Educating or training US and foreign personnel
- Sustaining these efforts over the long-term is critical to the success of these programs and will require significant funding and continued attention from the NOC.
- Executive Order 13141 is step in right direction, but we need more effective and independent review of trade agreements to fully address international living marine resource issues.

International Management of LMR (cont.)

The National Oceanic and Atmospheric Administration should:

- Improve existing domestic programs to develop gear and methods to reduce fisheries bycatch of marine mammals and sea turtles, and other non-target species.
- These gears and methods should be exported to other countries' fisheries wherever possible.

The US Congress should consider developing and approving legislation:

- Similar to the Tropical Forest Conservation Act, to protect Coral Reef Ecosystems by forgiving a nation's debt if they develop and implement appropriate strategies to manage their coral reef ecosystems.
- Similar to the Wild Bird Conservation Act, to prohibit importation of marine ornamental fish and corals into the US unless the exporting country can certify the organisms were harvested in a sustainable manner

Living Marine Resources Enforcement

<u>Use of Cooperative Federal-State Enforcement</u> <u>Agreements</u>

- At a minimum, funding for joint federal-state law enforcement operations should be restored to 2001 levels.
- USCG should be included in the development of these agreements.

LMR Enforcement (cont.)

Expand Joint Training Programs Through Existing USCG Regional Fisheries Training Centers

- USCG fishery enforcement training centers should be funded to allow for greater participation by NMFS and state enforcement personnel.
- Emphasis should be placed on a comprehensive approach to regional enforcement and methods to enhance cooperative enforcement efforts.
- Training programs should include input from NMFS and state enforcement officers.

LMR Enforcement (cont.)

Encourage Innovative Ways of Maximizing Effectiveness of Existing Enforcement Assets

- Fund innovative uses of technology.
- Continue efforts to better coordinate the sharing of enforcement information among agencies and coordinate notification.
- Continue focusing on community outreach and education efforts and share successful approaches between federal agencies and states. Combine where possible with existing boating safety and recreational user programs.

LMR Enforcement (cont.)

- Necessary resources should be made available to the USCG, and a commitment made by the USCG, to return its LMR enforcement activities to, or at least near, pre-9/11 levels.
- Recognizes that even pre-9/11 enforcement efforts by the USCG and other Federal entities were insufficient, make broader use of cooperative State-Federal enforcement agreements
 - Funding
 - USCG included

Vessel Monitoring System (VMS)

- VMS participation should be required for all commercial vessels permitted under federal fisheries plans.
- Uniform national "core" requirements for VMS systems should be established.
- NMFS and USCG should accelerate cooperative efforts to:
 - Complete the centralized infrastructure and provide near realtime information to enforcement assets.
 - Coordinate their monitoring and information-sharing capabilities to provide maximum possible utilization of VMS information.
- Costs of VMS installation and operations should be born by fishers.

General Vessel Pollution Issues

Marine Sanitation Devices (MSDs)

- Establish new MSD discharge standards, which are over 20 years old, taking into consideration current information on effectiveness of systems and impacts on the environment and human health.
- Develop a system, such as a performance warranty system, to ensure that MSDs continue to meet discharge standards through time.
- Conduct research to:
 - Determine the cumulative impacts of vessel sewage discharges, particularly in areas of high vessel concentration, biologically sensitive areas, and in areas with low exchange rates.
 - Determine the adequacy and effectiveness of NDZs and pump out facilities.
- Modify discharge standards as needed based on additional research.

General Vessel Pollution Issues (cont.)

Air Emissions

- Support the development of a more extensive air sampling program to monitor and characterize ship emissions, particularly in ports located in problem air basins.
- Support and provide incentives for industry to reduce air emissions:
 - Adopt new technologies
 - Use low-sulfur fuels
- Encourage the in-port use of shore power grids wherever the existing infrastructure permits.

General Vessel Pollution Issues (cont.)

Oily Bilge Water

- Support industry initiatives such as the use of gas turbine engines which reduce oil in bilge water.
- Include oily water treatment system inspection as part of unannounced enforcement inspections.

Cruise Ship Pollution

Overall Management Approach

- Build upon voluntary industry initiatives to adopt industrywide waste management practices, and to introduce new technologies for treatment and reduction of waste:
 - Provide incentives to encourage innovative approaches
- Complement voluntary programs with comprehensive regulatory regimes which provide clear, uniform national requirements for cruise ship waste management.
- Provide for a robust national enforcement regime characterized by clear and consistent interpretation of regulatory requirements.

Cruise Ship Pollution (cont.)

Blackwater and Greywater

 Drawing upon the federal and state statutory regimes currently in place in Alaska, develop a federal statutory regime, applicable nationwide, for the regulation of cruise ship blackwater, greywater and other waste streams.

Hazardous Waste

- Resolve existing ambiguities in the application of U.S. law (RCRA) to the management and disposal of hazardous wastes generated aboard cruise ships.
- Develop a process for uniformity in application of standards, permitting, and enforcement that takes into account the operation of cruise ships in multiple jurisdictions.

Cruise Ship Pollution (cont.)

Solid Waste

- Provide incentives for the ongoing development of new technologies to treat and dispose of solid waste.
- Assess the adequacy of shore reception facilities and work to enhance capacity where necessary.

Invasive Species - Ballast Water

- Develop a ballast water performance standard based on the size of organisms.
- Allocate resources to the development of treatment technologies to meet the standards.
- Reauthorize NISA to allow the U.S. flexibility in negotiating an international ballast water regime.

Invasive Species

- Strengthen education, outreach and public participation in invasive species management.
- Develop a risk assessment and management process to evaluate non-native introductions.
- Develop revenue streams from local user groups and industry.

Marine Debris

- Educate the public about how their individual actions cumulatively have a dramatic impact on the marine debris problem.
- Reestablish an interagency marine debris committee, co-chaired by EPA and NOAA, charged with expanding and better coordinating marine debris efforts.
- Increase agency involvement and revive the Marine Entanglement Research Program (MERP) or create a similar program.
- Improve port reception facilities to address the marine debris problem. Congress should require the establishment of technical standards for reception facilities.

Marine Debris (cont.)

- Support and assist other countries in implementing the Special Areas designations under Annex V of MARPOL.
- The National Research Council (NRC), the Food and Agriculture Organization (FAO), and other appropriate organizations should make recommendations to address the derelict fishing gear problem.
- Improve source identification, data sharing, and monitoring efforts.
- Increase funding for public education; monitoring and source identification; prevention; and derelict fishing gear removal programs such as the Northwestern Hawaiian Islands Expedition.

National Ocean Council (NOC) and Nonpoint Source Pollution

NOC to Establish National Goal:

Measurable improvement in reducing polluted runoff in impaired watersheds in the U.S.

NOC Functions:

- Improve interagency coordination/cooperation/participation on NPS.
- Ensure that federal water quality protection programs are wellcoordinated, at national and regional/state levels, including:
 - Coordinate budget formulation, on a multi-year ("out-years")
 planning basis: priority-setting and assessment of success.
 - Not review of annual agency budgets.

NOC and Nonpoint Source Pollution (cont.)

- Attention to interagency coordination and cooperation when a problem has sources in multiple States.
- Seek to maintain and increase funding for NPS programs in general.
- Develop public support for NPS control.
 - Public education, outreach, and marketing.
 - Must influence multiple national policies.

NOC and 2002 Farm Bill Implementation

Goal:

 Work with USDA to ensure that the conservation programs in the 2002 Farm Bill are implemented effectively.

Functions:

- Support and encourage USDA's efforts to implement the 2002 Farm Bill, with emphasis on maximizing the conservation programs' benefits for water quality.
- NOC should consult with USDA and other interested agencies as they develop specific, measurable national goals for NPS that USDA would have a lead role in achieving

NOC and 2002 Farm Bill Implementation (cont.)

NOC to work with USDA on priority initiatives, e.g.:

- State conservationists role in NPS control.
- NRCS technical assistance.
- Link subsidies and BMPs.
- Review commodity policy.
- Carbon sequestration.
- Revise research and marketing efforts (shift from corn).

Concentrated Animal Feeding Operations (CAFOs)

- Congress should ensure that the full authorized funding for 2002 Farm Bill conservation programs is available.
- USDA should target the programs' funds to projects at CAFOs that will have the greatest water quality benefits.
- Should implement the <u>voluntary</u> EPA-USDA Unified National Strategy for Animal Feeding Operations.
 - To reach the smaller 80 90% of AFOs not regulated by the EPA CAFO rule.

Sewage Treatment Plants

Funding Shortfalls for Water Infrastructure and State CWA Programs

- Continue federal appropriations for CWA SRF capitalization grants, at approx. \$850 million/yr - \$1.35 billion/yr.
- Continue federal funding to states to implement CWA programs.
- Program managers should give highest priority to projects and programs that will:
 - 1. Protect public health.
 - 2. Obtain benefits for water quality where possible.

Sewage Treatment Plants (cont.)

CWA § 301(h) Waivers for Secondary Treatment for Ocean Discharges

EPA should ensure that all POTWs applying for § 301(h) waivers fully meet all environmental criteria before EPA grants the waiver.

Sewage Treatment Plants (cont.)

Advanced Treatment (AT) of Nutrients (Name and P) at POTWs

 EPA and Congress should require consideration of advanced nutrient removal for sewage discharges into nutrient-impaired waters.

 EPA should continue to research Biological Nutrient Reduction AT.

Sewage Treatment Plants (cont.)

Septic Systems

- EPA and others should urge States and local governments to:
 - Adopt, and better enforce, better building/zoning codes for septic systems;
 - Improve public education about septic system maintenance.
- The NAS/NRC should:
 - 1. Study whether economic and/or social factors and/or policies encourage new development that uses septic systems; and
 - 2. Recommend policies to promote centralized treatment.

Stormwater

Watershed Protection

- Increase support and funding for outreach programs that inform local officials as well as the general public about how land-use decisions affect aquatic resources.
- The overall goal should be to meet state water quality standards.
- Minimize disturbance to the natural environment where possible.
- Determine the best areas to be preserved taking into account that water quality becomes increasingly degraded as impervious surfaces in a watershed increase above the ten-percent threshold. Require that new development be conducted to minimize impacts.
- Re-examine building codes and ordinances that serve to discourage environmentally-friendly development.

Stormwater (cont.)

New Development

- Establish national, performance-based goals, with local flexibility to create more stringent goals, to reduce the impacts during site development and abate post-development impacts.
- Best Management Practices (BMPs) should be used and monitoring should be done to determine if the BMPs are effectively meeting the goals.
- If the goals are not being met, BMPs should be revised or new BMPs should be used to meet the established goals.

Stormwater (cont.)

Existing Development

- Monitor to identify the major problems and focus resources on controlling these problems.
- State and local governments should identify the local water quality objectives and establish performance-based goals. The overall goal should also be to meet the state water quality standards.
- Actions to meet these goals include, but are not limited to: BMPs; putting local ordinances in place; ensuring legal requirements are met; and retrofitting.
- Similar to new development, after these BMPs have been utilized, monitoring should be done to see if the goals are being met, and if they are not, new or revised BMPs should be used.

Clean Water Act Section 404 Program

- Federal government should assert wetlands jurisdiction to the broadest Constitutional extent:
- States should enact laws to protect all wetlands in state.
- Encourage EPA and the Army Corps to <u>maintain and attain</u> "No Net Loss" and work towards increasing the national wetland base.
 - Strongly encourage avoidance of wetlands loss
 - Require replacement for unavoidable losses.
- Encourage EPA and Army Corps to continue to implement the National Mitigation Action Plan.
 - Require effective mitigation for unavoidably-lost wetlands.

Sediment Management

Environmentally sound dredge management is important to Port competitiveness

- Encourage all ports develop Comprehensive Port
 Management Plans linking economic, ecological and
 social issues for the port and its coastal region. This
 process should link to watershed councils.
- Conduct detailed monitoring and research of sediment processes and contamination in port regions.
- Request dredge permit process analysis by the National Academy of Public Administration.

Atmospheric Deposition of Pollutants

 Urge EPA: reduce emissions of N and toxics, using both the CAA and CWA.

 Urge Congress: <u>proceed now</u> to amend CAA to require significant reductions of NOx, SO2, and mercury for the purpose of protecting <u>water</u> quality and related concerns.

Atmospheric Deposition of Pollutants (cont.)

- Urge EPA, State Dept., and others to increase efforts to address international air pollution.
- Encourage States to enact and implement State laws to regulate in-State <u>air</u> emissions for the purpose of protecting <u>water</u> quality and related concerns.
- Encourage EPA's and others' efforts to educate, about AD problems and sources:
 - Watershed managers;
 - State air and water pollution control officials;
 - The general public.

Incentives, Disincentives, and "Backstop Mechanisms" For Nonpoint Source & Watershed Pollution

- Congress should provide financial incentives and disincentives, and federal "backstop" authority, to encourage states to keep the leading role to address NPS.
- Legal & Policy Precedent: Clean Air Act says, if state does poorly:
 - State loses federal highway funds, <u>and</u>
 - EPA must prepare a "FIP" to regulate air emissions.
- Federal government would control NPS sources "only if all else fails".
 - Data gathering mechanism required
 - Financial and legal tools to be phased-in over time if a state does not make "reasonable progress".
 - All parties would know "what's coming next" if the state chronically fails to address NPS.
 - Incentive based as possible

Governance Recommendations

- 1. The National Ocean Policy Framework
- Regional Ocean and Coastal Governance
- Federal Agency Reorganization
- Offshore Oil and Gas/ Existing and Emerging Uses
- Coastal Management

The National Ocean Policy Framework

- That the President create, by Executive Order, and/or Congress, by statute, a National Ocean Policy Framework, composed of a designated Assistant to the President, an Office of Ocean Policy in the Executive Office of the President, a National Ocean Council, and a Presidential Council of Advisors on Ocean Policy (a FACA advisory council);
- That the Office of Ocean Policy in the Executive
 Office of the President be directed by the designated
 Assistant to the President and be supported by staff
 as necessary to support the Office of Ocean Policy
 and the National Ocean Council;

The National Ocean Policy Framework

- That the National Ocean Council be chaired by the designated Assistant to the President and composed of cabinet secretaries of ocean agencies and directors of independent ocean agencies; and
- That the National Ocean Council be assisted by a Presidential Council of Advisors on Ocean Policy (a FACA advisory council) made up of coastal governors, other appropriate state, local, and tribal government representatives, as well as the private sector, research community, non-governmental organizations, and watershed organizations.

For discussion purposes, the term "National Ocean Council" means the "National Ocean Policy Framework" as described above.

The following are the types of functions of the National Ocean Council. This list is not exhaustive:

- Policy Formulation, Program Implementation, and Reporting:
 - Guide implementation and continuous improvement of the Commission's recommendations for broad national guidance and principles and develop new policy as needs arise
 - Make recommendations for federal agency reorganization or consolidation reflecting Commission recommendations.

- Policy Formulation, Program Implementation, and Reporting (cont):
 - Identify legislative redundancies and overlap and develop national ocean policy positions needed to resolve conflicts, fill gaps, and address new and emerging issues in support of Commission recommendations.
 - Review and assess the progress of individual agency programs in achieving national ocean goals.
 - Identify and participate in resolution of interagency policy disputes.
 - Institute immediate and vastly improved coordination among agencies with ocean and coastal responsibilities reflecting Commission recommendations.

- Policy Formulation, Program Implementation, and Reporting (cont):
 - Guide the development and implementation of a national ocean research plan (specific to policy problems) with input from the researchers and policy makers through an advisory committee on ocean research.
 - Guide the development and implementation of a national ocean data and information management system pursuant to Commission recommendations.
 - Create and oversee the work of task groups formed to address specific ocean and coastal problems requiring concerted, highlevel attention within specified timeframes.
 - Provide a vehicle for harmonizing the actions of federal and state agencies in the nation's oceans and coasts during the development of the planning process in support of the Commission's recommendations on second generation coastal management.

- Policy Formulation, Program Implementation, and Reporting (cont):
 - Oversee the development and implementation of a national program for the assessment of the state of ecosystems to provide critical goods and services.
 - Provide, in consultation with the Department of State, leadership in international marine affairs and contribute to the effective implementation of international agreements on oceans and coasts.
 - Determine proper ecosystem planning and management units for regional ocean governance, including identifying the appropriate scientific criteria for establishing ecosystem planning and management units.
 - Periodically report on the state of the nation's oceans and coasts and of their uses, providing an assessment of progress in the implementation of the national ocean policy.

Budget Process:

- The Assistant to the President, in consultation with the Director of OMB and the NOC, shall identify programs that contribute significantly to the national policy for ocean and coastal resources and shall provide advice to the agencies for such programs.
- The Assistant to the President shall provide advice to the agencies and to the Director of OMB on the levels and uses of funding in the agencies for ocean and coastal resource related activities.

- Development of a Regional Framework (State/Territorial/Local/Tribal Levels):
 - Work closely with the appropriate state, territorial, local, tribal and other interested entities (e.g. non-governmental and business organizations) to develop a planning process for an improved system of ocean and coastal governance that would include the creation of regional ocean councils. These regional ocean councils in conjunction with the NOC should develop guidance for regional ecosystem management plans. It is anticipated these plans will address issues, such as state/regional coordination, pollution reduction, economic development, and research priorities.
 - NOC will stimulate the creation of regional ocean councils on a pilot basis where state, territorial, local, and tribal interests are receptive to such projects.
 - NOC should foster regional implementation of national goals

Guidance to the National Ocean Council:

- The nation move toward a coordinated and ecosystem-based approach to the management of multiple ocean and coastal resources and uses at the regional and national level. A regional ocean and coastal approach means that management actions should reflect regional goals, consistent with the national goals that recognize the importance of healthy ecosystems in providing essential goods and services.
- As a first step in the development of improved regional governance, federal agencies coordinate their functions and decision making processes at the regional level so as to reduce duplication of efforts and prevent efforts that contradict one another.

Guidance to the National Ocean Council:

- Issues of regional concern need to be more effectively addressed. Issues of regional concern should be identified on a region by region basis and each region should take a flexible approach at addressing these issues. Each regional ocean council could carry out functions such as:
 - Facilitate the resolution of problems arising from the lack of interagency coordination and competing uses of ocean and coastal resources, including conservation
 - Stimulate characterization and delineation of the region; determine seaward, lateral and inland boundaries; provide names and description of key areas and features; promote development of accurate maps of the region
 - Build awareness of ocean issues in the region through public information and educational outreach programs

Guidance to the National Ocean Council:

- Issues of regional concern need to be more effectively addressed. Issues of regional concern should be identified on a region by region basis and each region should take a flexible approach at addressing these issues. Each regional ocean council could carry out functions such as (cont):
 - Facilitate coastal and ocean science and information support; develop research priorities and plans; provide or facilitate data management for the region
 - Apply ecosystem-based principles established by the NOC in support of management agencies that are appropriate to the region; encourage and facilitate use of such information in existing management authorities
 - Facilitate the integration of regional plans for coastal management, living marine resources, pollution control, nonliving marine resources, conservation, and science and research needs, including social sciences.

- Guidance to the National Ocean Council:
 - The enhancement of the capacity to coordinate between all levels of government and stakeholder and citizen groups. The structure and function of these councils would vary depending on regional needs. The functions of these councils could include:
 - The Regional Ocean Councils may organize a series of panels to represent particular focus areas for planning. These panels would be set up as needed to discuss and resolve particular issues, or be established as permanent standing groups. The bodies may provide the charter for the panels, oversee their work, provide staff support, and receive and publicize their recommendations. Authoritative action would remain the responsibility of the official federal, state, or tribal, local agencies or other entities as required by statute. The panels may include:

- Guidance to the National Ocean Council:
 - The panels may include:
 - Offshore multiple-use planning panel
 - Federal agency panel
 - Fishery management panel
 - Coastal management panel
 - Marine science panel
 - Air and water quality panel
 - Watershed planning panel

- The Commission does not intend that the Regional Ocean Councils would supplant existing legal authorities, such as Regional Fishery Management Councils, or elements of state and local governments. However, the Commission also believes that it is very important that these regional coordinating bodies effectively bring the goals of ecosystem-based management and improved coordination to bear on decision-making.
- Facilitate the coordination of the expenditure of funds in order to achieve regional goals and objectives.
- The federal government should create, under the auspices of each Regional Ocean Council, a Regional Management Information Program.

- Develop regional goals and performance objectives and measures for the state controlled coastal zone in conjunction with state authorities; to the extent possible harmonize federal, state/local and tribal responsibilities within the state-controlled coastal zone.
- Provide coordinated regional input to federal agencies for use in the development of comprehensive plans for the management of federal lands and waters.

Federal Agency Reorganization

- The Commission believes that consolidation is warranted.
- The Commission has looked at numerous proposals for consolidation. These recommendations have come from Commissioners, testimony before the Commission and other experts.
- The Commission believes it is a function of the NOC to have an ongoing responsibility to look for consolidation opportunities of federal agencies.

Federal Agency Reorganization

- We think that in looking at these opportunities, the NOC should be guided by principles, such as:
 - Consolidate functions not just structures
 - Bring together pieces of a common problem
 - Look for leverage such that the whole is greater than the sum of its parts
 - Achieve efficiency in operations and management
 - Link the systems related to atmosphere, earth and ocean for policy and science
 - Enhance the linkage between science and policy programs

Federal Agency Reorganization

- We believe the following functions have the highest priority for consolidation, such as:
 - Habitat protection and restoration
 - Protected species programs
 - Nonpoint source pollution
 - Fishery management
 - Watershed management
 - Data management systems

Offshore Oil and Gas

- Establish a program under which some portion of the revenues that the federal government receives from the leasing and extraction of non-renewable offshore energy resources is invested in the conservation of renewable ocean and coastal resources through grants to all coastal states and an allocation at the national level for the advancement of marine science efforts to support such conservation. Those coastal states that are OCS producing states should receive a larger share of the portion to address the environmental and socioeconomic impacts of energy activity in adjacent waters.
- Increase and coordinate funding for environmental studies related to offshore oil and gas development.

Offshore Oil and Gas

- Work with state and environmental agencies and industry to evaluate the risk to the marine environment posed by the aging offshore and onshore infrastructure in the Gulf of Mexico as recommended by the National Academy of Sciences (Oil in the Sea III).
- Increase the research and development investment in the science and engineering needed to determine whether methane hydrates can be part of the solution for the nation's long term energy needs.
- The establishment of an ocean observing system through a governmental cooperative partnership with the oil and gas industry that uses the industry's existing research activities and infrastructure of pipelines, platforms, and vessels in a way that allows the transfer of non-proprietary data to research and academic institutions while protecting the security of proprietary data and meeting other safety, environmental and economic concerns.

Existing and Emerging Uses

- The federal offshore waters of the United States are held in public trust. These areas and their resources should be managed for multiple use and public benefit including appropriate environmental protection. The following are issues identified by the Commission that need to be addressed by Congress and the National Ocean Council in developing a formal regime:
 - Bioprospecting
 - Offshore aquaculture
 - Offshore renewable energy
 - Undersea telecommunication cables
 - Desalination
 - Submerged cultural resources
 - Other marine minerals

Existing and Emerging Uses

- Until Congress establishes a formal regime for these new uses or uses for which there is no current management regime, the National Ocean Council will designate an interim lead agency to undertake preliminary research, assessment, and monitoring of these uses.
- Congress should ensure that all new uses of the ocean areas or uses for which there is either no or inadequate management regime are assigned to and overseen by a public agency to ensure full consideration of public values and benefits in their use. Special consideration should be given to issues of the proper siting, leasing, and environmental consideration.

Coastal Management

The Commission believes that consistent with ecosystem based management we should assure the protection and sustainable use of the coastal zone.

• The National Ocean Council should coordinate with federal agencies, state, territorial, local, and tribal governments the development of a national coastal management policy. This policy should contain national coastal goals and objectives and ensure that the environmental and economic needs of coastal areas are balanced in a sustainable manner.

Coastal Management

- As one part of this national coastal management policy, the Coastal Zone Management Act should be amended to include the following:
 - Incorporate assessment and planning functions more effectively within state coastal management programs.
 - Authorize a coastal and estuarine land protection program to address the need for the protection of conservation corridors and the preservation of critical coastal areas that are threatened. (See, S. 2608, Coastal and Estuarine Land Protection)
 - Incorporate performance measures for state coastal management programs developed by the National Ocean Council and Regional Ocean Councils.
 - Strengthen ocean planning and management responsibility for coastal states.
 - Enhance the states' abilities to do more effective land use and growth management planning within the coastal zone, including consideration of cumulative effects.

Coastal Management

- Other aspects of a national coastal management policy should address:
 - The interaction of watershed management and coastal management
 - Specific issues related to shoreline and sediment management, coastal hazards, and coastal habitat restoration and conservation.
 - The impacts of federal infrastructure investments on coastal areas