

PART II
BLUEPRINT FOR CHANGE:
A NEW NATIONAL OCEAN POLICY
FRAMEWORK

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CHAPTER 4: ENHANCING OCEAN LEADERSHIP AND COORDINATION

More than thirty years have passed since the Stratton Commission issued its influential report. The time has come to again consider significant improvements to the nation's ocean and coastal governance system—improvements that build upon the Stratton Commission's approach, while acknowledging societal and environmental changes and taking advantage of scientific and technological advances. The U.S. Commission on Ocean Policy believes that an effective, integrated national ocean policy can be achieved through implementation of a new National Ocean Policy Framework. Each of the chapters in Part II focuses on one component of this framework.

The components of the new National Ocean Policy Framework are:

National Coordination and Leadership. Chapter 4 describes the establishment, within the Executive Office of the President, of a National Ocean Council to coordinate and provide high-level attention to ocean policy. The Council would be chaired by an Assistant to the President, with nonfederal input from a Presidential Council of Advisors on Ocean Policy.

A Regional Approach. Chapter 5 focuses on the value of regional leadership and coordination and promotes the voluntary creation of regional ocean councils. These councils, established at the regional level with support from the National Ocean Council, would enhance the ability of federal, state, territorial, tribal, and local governments to respond to issues on a regional basis.

Improved Governance of Offshore Waters. Chapter 6 discusses the need to establish a coordinated offshore management regime for federal waters to avoid and minimize conflicts among ocean users, safeguard human and marine health, and manage the ocean for the maximum long-term benefit of the nation.

A Strengthened and Streamlined Federal Agency Structure. Chapter 7 proposes strengthening, and eventually reorganizing, the federal agency structure for ocean and coastal issues. As the nation's civilian ocean agency, the National Oceanic and Atmospheric Administration (NOAA) should be strengthened and reconfigured to improve the agency's ability to carry out its responsibilities. Subsequently, and where necessary and appropriate, related ocean and coastal programs in other agencies should be consolidated. In the long term, more dramatic changes to the federal agency structure are needed that acknowledge the inextricable connections among the sea, land, and air and all of Earth's living creatures.

MAKING IMPROVEMENTS AT THE NATIONAL LEVEL

The previous chapters have illustrated many of the compelling reasons for addressing ocean and coastal issues in a new and improved fashion. There is a growing consensus about a number of ocean-related facts:

- the United States controls extensive resources in ocean and coastal areas that serve a wide range of national needs and are held in public trust.
- there are enormous opportunities for ocean science and technology to uncover new sources of energy, food, and drugs, and increase general understanding about the planet.
- serious risks to living marine resources exist, and degraded ocean environments need to be returned to productivity.
- national security requires greater awareness, knowledge, and observation of ocean and coastal areas.
- marine transportation needs to be enhanced to adequately handle growing demands from commerce and recreation.
- improved understanding of the factors influencing global climate change is needed, along with ideas for mitigating any adverse impacts.

Government agencies work on these and many other problems; however, a lack of communication and coordination continues to inhibit effective action.

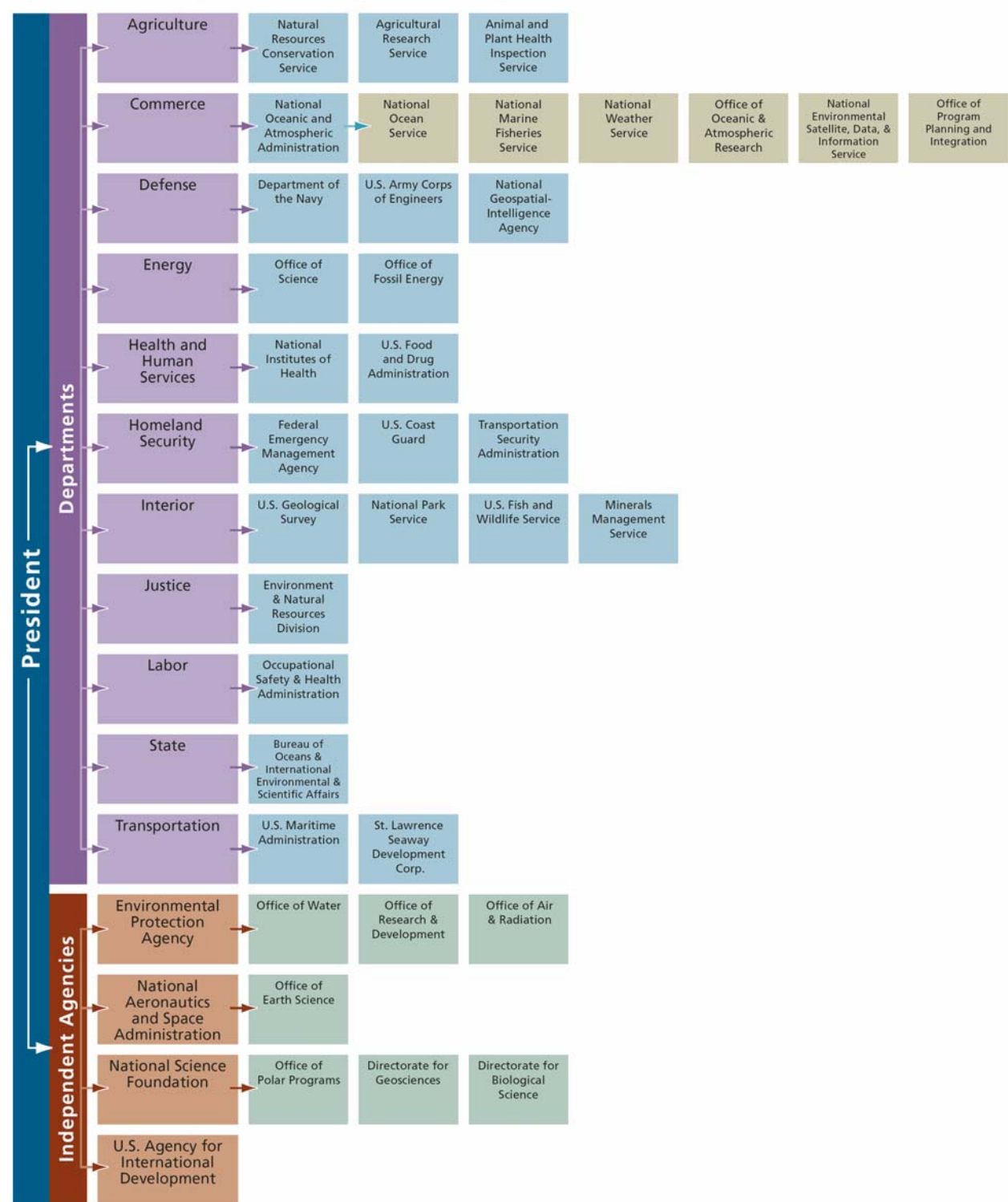
“Ocean issues” include virtually every aspect of the government’s duties, from promoting international commerce to protecting the environment, and from guarding national security to facilitating tourism and recreation. More than half of the fifteen existing cabinet-level departments, plus several independent agencies, play important roles in the development of ocean and coastal policy (Figure 4.1). Many individual programs within these departments and agencies administer specific initiatives that address varying, and sometimes overlapping, ocean and coastal issues. A few additional departments have a more limited role in ocean policy, usually through a single division, such as the U.S. Department of Justice’s Environment and Natural Resources Division.

A first step in enhancing the management of oceans and coasts, and a central part of the new National Ocean Policy Framework, is improving coordination among these many federal programs. A 1997 report by the National Research Council highlighted the need to harmonize ocean activities at the highest levels of government, with the objective of allowing federal agencies and the President to develop and carry out decisions within their authority.¹ The 2003 report of the Pew Oceans Commission, a privately funded initiative, also recognized the need to coordinate federal agency activities and address interagency disputes.²

Although a number of attempts have been made to achieve better coordination, none of them is adequate to cover the breadth of issues involved. Some coordinating mechanisms deal with particular topics, such as ocean research, coral reefs, or marine transportation. Other efforts are broader, but still fail to encompass the universe illustrated in Figure 4.1.

Within the Executive Office of the President, three entities have specific responsibilities that involve, to some extent, oceans. The Office of Science and Technology Policy supports the National Science and Technology Council in addressing government-wide science and technology issues. Within this structure, a Joint Subcommittee on Oceans was recently established to coordinate national ocean science and technology policy. The Council on Environmental Quality (CEQ) coordinates broad federal environmental efforts, oversees implementation of the National Environmental Policy Act, and serves as the principal environmental policy advisor to the President. Finally, the National Security Council’s Global Environment Policy Coordinating Committee includes a subcommittee to address international ocean issues.

Figure 4.1. Ocean Activities are Conducted by Many Federal Agencies and Departments



The agencies and departments depicted have varying ocean and coastal responsibilities. The number and breadth of organizations demonstrate that—at a minimum—coordination is essential to effectively manage the nation's oceans and coasts.

While these efforts are helpful in their designated areas of interest, they fall far short of a high-level interagency council with the ability to deal with all of the interconnected ocean and coastal challenges facing the nation, including not only science and technology, environmental, and international matters, but the many other economic, social, and technical issues specifically related to the management of marine resources. In effect, the whole of the oceans is greater than the sum of the marine-related parts of existing institutions with their different responsibilities.

In addition to the need for multi-issue coordination, the value and importance of the ocean to American society calls for greater visibility and leadership on ocean issues. Only the Executive Office of the President can move past traditional conflicts among departments and agencies, make recommendations for broad federal agency reorganization, and provide guidance on funding priorities. Thus the Executive Office of the President is the appropriate venue to provide high-level attention and coordination for an integrated national ocean policy.

Although legislative action will be needed to codify the establishment of an ocean leadership body and ensure a national commitment to and long-term stability for ocean issues, immediate presidential action can facilitate an early start to the process.

Recommendation 4-1. Congress should establish a National Ocean Council and a nonfederal Presidential Council of Advisors on Ocean Policy within the Executive Office of the President to provide enhanced federal leadership and coordination for the ocean and coasts. While Congress works to establish these components in law, the President should begin immediately to implement an integrated national ocean policy by establishing the National Ocean Council and Presidential Council of Advisors on Ocean Policy through an Executive Order, and by appointing an Assistant to the President to chair the Council.

These recommendations are in line with developing international trends. The United States was a leader at the 2002 World Summit on Sustainable Development, which reiterated support for the principles developed at the 1992 Earth Summit in Rio de Janeiro, including a call for better coordination of environmental policy at the national level.³ Several nations, including Australia, Brazil, Canada, Korea, and the Netherlands, have initiated strong national-level coordination on ocean and coastal policy.

National Ocean Council

There is important historical precedent for a body such as the National Ocean Council. The Marine Science, Engineering and Resources Council, chaired by the Vice President, was established in 1966 by the same statute that created the Stratton Commission. That council was disbanded in the early 1970s after the National Oceanic and Atmospheric Administration (NOAA) was established. Since then, no interagency body has existed to coordinate multi-agency implementation of an integrated national ocean policy.

The National Ocean Council would oversee all existing and new ocean- and coastal-related interagency mechanisms and coordination efforts. The Council would not have operational duties; rather, it would have responsibility for planning and coordinating, with support from a small staff and committees created to carry out specific functions.

Recommendation 4-2. The National Ocean Council (NOC) should provide high-level attention to ocean and coastal issues, develop and guide the implementation of appropriate national policies, and coordinate the many federal departments and agencies with ocean and coastal responsibilities.

The NOC should be:

- *chaired by an Assistant to the President.*
- *composed of cabinet secretaries of departments and directors of independent agencies with relevant ocean- and coastal-related responsibilities. Heads of other relevant executive departments, agencies, commissions, quasi-official agencies and senior White House officials should be invited to attend meetings of the NOC when appropriate.*

The NOC should carry out the following functions:

- *develop broad principles (based on those outlined in Chapter 3) and national goals for governance of the nation's oceans and coasts, and periodically review and revise these goals.*
- *make recommendations to the President on developing and carrying out national ocean policy, including domestic implementation of international ocean agreements.*
- *coordinate and integrate activities of ocean-related federal agencies and provide incentives for meeting national goals.*
- *identify statutory and regulatory redundancies or omissions and develop strategies to resolve conflicts, fill gaps, and address new and emerging ocean issues for national and regional benefits.*
- *guide the effective use of science in ocean policy and ensure the availability of data and information for decision-making at national and regional levels.*
- *develop and support partnerships among government agencies and nongovernmental organizations, the private sector, academia, and the public.*
- *expand education and outreach efforts by federal ocean and coastal agencies.*
- *work with a broad range of nonfederal stakeholders, governmental and nongovernmental, to develop a broad, flexible, and voluntary process for the establishment of regional ocean councils to help advance regional approaches.*
- *periodically assess the state of the nation's oceans and coasts to measure the achievement of national ocean goals.*

While the nation has made great strides in understanding the connections among the ocean, the atmosphere, the Earth, and the rest of the living world, it has been less successful in applying this knowledge to the management of ocean and coastal resources. New ocean and coastal policies should avoid the common practice of managing one activity or one part of an ecosystem without considering the impacts on and influences of other parts, including its human inhabitants. Rather, ocean policies should promote an ecosystem-based management approach, placing human interests and activities squarely within the context of the larger environment.

Moving toward such an approach requires several steps: assessing the ecosystem, including human needs; minimizing any threats and promoting opportunities; monitoring the ecosystem to evaluate progress; and revising management measures as appropriate. As part of the move toward an ecosystem-based management approach, a precautionary approach (described in Chapter 3) should be incorporated into decision-making processes and adopted by the National Ocean Council in developing national standards for ecosystem-based management.

Recommendation 4-3. The National Ocean Council (NOC) should adopt the principle of ecosystem-based management and assist federal agencies in moving toward an ecosystem-based management approach.

As part of this effort, the NOC should:

- *coordinate the development of procedures for the practical application of the precautionary approach and adaptive management.*
- *ensure that all resource agencies incorporate preservation of marine biodiversity in their management programs and all research agencies support further study of biodiversity.*

Assistant to the President

One role of the National Ocean Council is to resolve policy disputes and reach consensus among federal departments and agencies. To achieve this, the Council will need to be chaired by a high-level presidential appointee who is not part of any department or agency represented on the Council.

Recommendation 4-4. An Assistant to the President should be assigned to provide leadership and support for national ocean and coastal policy.

The Assistant to the President should have the following responsibilities:

- *chair the NOC.*
- *co-chair the Presidential Council of Advisors on Ocean Policy.*
- *lead NOC efforts to coordinate federal agency actions related to oceans and coasts.*
- *make recommendations for federal agency reorganization as needed to improve ocean and coastal management.*
- *resolve interagency policy disputes on ocean and coastal issues.*
- *reach out to state, territorial, tribal, and local stakeholders and promote regional approaches to ocean and coastal management.*
- *consult with the Office of Management and Budget (OMB) director and NOC members to identify programs that contribute significantly to the national policy for oceans and coasts, advise OMB and the agencies on appropriate funding levels for ocean- and coastal-related activities, and prepare a biennial report as mandated by section 5 of the Oceans Act of 2000.*

Presidential Council of Advisors on Ocean Policy

In 1969, the Stratton Commission recommended establishment of a broadly representative, presidentially-appointed committee of nonfederal individuals to provide continuing advice in the development of a national marine program. In response, in 1971 Congress created the National Advisory Committee on Oceans and Atmosphere (NACOA). NACOA reported to the President and Congress, advised the Secretary of Commerce, and provided analyses, recommendations, annual reports, and special studies on virtually every aspect of ocean policy. NACOA ceased meeting in the late 1980s, due primarily to lack of political support. Nevertheless, the need it fulfilled is more imperative than ever. To adequately represent the full spectrum of national interests, the National Ocean Council and the Assistant to the President will need input from a variety of interested groups and individuals from outside the federal government.

Recommendation 4-5. A Presidential Council of Advisors on Ocean Policy, a formal structure for input from nonfederal individuals and organizations, should advise the President on ocean and coastal policy matters.

The Presidential Council of Advisors on Ocean Policy should be:

- *composed of a representative selection of individuals appointed by the President, to include governors of coastal states, other appropriate state, territorial, tribal and local government representatives, and individuals from the private sector, research and education communities, nongovernmental organizations, watersbed organizations and other nonfederal bodies with ocean interests.*
- *comprised of members knowledgeable about and experienced in ocean and coastal issues.*
- *co-chaired by the chair of the National Ocean Council and a nonfederal member.*

Other Needed Elements

Office of Ocean Policy

Because the National Ocean Council will be responsible for planning and coordination rather than operational duties, and because its cabinet-level members are unlikely to meet more than a few times a year, the support of a small staff and committees will be required to carry out its functions and associated daily activities. It is

important for strong links to be maintained among the National Ocean Council, its committees, other relevant entities in the Executive Office of the President, as well as among other ocean-related advisory councils and commissions. (All the elements of the proposed national coordinating structure are illustrated in Figure 4.2.)

Recommendation 4-6. Congress should establish an Office of Ocean Policy to support the Assistant to the President, the National Ocean Council (NOC), and the Presidential Council of Advisors on Ocean Policy. To provide staff support immediately, the President should establish an Office of Ocean Policy through the Executive Order creating the NOC and the Presidential Council of Advisors on Ocean Policy.

The Office of Ocean Policy should be:

- *composed of a small staff that reports to the Assistant to the President.*
- *managed by an executive director responsible for daily staff activities.*

Committee on Ocean Science, Education, Technology, and Operations

A committee under the National Ocean Council will be needed to assume the functions of the current National Ocean Research Leadership Council (NORLC), plus additional responsibilities. The NORLC is an important existing attempt at government coordination in one area. It was established by Congress in 1997 as the decision-making body for the National Oceanographic Partnership Program (NOPP) in an effort to provide coordination and leadership of oceanographic research programs on the national level. In addition to the NORLC, NOPP includes a Program Office, an Ocean Research Advisory Panel, an Interagency Working Group, a Federal Oceanographic Facilities Committee, and an ocean observing office (Ocean.US).

NOPP has had difficulty fulfilling the original vision of the National Oceanographic Partnership Act, due largely to the NORLC's lack of authority to ensure active participation by federal agencies. By placing the NORLC under the National Ocean Council, renaming it as the Committee on Ocean Science, Education, Technology, and Operations (COSETO), and broadening its responsibilities to include coordination, planning, and oversight of operational programs and education activities in addition to research, it will become more visible and more effective.

Because the Office of Science and Technology Policy (OSTP) plays an important role in government-wide science and technology issues, it is logical for OSTP to work closely with the National Ocean Council on these issues. In particular, a strong connection between OSTP and COSETO will be essential for providing coordinated, high-level advice to the President. The tasks of the existing Joint Subcommittee on Oceans under the National Science and Technology Council, which focus on coordination of ocean science and technology issues in the executive branch, would be appropriately subsumed by COSETO.

Recommendation 4-7. Congress, working with the National Ocean Council (NOC), should amend the National Oceanographic Partnership Act to integrate ocean observing, operations, and education into its marine research mission. A strengthened and enhanced National Ocean Research Leadership Council (NORLC) should be redesignated as the Committee on Ocean Science, Education, Technology, and Operations (COSETO), under the oversight of the NOC.

In particular, amendments to the National Oceanographic Partnership Act should specify that the newly-named COSETO:

- *reports to the NOC.*
- *is chaired by the director of the Office of Science and Technology Policy to ensure appropriate links to government-wide science and technology policy and equity among participating federal agencies.*
- *includes in its mandate coordination and planning of federal marine facilities and operations, federal oversight of the Integrated Ocean Observing System, and coordination of ocean-related education efforts, in addition to its existing research responsibilities.*

- *includes existing NORLC members plus the director of the National Institute of Environmental Health Sciences at the National Institutes of Health, the assistant secretary for Natural Resources and Environment at the Department of Agriculture, and the undersecretary for science at the Smithsonian Institution.*
- *subsumes the current tasks of the National Science and Technology Council's Joint Subcommittee on Oceans.*
- *is supported by the Office of Ocean Policy.*

Committee on Ocean Resource Management

In addition to COSETO, the National Ocean Council will need an equivalent working committee, the Committee on Ocean Resource Management (CORM), to coordinate federal resource management decisions and policy. In general, interagency coordination ranges from simple exchanges of information on a voluntary ad hoc basis, to legally mandated coordination on specific issues such as climate, marine mammals, or habitat conservation.

Examples of formal coordination mechanisms on ocean issues include the Coral Reef Task Force, the Interagency Committee on the Marine Transportation System, the National Dredging Team, Coastal America, and many others. Other formal coordinating bodies address broader issues with important ocean components, such as the National Invasive Species Council and the Joint Subcommittee on Aquaculture. Many of these institutions are discussed in greater detail elsewhere in this report, and most merit continued support. Indeed, additional task forces may be required to address new and emerging uses, such as the coordination of activities in federal waters. However, no high-level, cross-cutting oversight of these many ocean and coastal issue-specific efforts currently exists, limiting the federal government's consideration of cumulative impacts, conflicting mandates, and an ecosystem-based management approach.

Because of the Council on Environmental Quality's role in environmental and resource management issues, this office, like the Office of Science and Technology Policy, should have a strong connection with the National Ocean Council.

Recommendation 4-8. The National Ocean Council (NOC) should establish a Committee on Ocean Resource Management to better integrate the resource management activities of ocean-related agencies. This committee should oversee and coordinate the work of existing ocean and coastal interagency groups and less formal efforts, recommend the creation of new topical task forces as needed, and coordinate with government-wide environmental and natural resource efforts that have important ocean components.

The Committee on Ocean Resource Management should:

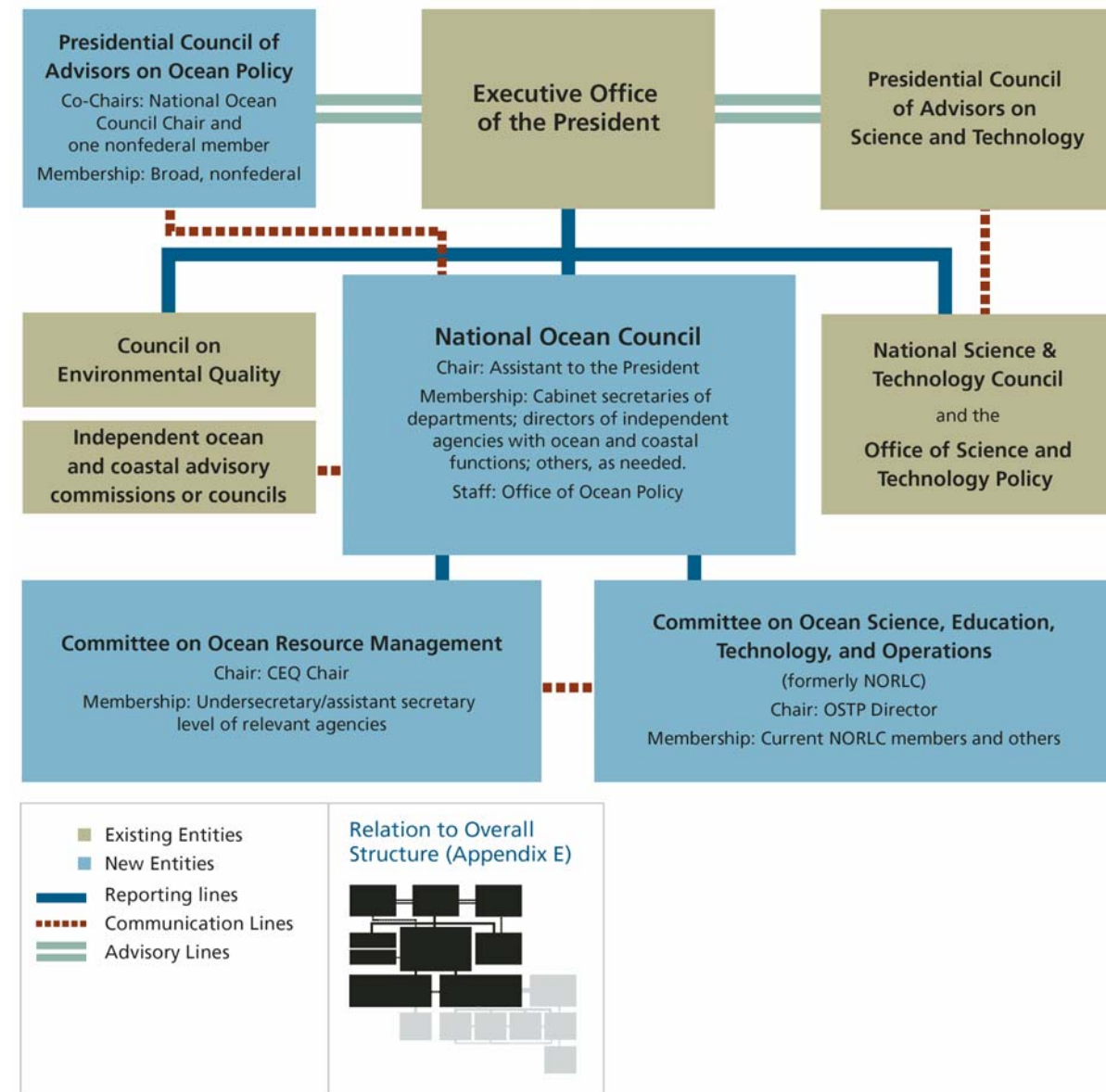
- *be chaired by the chair of the Council on Environmental Quality to ensure appropriate links to government-wide environmental policy and equity among participating federal agencies.*
- *include undersecretaries and assistant secretaries of departments and agencies that are members of the NOC.*
- *report to the NOC.*
- *be supported by the Office of Ocean Policy.*

Ocean-related Advisory Councils or Commissions

In addition to the interagency coordinating groups discussed above, a number of independent ocean-related councils and commissions have been established by law (Appendix D). Some are no longer operational, such as NACOA, while others maintain active roles, like the Marine Mammal Commission. Strong connections will be needed between all existing bodies and the National Ocean Council.

Recommendation 4-9. The National Ocean Council (NOC) should review all existing ocean-related councils and commissions and make recommendations about their ongoing utility, reporting structure, and connections with the NOC.

Figure 4.2. Proposed Structure for the Coordination of Federal Ocean Activities



Shown here are the institutional components that should be established in the Executive Office of the President (EOP) to improve federal leadership and coordination of the nation's oceans and coasts. This diagram also illustrates the organizational relationship between these new components and existing units in the EOP. The new and existing components located under the Committee on Ocean Science, Education, Technology, and Operations (shown in grey in the inset) are discussed in Chapters 8 and 25.

MAKING IMPROVEMENTS AT THE REGIONAL LEVEL

In addition to improving coordination at the national level, an important component of the new National Ocean Policy Framework is the strengthening of regional approaches that allow decision makers to address issues across jurisdictional lines. Further discussion about the need for a regional approach and the value of regional ocean councils is presented in Chapter 5.

Although regional ocean councils must be established in a flexible, voluntary, grassroots way by state and local participants, the National Ocean Council can help by providing a mechanism for participants to come together at the regional level. With its broad interests and high-level visibility, the National Ocean Council will be in a good position to facilitate the process of developing regional councils.

Recommendation 4-10. The National Ocean Council should work with Congress, the Presidential Council of Advisors on Ocean Policy, and state, territorial, tribal, and local leaders, including representatives from the private sector, nongovernmental organizations and academia, to develop a flexible and voluntary process for the creation of regional ocean councils.

The creation of regional ocean councils will undoubtedly be challenging. Regions vary greatly in their level of coordination, interest, and expertise. For this reason, efforts should be encouraged immediately in regions where readiness and support for a regional approach is already strong. The first councils can then serve as pilot projects, allowing those involved to learn what works in the region, building support to fully implement a regional ocean council, and paving the way for subsequent councils in other regions.

While the process of planning, organizing, and testing regional ocean councils is underway, federal agencies can begin to improve their own regional coordination and provide stronger institutional, technical, and financial support for regional issues. Currently, the activities of federal agencies with ocean and coastal responsibilities often overlap, conflict, or are inconsistent with one another at the regional and state levels. For example, navigation projects, highway development, and other federal infrastructure activities often conflict with environmental protection goals. Several federal agencies oversee habitat protection and restoration programs within the same region, but in isolation from one another. And federal agency regulations and permit requirements are typically applied on a project-by-project basis, without adequate consideration of the cumulative effect of these decisions on ocean and coastal ecosystems. The National Ocean Council's responsibility to examine ocean-related statutory and regulatory redundancies, resolve conflicts, and fill gaps will help clarify and rationalize regulatory guidance within the regions. But structural changes may also be needed.

Several federal agencies already divide their nationwide operations and management responsibilities along regional lines (Figure 4.3). For example, the U.S. Environmental Protection Agency (EPA) has ten regional offices throughout the nation, mapped along state lines. The seven regions of the U.S. Fish and Wildlife Service are also based on state lines, but differ from the states included in EPA's regions. NOAA's National Marine Fisheries Service has six regional offices. And the U.S. Army Corps of Engineers is organized into eight regions defined by the boundaries of watersheds, not state lines. The structures and functions of regional offices also differ among agencies, with some offices possessing more independence and authority than others. In some cases, regional offices have not had strong ties to their agencies' national management, and it is common for the regional office of one agency to operate in isolation from the corresponding regional offices of other agencies. The current structure hinders the ability of federal agencies with ocean- and coastal-related responsibilities to effectively interact on a regional basis with each other and with state, territorial, tribal, and local entities.

Figure 4.3. Alignment of Federal Regions is Essential for Communication

Shown above are the existing regional management areas for three federal agencies. Because these areas do not coincide, it is difficult for the agencies to coordinate and communicate over issues of common concern. Furthermore, this lack of coordination impedes their ability to effectively interact with regional, state, territorial, tribal, and local entities on a regional basis.

Recommendation 4-11. The President, through an Executive Order, should direct federal agencies with ocean- and coastal-related functions to immediately improve their regional coordination, as a precursor to reorganization around common regional boundaries and the eventual establishment of regional ocean councils.

As part of this process, federal agencies should:

- *collaborate with regional, state, territorial, tribal, and local governments and nongovernmental parties.*
- *identify major issues of concern in each region and, where possible, reconcile inconsistencies in agency mandates, regulations, practices, and funding that prevent these issues from being effectively addressed.*
- *identify opportunities for better coordination and communication among agencies, including the possible development of interagency protocols to guide regional decision-making.*
- *coordinate funding and grants to target major issues of concern in each region.*
- *maintain a strong connection with the National Ocean Council and suggest needed administrative or legislative changes to improve federal support of regional issues.*

¹ National Research Council. *Striking a Balance: Improving Stewardship of Marine Areas*. Washington, DC: National Academy Press, 1997.

² Pew Oceans Commission. *America's Living Oceans: Charting a Course for Sea Change. A Report to the Nation—Recommendations for a New Ocean Policy*. Washington, DC, 2003.

³ United Nations. *Report of the World Summit on Sustainable Development*. Johannesburg, South Africa, August 26–September 4, 2002. New York, NY, 2002.

CHAPTER 5: ADVANCING A REGIONAL APPROACH

The nation's ocean and coastal resources are affected by the cumulative impacts of human activities that span cities, counties, states, and sometimes nations. To move toward an ecosystem-based management approach, federal, state, territorial, tribal, and local governments should be able to respond to ocean and coastal issues in a coordinated fashion across jurisdictional boundaries. The voluntary establishment of regional ocean councils, developed through a process supported by the National Ocean Council, would facilitate the development of regional goals and priorities, improve responses to regional issues, and enhance coordination of federal and state planning and management activities on a regional basis. In addition, to meet the information needs of decision makers, regional ocean information programs are needed to develop and disseminate regionally significant research and information.

ADDRESSING ISSUES CROSSING JURISDICTIONAL LINES

Even though many pressing ocean and coastal issues take place on a regional scale, today's governance system is not designed to cross traditional political boundaries. Governments rarely consider impacts outside their immediate jurisdiction, although these borders seldom correspond with ecosystem boundaries. In addition, individual agency mandates are often too narrow in scope, sector-based, and poorly coordinated to address regional issues. Finally, broadly accepted regional goals—whether social, economic, or environmental—are not available to measure progress.

Despite these challenges, there are many instances where concern for the health of a particular ecosystem has motivated a wide range of participants to create new structures for addressing regional concerns. For example, the declining health of the Chesapeake Bay triggered a significant initiative by federal agencies, state and local governments, nongovernmental organizations, and other stakeholders to address the region's water quality and living resource problems. In the Pacific Northwest, a similar mix of governmental and nongovernmental entities have come together to reverse the decline in endangered salmon stocks. Efforts to address the growing hypoxic zone in the Gulf of Mexico have brought together several Gulf states, as well as states throughout the Mississippi River Basin. Likewise, U.S. island states and territories are collaborating to develop strategies to protect and preserve coral reef ecosystems. As these examples illustrate, regional efforts are usually initiated at the grassroots level in response to pressing, shared concerns.

However, there is a growing awareness that such regional approaches can benefit the health and productivity of all the nation's ocean and coastal regions. Focusing efforts within ecosystems, rather than political boundaries provides an opportunity for decision makers at all levels to coordinate their activities, reduce duplication of efforts, minimize conflicts, and maximize limited resources. It also promotes a sense of stewardship among government, private interests, and the public by encouraging a sense of connection with a specific area.

FACILITATING REGIONAL ORGANIZATION

Chapter 4 discussed the need for federal agencies to improve their coordination at both national and regional levels. Although this is important, the federal government is only one actor—and often not the most important actor—at regional, state, and local levels. As a result, one element of the U.S. Commission on Ocean Policy’s proposed National Ocean Policy Framework is the development of improved mechanisms to encourage a wide range of participants (including state, territorial, tribal, and local leaders, and leaders from the private sector, nongovernmental organizations, and academia) to join forces in addressing issues of regional concern, realizing regional opportunities, and identifying regional goals. Such regional bodies would also provide a visible point of contact for federal agencies to communicate and coordinate with state and local decision makers.

A Flexible Process

Although regional processes should be initiated by those involved, rather than mandated at the federal level, broad national guidelines can facilitate the process and ensure consistency across regions. As discussed in Recommendation 4-10, the development of a flexible process to guide the voluntary creation of regional ocean councils will be a key function of the National Ocean Council, working with a wide range of other participants. A flexible approach will be necessary to meet the needs of the different regions, which vary dramatically in their environmental, political, social, and economic characteristics.

Recommendation 5-1. State, territorial, tribal, and local governments and nongovernmental participants should use the broad, flexible process developed through the National Ocean Council to begin the establishment of regional ocean councils.

The creation of regional ocean councils will be a complex and challenging endeavor. It should begin as soon as possible in those regions where readiness and support for a regional approach is already strong. The first councils can then serve as pilot projects, allowing everyone to learn what works and building support for broader implementation of regional ocean councils. Once established, regional ocean councils will most likely evolve, as participants identify the structure and functions that best suit their needs.

As the establishment of regional ocean councils gets underway, critical regional issues may arise that require immediate attention. In the absence of a regional ocean council, the National Ocean Council may convene ad hoc regional committees to make recommendations for addressing these issues. Once established, regional ocean councils will benefit from ongoing guidance, support, and interaction with the National Ocean Council.

Regional ocean councils, when voluntarily established under the process set forth by the National Ocean Council, may perform some or all of the following functions:

- designating ad hoc subcommittees to examine issues of regional concern.
- mediating and resolving disputes among entities within the region.
- developing more formal mechanisms for implementing decisions, such as interagency agreements, interstate compacts, or limited waivers of regulatory requirements.
- monitoring and evaluating the state of the region and the effectiveness of management efforts.
- building public awareness about regional ocean and coastal issues.
- facilitating required government approvals or permitting processes that involve several federal, state, and local government agencies within the region.

Regional ocean councils are not intended to supplant the functions or authority of any existing regional entity, such as regional fishery management councils. Rather, they will complement and enhance the effectiveness of current initiatives and provide guidance and support for future ones. Regional ocean councils will help ensure that issue-specific initiatives (such as regional dredging teams) and subregional initiatives (such as the Chesapeake Bay Program, the Florida Everglades restoration effort, or the CALFED Bay-Delta program) are carried out in harmony with one another and in a way that achieves larger regional goals.

Regional ocean councils will also have a role in helping ensure that offshore activities are planned and managed in an ecosystem-based context. Regional ocean councils should provide input to Congress during development of a coordinated offshore management regime. In particular, the councils will be important for engaging stakeholders in the design and implementation of marine protected areas. (Management of offshore uses, including the role of marine protected areas, is discussed in greater detail in Chapter 6.) Regional ocean councils will need to work with upstream decision makers outside their region on issues such as nonpoint source pollution. And in certain regions, including the Great Lakes, New England, the Pacific Northwest, and U.S. island territories, regional ocean councils may also need to work closely with other nations.

Regional Boundaries

Regional ocean councils should encompass relatively large areas with similar ecosystem features. Membership should include the many entities that participate in the management of activities within these areas. At a minimum, the boundaries of each regional ocean council should encompass the area from the inland extent of coastal watersheds to the offshore boundary of the nation's exclusive economic zone. The boundaries of the Regional Fishery Management Councils (RFMCs) may be used as a starting point in the process of developing each council, although these regions may not always be suitable. For example, more than one regional ocean council may be necessary along the Pacific Coast where there is only one RFMC. A regional ocean council for the Great Lakes region is also desirable.

ENHANCING REGIONAL RESEARCH AND INFORMATION

Decision makers at all levels need the best available science, information, tools, and technology on which to base ocean and coastal management decisions. However, research targeted at regional concerns, such as the origins and impacts of nonpoint source pollution or the practical application of ecosystem-based management, is severely limited. Furthermore, the data that do exist are rarely translated into products that will be useful to managers.

A 2002 National Research Council report concluded that there is insufficient support for regional research, due primarily to a mismatch between the size and complexity of marine ecosystems and the fragmented authority for coastal research.¹ New programs are needed to fill these gaps and provide support for regional management by federal agencies and by the state, territorial, tribal, and local participants in the regional ocean council process.

Recommendation 5-2. Congress should establish regional ocean information programs to improve coordination and set regional priorities for research, data collection, science-based information products, and outreach activities in support of improved ocean and coastal management. Program priorities should be carried out primarily through a grants process.

Regional ocean information programs:

- *should be developed immediately, independent from the voluntary and potentially more complicated process of establishing regional ocean councils.*
- *may be subsumed within the regional ocean council structure, where regional ocean councils are established.*

Functions of the Regional Ocean Information Programs

Research

The regional nature of ecosystem processes calls for improved regional-scale research programs. Regional phenomena such as the transport of nutrients, toxic chemicals, and pathogens through coastal watersheds, the cumulative impacts of development on coastal habitat and water quality, socioeconomic trends in coastal areas, and the potential for new beneficial uses are poorly understood, often due to institutional barriers in undertaking comprehensive research efforts. A report prepared by state-level coastal resource managers found that scientific information is required over spatial scales beyond state jurisdiction, at a level of effort beyond the ability of states to support, and over time scales longer than state governments generally act.² The regional ocean information programs will help fill the gaps in current research to increase the understanding of ocean and coastal ecosystems.

Data Collection and Observations

Substantial efforts have been focused on the design and implementation of a nationwide network of regional ocean observing systems. These regional ocean observing systems will form the backbone of the national Integrated Ocean Observing System (IOOS), which will provide routine and timely information about the ocean and coastal environments to multiple users. The regional ocean information programs should oversee operation of the regional ocean observing systems, ensuring that the design of these systems is based on the needs of user groups while adhering to national standards. Input from the users will be essential in determining which variables should be included as priorities in the development of the IOOS. See Chapter 26 for more information on the IOOS and on the role of regional ocean information programs in coordinating the development of the regional components of the IOOS.

A water quality monitoring network, discussed in Chapter 15, will also be linked to the IOOS to help produce assessments and forecasts of ocean and coastal conditions, as well as conditions farther up the watershed. Together, these observing systems will help determine cause-and-effect relationships between stressors and impacts, facilitate more informed ocean and coastal management decisions, and gauge the effectiveness of these decisions.

Information for Practical Applications

To be useful, data and scientific results must be presented in a manner that is easily understood and applied by decision makers. Such information products are currently developed by a number of entities including the National Oceanic and Atmospheric Administration's (NOAA's) Coastal Services Center, whose purpose is to bring information, services, and technology directly to coastal resource managers. Regional ocean information programs will help translate ongoing regional research and data collection into usable products through partnerships with experts in this area, including the NOAA Coastal Services Center and a proposed new joint NOAA–Navy information program discussed in Chapters 26 and 28.

Outreach and Education for Decision Makers

Notwithstanding the availability of research and data products, decision makers may need education and training to effectively use this information and take full advantage of technological innovations. Since its establishment in 1966, the National Sea Grant College Program has been at the forefront of partnering with academia, government, and the private sector in this type of outreach effort. Sea Grant's well-established extension and communications programs, familiar to many resource managers and others in coastal communities, should be the primary mechanisms for delivering and interpreting information products developed through the regional ocean information programs. Participation by other education and training programs, such as NOAA's Coastal Training Program, will also be important to accomplish the mission of the regional ocean information programs.

Regional Ecosystem Assessments

Assessments of the natural, cultural, and economic attributes of each region, including an inventory of the region's environmental resources and demographic characteristics, would be extremely valuable to decision makers. These assessments could also be used to establish baselines for ocean and coastal ecosystem health, allowing decision makers to analyze the impacts of human activities and management actions. The regional ocean information programs will be ideally suited to undertake such assessments by integrating existing assessments and inventories, identifying additional information needs, and sponsoring research and data collection efforts.

In addition to enhancing decision-making, regional ecosystem assessments would improve the process mandated under the National Environmental Policy Act (NEPA) which requires federal agencies to prepare Environmental Impact Statements (EISs) for proposed major activities. Currently, each agency must conduct an individual assessment of the state of the environment to determine the impact of a proposed activity or related set of activities. The development of a single, scientifically-based regional ecosystem assessment would reduce this duplication of effort and help ensure that every EIS is based on similar, comprehensive, and timely information about the region.

Assessments are also important to evaluate the cumulative impacts over time of many proposed activities. Although guidelines developed by the Council on Environmental Quality (the office responsible for overseeing NEPA implementation) require federal agencies to prepare cumulative impact evaluations for proposed activities, challenges in developing a consistent approach have made it difficult for federal agencies to meet this requirement. A comprehensive and periodically updated regional ecosystem assessment that analyzes the status of the affected region, establishes baselines of ocean and coastal ecosystem health, and describes existing and potential impacts from a range of human activities will enhance decision makers' ability to analyze cumulative impacts.

Recommendation 5-3. Each regional ocean information program, with guidance from the National Ocean Council, should coordinate the development of a regional ecosystem assessment, to be updated periodically.

Recommendation 5-4. The Council on Environmental Quality should revise its National Environmental Policy Act guidelines to require that environmental impact statements for proposed ocean- and coastal-related activities take into account any available regional ecosystem assessments developed under the oversight of the regional ocean information programs.

Administration of the Regional Ocean Information Programs

Oversight boards will be needed to administer the regional ocean information programs. Each regional board should be comprised of both information providers and users from federal agencies, states, nongovernmental organizations, academia, and private companies. Unlike the voluntary regional ocean councils, which will determine their own boundaries over time, fixed boundaries are needed upfront for the regional ocean information programs. The following regions indicate the spatial scale on which regional ocean information programs should be developed:

- *Alaska*
- *Insular Pacific* (Hawaii, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands)
- *Northwest* (Washington, Oregon, and California to north of Point Arena)
- *Central West Coast* (California from Point Arena to Point Conception)

- *Southern California* (California from Point Conception to the Mexican border)
- *Gulf of Mexico* (Texas, Louisiana, Mississippi, Alabama, and Florida's Gulf coast)
- *Southeast* (Florida's Atlantic coast including the Florida Keys, Puerto Rico, the U.S. Virgin Islands, Georgia, South Carolina, and North Carolina to south of Cape Hatteras)
- *Mid-Atlantic Bight* (North Carolina from Cape Hatteras, Virginia, Maryland, Delaware, Pennsylvania, New Jersey, New York, Connecticut, Rhode Island, and Massachusetts to south of Cape Cod)
- *Gulf of Maine* (Massachusetts from Cape Cod, New Hampshire, and Maine)
- *Great Lakes* (Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania, and Wisconsin)

Each regional ocean information program should collaborate with other regions or nations as needed to investigate issues that transcend program boundaries. Representatives from all the regional programs should meet at least once a year to ensure that information is exchanged, regional observing systems share common design features and data protocols, and research results are widely disseminated.

Recommendation 5-5. Congress should establish regional boards to administer regional ocean information programs throughout the nation. Program priorities should be carried out primarily through a grants process.

Each regional board should:

- *be comprised of federal agency representatives, representatives from each state in the region, and a Sea Grant Director from at least one state in the region. Each board should also have territorial, tribal, local, and other stakeholder representation.*
- *develop a comprehensive plan for regional research, data collection, information product development, and outreach based on regional information needs and priorities, and submit the plan to the National Ocean Council for approval.*
- *solicit proposals to carry out elements of the approved regional plan, and distribute funds to government, academic, private, or other groups selected through an open and competitive process.*
- *oversee the regional ocean observing systems to fulfill the data collection requirements of regional plans while adhering to national Integrate Ocean Observing System requirements.*
- *ensure that product development, dissemination, and user feedback are integral components of the regional observing systems.*

Recommendation 5-6. The National Ocean Council (NOC) should ensure that adequate support is provided for the operation of regional ocean information programs.

Funding should come from these sources:

- *the Integrated Ocean Observing System (IOOS) budget should support the regional ocean observing systems. IOOS funds should be appropriated to the National Oceanic and Atmospheric Administration, with spending subject to approval by the NOC as discussed in Chapter 26. Because of their operational nature, regional ocean observing systems should receive long-term, multi-year funding to achieve stability.*
- *a comparable amount of support needed to carry out the other research and communication functions of the regional programs should come from coordinated contributions from federal agencies and new funds described in Chapter 30.*

¹ National Research Council. *Bridging Boundaries through Regional Marine Research*. Washington, DC: National Academy Press, 2002.

² Keeley, D., et al. "More Effectively Using Our Observing, Monitoring, Research, and Education Infrastructure." Paper prepared for the California and the World Ocean Conference, Santa Barbara, CA, October 2002.

CHAPTER 6: COORDINATING MANAGEMENT IN FEDERAL WATERS

Federal waters provide vast opportunities to build the nation's economy, enhance our quality of life, and increase knowledge about the workings of nature. Converging economic, technological, demographic, and other factors make federal waters an increasingly attractive place for new enterprises seeking to tap the ocean's resources, as well as for the continuation and expansion of traditional uses. The challenge for policy makers will be to unlock the ocean's potential while minimizing conflicts among users, safeguarding human and marine health, and fulfilling the federal government's obligation to manage public resources for the maximum long-term benefit of the entire nation. While legal, policy, and institutional frameworks exist for managing some ocean uses, there remain increasingly unacceptable gaps. The nation needs a coordinated offshore management regime that encompasses traditional and emerging uses and is adaptable enough to incorporate uses not yet clearly foreseen.

MEETING GROWING NEEDS

An important task for the new National Ocean Policy Framework is to improve the ability of the federal government to manage the growing number of activities taking place or being proposed in federal waters. This area, which extends from 3 to 200 nautical miles offshore, contains an enormous diversity of resources, many of which are used or affected by human activities. Within federal waters, the United States has sovereign rights for the purpose of exploring, exploiting, conserving, and managing the living and nonliving natural resources of the seabed and subsoil and the surface and subsurface of the waters. The federal government also has jurisdiction over the establishment and use of artificial structures, islands, and installations that have economic purposes, and the protection and preservation of the ocean environment. Associated with these authorities is the federal government's responsibility to ensure that ocean activities are managed for the benefit of the public.

In decades past, nearshore areas held certain inherent advantages for human activities—the waters tend to be shallower, logistics simpler, and costs lower. Increasingly, however, these advantages are shrinking. Nearshore waters are now crowded with competing users whose ranks are steadily augmented by surging coastal populations. There is also considerable public opposition to certain activities when conducted close to shore, such as those that involve the use of heavy equipment or disrupt scenic views. In addition, technological advances and an evolving scientific understanding of the ocean have made activities in offshore areas more feasible and economical than in the past.

For these reasons, interest in the use of federal waters is growing and activities farther offshore are expected to multiply. In many instances, these activities are mutually compatible and can take place in the same approximate area without problems. But in other instances, uses conflict with and can disrupt one another. While later chapters discuss many specific offshore activities, including fisheries (Chapter 19), aquaculture (Chapter 22), bioprospecting (Chapter 23), development of offshore energy and mineral resources (Chapter

24), and others, the focus of this chapter is the overarching offshore management regime that will be needed to coordinate all these activities and more—an important part of moving toward an ecosystem-based management approach.

An offshore management regime should embody strong principles and robust coordination for all ocean uses while recognizing the particular needs and challenges associated with each individual use. It must be able to address the needs of the ecosystem—including human needs—by prioritizing uses, minimizing conflicts, protecting resources, and ensuring that uses are compatible. It should also strike a balance between long-term and short-term strategies. For example, a legislative remedy may be warranted to address immediate concerns about one ocean activity, but the legislation should leave room to incorporate the activity within a broader, developing regime.

Any new offshore management regime should be grounded in the principles set forth in this report. For example, the nation should not wait until technologies are fully developed or scientific information is complete to establish mechanisms for managing new ocean uses. Instead, policy makers should proceed judiciously and responsibly to prepare for new uses, and to establish proactive means for identifying and remedying any negative impacts. Creating a coherent and coordinated management regime will make it easier for governments at all levels to protect the public interest and for private interests to make informed decisions.

One of the biggest obstacles to improving management of offshore resources is inadequate scientific understanding of how ecosystems function and how to evaluate the cumulative impacts of activities over time. Regional ecosystem assessments, as recommended in Chapter 5, provide a vehicle to comprehensively and periodically analyze the status of an ocean region, establish baselines for ocean ecosystem health, and describe existing or potential impacts from human activities. These assessments, coupled with a strong commitment to furthering scientific understanding of ecosystems and their components, would dramatically enhance the effectiveness of offshore management.

CLARIFYING OFFSHORE RESPONSIBILITIES

Numerous federal agencies are involved in managing offshore activities. Some activities, such as fishing or offshore oil and gas development, are governed according to well-developed regulatory regimes established in accordance with specific legislative mandates. Other activities, such as offshore aquaculture, are subject to regulation by a number of federal agencies executing varying responsibilities, but are not addressed by any comprehensive federal law. For emerging ocean uses, such as wind energy development, authorities and responsibilities remain dispersed and unclear.

The array of agency responsibilities and lack of coordination result in confusion that can create roadblocks to public participation, discourage private investment, cause harmful delays, and generate unnecessary costs. This is particularly true for new uses, for which federal agency responsibilities are scattered and ill defined and the decision making process is unclear. Without an understandable, streamlined, and broadly accepted method for reviewing a proposed activity, reactive, ad hoc management approaches will continue, perpetuating uncertainty and raising questions about the comprehensiveness and legitimacy of decisions.

Recommendation 6–1. Congress, working with the National Ocean Council (NOC), should ensure that each current and foreseeable use of federal waters is administered by a lead federal agency. The lead agency should coordinate with other federal agencies with applicable authorities and ensure full consideration of the public interest. Pending congressional action, the National Ocean Council should designate interim lead agencies to coordinate research, assessment, and monitoring of new offshore activities.

Swimming through Hoops: Establishing an Offshore Aquaculture Facility

The growing interest in offshore aquaculture offers an excellent example of how confusing and overlapping agency responsibilities create difficulties. As more entrepreneurs pursue this enterprise, they find they must cross several bureaucratic hurdles at the federal and state levels, often with little guidance from the agencies on what is needed, from whom, and when.

At the federal level, at least five agencies must be consulted or grant permits before an aquaculture facility can proceed:

- The Rivers and Harbors Act authorizes the U.S. Army Corps of Engineers to require permits for any device attached to the seafloor that poses a threat to navigation.
- The U.S. Coast Guard is responsible for marking potential obstructions to safe navigation.
- The Clean Water Act authorizes the U.S. Environmental Protection Agency (EPA) to require a National Pollutant Discharge Elimination System permit for any facility that discharges a pollutant into U.S. navigable waters or exclusive economic zone (EEZ).
- Although the Magnuson–Stevens Fishery Conservation and Management Act may not have been intended as a mechanism for managing marine aquaculture, NOAA asserts that the harvest of aquaculture species falls under the Act. Therefore, the Regional Fishery Management Councils (RFMCs) may develop management measures for aquaculture in offshore waters and the National Marine Fisheries Service (NMFS) may regulate aquaculture harvest based on such RFMC recommendations. In addition, NMFS, under the Endangered Species Act, must review aquaculture applications for any potential impacts on endangered species or marine mammals.
- In certain circumstances, the U.S. Fish and Wildlife Service may also review aquaculture applications for their impacts on endangered species or marine mammals, or other activities under its jurisdiction.

At the state level, each jurisdiction has its own procedures, with no uniformity among states. In fact, continuity is sometimes lacking even within a single state—one applicant may start the process with the state environmental protection office, another may start with the state marine fisheries agency, and a third may start with the state agricultural office.

Each of the federal and state offices may require a separate application, although much of the information required is exactly the same. Rarely do these offices coordinate with each other, and the application may be stopped at any stage. A more coordinated and consistent regime is needed to provide greater protections for the ocean environment, as well as to lessen unnecessary bureaucratic burdens on applicants.

ESTABLISHING A COORDINATED OFFSHORE MANAGEMENT REGIME

There are essentially two categories of ocean uses. Some activities are confined to a specific location, often requiring an offshore structure such as an oil rig, a wind turbine, or an aquaculture pen. Other activities, such as fishing or recreation, are more diffuse, taking place within broad, flexible areas. To begin moving toward an ecosystem-based management approach, the federal government should develop a better understanding of offshore areas and their resources, prioritize uses, and ensure that activities in a given area are compatible.

Where a proposed activity will occupy a certain space to the exclusion of other uses, it is the federal government's responsibility to determine where the activity can take place, by whom, in what manner, and for what length of time. But these decisions should not be made in isolation: the agency administering the siting of aquaculture facilities, for example, must be aware of actions taken by another agency permitting offshore power generation facilities. As the pressure for offshore uses grows, and before serious conflicts arise, coordination should be immediately improved among single-activity management programs that regulate

location-dependent activities. The National Ocean Council should review all such single-purpose ocean programs that regulate offshore activities with the goal of determining how such programs may be better coordinated.

However, to truly move toward an ecosystem-based management approach, coordination of *all* offshore activities is necessary—including those that are not tied to a specific geographic location. The new offshore management regime will also need to make sure that disputes are resolved and decisions made through an open process accepted by all parties.

Building a coordinated offshore management regime will take time. It will not be easy. No regime for governing ocean activities will eliminate all conflict, given the complexity of the problems and the diverse perspectives of competing interests. However, the National Ocean Council, Presidential Council of Advisors on Ocean Policy, regional ocean councils, and other components of the National Ocean Policy Framework provide the basis for more coordinated, participatory management of ocean activities. It provides the opportunity—one perhaps long overdue—for a larger federal-regional-state-stakeholders dialogue among stakeholders at the federal, regional, and state levels on a more coordinated and planned approach to the uses of and activities in offshore areas.

A Fair Return for the Use of Offshore Resources

The management of public resources also generally encompasses issues of public compensation. Specifically, economists refer to the economic value derived from a natural resource as *resource rent*. In the ocean, a natural resource may be an area, a space, a living or a nonliving resource. When publicly-owned and made available to the private sector, fairness and efficiency argue for a return of some portion of the rent received from the use or development of that resource to the public. This principle has been clearly established on land, where the government collects rents from ranchers through grazing fees and from timber and mining companies through royalties. The government also collects revenues from outer Continental Shelf oil and natural gas operations in the form of bonuses and royalties. In keeping with this principle, the public should also receive some return when private entities are allowed to use ocean space and other resources.

Recommendation 6-2. Congress, working with the National Ocean Council and regional ocean councils, should establish a coordinated, ecosystem-based offshore management regime that sets forth guiding principles for the balanced coordination of all offshore uses. It should recognize the need, where appropriate, for single-purpose ocean governance structures that are comprehensive and fully integrated with and based on the principles of the new offshore management regime. The regime should also include a process for planning for new and emerging activities and a policy that a reasonable portion of the resource rent derived from such activities is returned to the public.

EMPLOYING MARINE PROTECTED AREAS AS A MANAGEMENT TOOL

Marine protected areas are one type of management tool the federal government can employ for locations and resources in estuarine, nearshore, and offshore areas in need of protection. A broad umbrella term, marine protected areas are created for many different reasons, including conserving living marine resources and habitat, protecting endangered or threatened species, maintaining biological diversity, and preserving historically or culturally important submerged archeological resources. These areas have also been recognized for their scientific, recreational, and educational values.

Marine protected areas can vary from restricting all activities to limiting only some uses. Examples of activities that might be restricted include oil and gas exploration and production, dredging, dumping, certain types of vessel traffic, fishing, and placing structures on the seabed. Marine protected areas can be set aside permanently or temporarily and can be implemented either seasonally or year-round. Even within a marine

protected area, a particular activity may be allowed in one part of the area but not in others. Marine protected areas can be established and managed by a variety of agencies at the federal, state, territorial, tribal, and local levels, pursuant to a number of authorities.

Federal Efforts

The National Oceanic and Atmospheric Administration (NOAA) is authorized to develop and implement marine protected areas through several programs. NOAA manages thirteen marine protected areas as part of its National Marine Sanctuaries Program, and administers the National Estuarine Research Reserve System, which is made up of a network of twenty-six protected estuarine areas. The agency also manages a variety of fishery zones and area closures to protect critical habitat for threatened or endangered species.

The Department of the Interior (DOI), through the National Park Service (NPS) and the U.S. Fish and Wildlife Service (USFWS), is also authorized to create and manage marine protected areas. NPS manages the National Park System, which includes national parks, monuments, and preserves in ocean areas, as well as ten areas designated as national seashores on the Atlantic, Gulf, and Pacific coasts, and four national lakeshores along the Great Lakes coastline. USFWS manages the National Wildlife Refuge System, which includes more than 500 wildlife refuges, many of which are located in ocean and coastal areas. USFWS also manages critical habitat for endangered and threatened species that fall under its statutory responsibilities.

In 2000, an Executive Order on Marine Protected Areas directed NOAA and DOI to establish a Marine Protected Area Center. The Center is charged with developing a framework for a national system of marine protected areas and providing federal, state, territorial, tribal, and local governments with information, tools, and strategies for effectively designing and managing such areas. The Marine Protected Area Center has made progress in improving coordination and working to establish a national system of marine protected areas; however, further consolidation of the many related federal programs may be needed. Simplifying the multiplicity of marine protected area management regimes can lessen confusion, foster stewardship, and enhance enforcement. (Federal marine protected area programs are summarized in Appendix D.)

The Role of Marine Protected Areas

Marine protected areas are important tools for ecosystem-based management, although they will not in and of themselves deliver long-term sustainable use of the oceans. Other pressing problems will continue to require attention, including resource use outside protected areas, point and nonpoint source pollution, and intensive coastal development. For this reason, marine protected areas are most effective when they are designed within the broader context of regional ecosystem planning and adaptive management, and when they are employed in conjunction with other management tools.

When a marine protected area is determined to be the best approach for addressing ecosystem goals in a particular area, its design must take a number of factors into consideration. These factors include local, state, regional, and national objectives, ecosystem characteristics and threats, competing uses within the targeted area, ecological and socioeconomic impacts, and the capacity for effective implementation and enforcement of the protected area. Marine protected areas must also be designed using the best available scientific information to ensure that their establishment is likely to meet the intended objectives. Monitoring, periodic assessment, and modification are also essential to ensure the continuing effectiveness of marine protected areas.

Although at times controversial, appropriately designed and implemented marine protected areas have proven useful. A 2001 report by the National Research Council concluded that marine protected areas can be effective in maintaining marine biological diversity and protecting habitats and have the potential to provide a flexible, spatially-based management framework for addressing multiple ecological and socioeconomic

objectives.¹ The report stated that, in particular, closing certain areas to fishing—temporarily, seasonally, or permanently—can advance sustainable fisheries management and provide insurance against uncertainties in fisheries science. Nevertheless, design and implementation of marine protected areas, like any other marine resource management measure, must be considered in the context of broader planning and implementation of a coordinated regime.

Sunken Treasures: Preserving Historic Artifacts

A number of marine sanctuaries, national and state parks, and national historic monuments have been established to protect shipwrecks and other submerged cultural resources. At least 50,000 shipwrecks are scattered about the territorial waters and exclusive economic zone of the United States. Many hold considerable historic, archeological, recreational, and financial value.

Commercial salvors have used traditional admiralty law to justify their right to locate, recover, and remove objects of value from shipwrecks. However, many archeologists argue that historic shipwrecks and other submerged sites, as well as the material recovered from them, are part of the nation’s collective heritage, and the sale of artifacts deprives the public of important historical, cultural, and educational assets. While laws are in place to address conflicts about ownership and management of submerged cultural resources, they have been implemented with only modest success. A coordinated offshore management regime needs to recognize the potential importance of some of these sites and should consider preserving them for future generations by establishing protected areas when necessary.

National Interests

It is appropriate for marine protected areas to be designed and implemented with strong input from the regional and local levels. However, because marine protected areas have the potential to affect issues of national concern, such as freedom of navigation, there will always be a need for national-level oversight. With its multiple use, ecosystem-based perspective, the National Ocean Council is the appropriate entity for overseeing the development of a uniform process to design and implement marine protected areas.

The design of marine protected areas should not unreasonably limit important national interests, such as international trade, national security, recreation, clean energy, economic development, and scientific research. For example, in most cases freedom of navigation through marine protected areas should not be restricted. However, where some infringement on such national interests is deemed essential to achieving the purposes of a marine protected area, restrictions should be based on sound science, with a plan for ongoing monitoring and modifications over time. The overall ecological and socioeconomic impacts of marine protected areas should also be evaluated at the national level.

Recommendation 6–3. The National Ocean Council should develop national goals and guidelines leading to a uniform process for the effective design and implementation of marine protected areas.

The process should include the following:

- *marine protected area designations that are based on the best available scientific information to ensure that an area is appropriate for its intended purpose.*
- *periodic assessment, monitoring, and modification to ensure continuing ecological and socioeconomic effectiveness of marine protected areas.*
- *design and implementation that consider issues of national importance, such as freedom of navigation, and are conducted in the context of a comprehensive offshore management regime.*

Regional and Local Stakeholders

Part of the controversy surrounding marine protected areas stems from the impacts their restrictions can have on stakeholders. While some stakeholders recognize the benefits of creating such areas, others vigorously oppose the limitations on otherwise legal ocean uses. When designing and implementing a marine protected area, it is important to engage all regional and local stakeholders to build support for the proposed protected area and to ensure compliance with any restrictions it may impose.

Because marine protected areas are used to accomplish a broad range of objectives and have different meanings for different people, it is imperative that each proposed area has clearly defined regional goals and objectives that are consistent with national goals and guidelines. Regional ocean councils, or other appropriate state and local entities, can provide a forum for applying the uniform process developed by the National Ocean Council to design and implement marine protected areas. They can also facilitate public discussion of the trade-offs inherent in their implementation. Well-designed scientific studies at the design and review stages can assist in the evaluation of the potential impacts of the marine protected area on communities.

Recommendation 6–4. Regional ocean councils, or other appropriate regional entities, should actively solicit stakeholder participation and lead the design and implementation of marine protected areas. The design and implementation should be conducted pursuant to the goals, guidelines, and uniform process developed by the National Ocean Council.

¹ National Research Council. *Marine Protected Areas: Tools for Sustaining Ocean Ecosystems*. Washington, DC: National Academy Press, 2001.

CHAPTER 7:**STRENGTHENING THE FEDERAL AGENCY STRUCTURE**

Although improved coordination is a vital aspect of the new National Ocean Policy Framework, changes to the structure of some federal agencies will also be needed to enable effective implementation of national ocean policy. Immediate strengthening of the National Oceanic and Atmospheric Administration's (NOAA's) ability to carry out its many ocean- and coastal-related responsibilities is critical, to be followed by consolidation, where appropriate, of other agency ocean and coastal programs. Over the long term, more fundamental changes to the federal agency structure should be made to recognize the inextricable connections among the sea, the land, the atmosphere and all living creatures on Earth, including humans. Strengthening the federal agency structure through a phased approach—in combination with improving coordination through the National Ocean Council—will improve agency performance, reduce unnecessary overlap, and significantly enhance the long-term goal of addressing the nation's management of oceans, coasts, and other natural resources through an ecosystem-based management approach.

**REORGANIZING TO SUPPORT AN
ECOSYSTEM-BASED MANAGEMENT APPROACH**

New knowledge about the functioning of ecosystems—and specifically about our ocean and coastal regions—supports the need for fundamental changes in the nation's approach to managing its resources. The benefits of improved coordination at national and regional levels were discussed in Chapters 4 through 6, and a number of recommendations made. But even excellent coordination does not preclude the need to consider reorganization—the new National Ocean Policy Framework contemplates both. The proliferation of federal agencies with some responsibility for ocean and coastal activities (illustrated in Chapter 4, Figure 4.1) strongly suggests that consolidation might improve government performance, reduce unnecessary overlaps, facilitate local, state, and regional interactions with the federal government, and begin to move the nation toward an ecosystem-based management approach.

REVIEWING PREVIOUS REORGANIZATION PROPOSALS

In 1969, the Stratton Commission called for the establishment of a major new independent agency to administer the nation's civil marine and atmospheric programs.¹ Around the same time, the President's Advisory Council on Executive Reorganization (known as the Ash Council) made recommendations for more effective management of all federal programs and agencies.

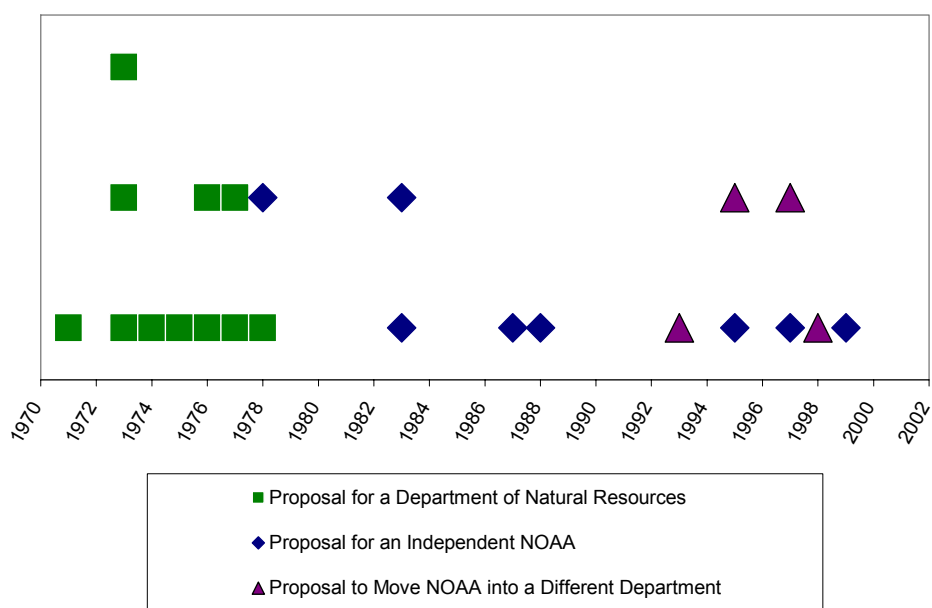
Based on the advice from these two groups, the Nixon administration planned to create an ocean and atmospheric agency and to place it under a new Department of Natural Resources, in which the Department of the Interior and several other agencies were identified as key elements. However, in 1970

the administration decided, largely for political reasons, to establish the National Oceanic and Atmospheric Administration (NOAA) as an agency within the U.S. Department of Commerce (DOC).

Since that time, members of Congress have introduced many reorganization proposals to improve federal management generally, or specifically as it affects oceans and coasts. Two presidential proposals addressed broad reorganization around natural resources, while a national advisory committee on oceans and coasts proposed specific recommendations to improve the federal agency structure in that area. Proposals in the 1970s called for putting NOAA within a broader Department of Natural Resources, while a mix of proposals during the 1980s and 1990s would have either established an independent NOAA or moved parts of the agency to a different department. In the end, largely because of the political complexity associated with any reorganization of executive branch agencies, none of the proposals to reorganize or relocate NOAA was adopted. (Brief summaries of past proposals are included at the end of this chapter and summarized in Figure 7.1.)

Despite past failures to reorganize ocean and coastal programs, the concept of combining federal programs with similar functions remains under active consideration. In its 2003 report, the National Commission on the Public Service (known as the Volcker Commission) concluded that the historical phenomenon of governmental expansion on an issue-by-issue basis has resulted in a “virtually unmanageable tangle of government activities” that negatively affects program performance. That commission emphasized the need to reorganize the federal government “into a limited number of mission-related executive departments.”²²

Figure 7.1. Proposals to Reorganize Federal Ocean Management



Since 1970, there have been over 20 congressional, two presidential, and a number of other proposals by federal advisory committees to consolidate the management of natural resources, including oceans, within the federal government. Most recently, proposals have focused on establishing NOAA as an independent agency, or moving it out of the Department of Commerce to a more compatible home.

The complexity of the current policy-making process, with its many political and jurisdictional components, compels a cautious, methodical, phased approach for moving toward a more ecosystem-based federal structure. The phases should include:

1. *Phase I—Immediate Action:* Solidify NOAA’s role as the nation’s lead civilian ocean agency through the enactment of a NOAA organic act that codifies the agency’s establishment within the Department of Commerce, clarifies its mission, and strengthens execution of its functions.
2. *Phase II—Medium-term Action:* Consolidate selected ocean and coastal functions and programs from other agencies where such consolidation would eliminate unnecessary duplication, achieve more effective policy implementation, and not undermine the central mission of the other agencies.
3. *Phase III—Long-term Action:* Include oceans and coasts within a unified federal agency structure to manage all natural resources according to an ecosystem-based management approach.

STRENGTHENING NOAA: PHASE I

NOAA’s mission is to understand and predict changes in the Earth’s environment and to conserve and manage ocean and coastal resources to meet the nation’s economic, social, and environmental needs. The agency’s responsibilities have been spread across five line offices: the National Ocean Service; the National Marine Fisheries Service; the National Weather Service; the National Environmental Satellite, Data, and Information Service; and the Office of Oceanic and Atmospheric Research.

Since its creation, NOAA has made significant strides in weather prediction, navigational charting, marine operations and services on the ocean and along the coast, management and protection of living marine resources, satellite operations, processing and distribution of data, and development of innovative technologies and observing systems. These successes have occurred despite significant programmatic and functional overlaps, and frequent disagreements and disconnects among the current line offices. Recently, a sixth line office, the Office of Program Planning and Integration, was established to improve horizontal integration among NOAA line offices. Although this change will require time to take hold and show results, such initiatives constitute one of many steps required to strengthen NOAA’s performance.

NOAA needs both to manage its current activities more effectively and, if some or all of the recommendations discussed in this report are implemented, to handle a number of new responsibilities. For example, Chapter 26 discusses significant improvements that will be needed at NOAA to enable its effective implementation of the Integrated Ocean Observing System (IOOS), including streamlined distribution of funds to other involved agencies, closer partnerships with industry and academia, and the ability to assume operational responsibilities for satellite Earth observing programs. A stronger, more effective, science-based and service-oriented ocean agency—one that contributes to better management of oceans and coasts through an ecosystem-based approach—is needed.

Improving Ocean and Coastal Management by Enhancing NOAA's Capacity

NOAA is currently responsible for a variety of ocean and coastal activities and this report contains many recommendations intended to increase the agency's responsibilities and strengthen its performance in the following areas:

- Ocean exploration.
- Implementation of the Integrated Ocean Observing System.
- Scientific planning and budgeting.
- Research support in a broad range of areas, including socioeconomics, oceans and human health, and monitoring.
- Infrastructure and technology development, including the transition from research to operations.
- Mapping and charting.
- Data and information management and communication.
- Formal and informal education for all ages.
- Domestic and international fishery management.
- Marine mammal and other marine species protection.
- Coral reef conservation.
- Sustainable aquaculture.
- Coastal and watershed management.
- Natural hazards planning and response.
- Habitat conservation and restoration.
- Coastal sediment management.
- Water pollution and water quality monitoring.
- Invasive species control.

NOAA's three primary functions can be categorized as follows: 1) assessment, prediction, and operations for ocean, coastal, and atmospheric environments; 2) marine resource and area management; and 3) scientific research and education. One of the critical objectives for a strengthened NOAA is improved interaction within and among these categories. The execution of NOAA's functions should complement and support each other. For example, resource management decisions should be based on the best available science, research efforts should be planned to support the agency's management missions, and all research—sea, land, and air—should be connected and coordinated. Changes of this nature will likely require adjustments to the internal operation of the agency, including possible additional changes to the current line office structure.

Recommendation 7–1. Congress should pass an organic act that codifies the establishment and missions of the National Oceanic and Atmospheric Administration (NOAA). The act should ensure that NOAA's structure is consistent with the principles of ecosystem-based management and with its primary functions of assessment, prediction, and operations; management; and research and education.

Specifically, NOAA's structure should support its role in:

- *assessment, prediction, and operations for ocean, coastal, and atmospheric environments, including mapping and charting, satellite-based and in situ data collection, implementation of the Integrated Ocean Observing System, broadly based data information systems, and weather services and products.*
- *management of ocean and coastal areas and living and nonliving marine resources, including fisheries, ocean and coastal areas, vulnerable species and habitats, and protection from pollution and invasive species.*

- *research and education on all aspects of marine resources, including a focus on the importance of research and development, the use of scientifically valid technical data throughout the agency, and with external partners and promotion of educational activities across the agency and with the public.*

NOAA's entire structure, leadership, and staff should be oriented to support the effective exercise of these functions. Beginning with a strengthened science program and a more service-oriented approach, NOAA should be organized not only to improve its efficiency, but also to promote inclusiveness and a commitment to meaningful partnerships with other agencies, states, the private sector, and the academic community. International responsibilities will also need visibility at the highest levels of the agency.

As the clear lead civilian ocean agency in the federal government, NOAA will require budget support commensurate with its important and varied responsibilities. NOAA's placement within DOC may be partly responsible for insufficient visibility, but it has definite budgetary implications. At this time, NOAA's budget is reviewed within the Office of Management and Budget's (OMB's) General Government Programs, along with other elements of DOC such as the Bureaus of Industry and Security, Economics and Statistics, and Economic Analysis, the Census Bureau, the International Trade Administration, and the Patent and Trademark Office. These programs all have fundamental characteristics and missions programmatically separate from NOAA's, requiring budget examiners with very different expertise and perspectives. NOAA's placement within OMB also precludes its ocean and atmospheric programs from being considered in an ecosystem-based context along with the other resource and science programs in the federal government.

Recommendation 7-2. The President should instruct the Office of Management and Budget (OMB) to review the National Oceanic and Atmospheric Administration budget within OMB's Natural Resources Programs, along with the budgets of the U.S. Departments of Agriculture, Energy, and the Interior, the U.S. Environmental Protection Agency, the National Science Foundation, the National Aeronautics and Space Administration, and the U.S. Army Corps of Engineers' Directorate of Civil Works.

CONSOLIDATING OCEAN AND COASTAL PROGRAMS: PHASE II

In addition to NOAA, many other agencies across the federal government administer ocean- and coastal-related programs. In fact, although NOAA encompasses the single largest aggregation of civilian ocean programs, other agencies, taken together, represent the majority of federal spending on ocean, coastal, and atmospheric issues. Thus, changes within NOAA address only one part of the federal agency structure for oceans and coasts. Other agencies with ocean-related activities must be strengthened in a similar manner.

Recommendations throughout this report are intended to strengthen the execution of programs in other federal agencies with ocean- and coastal-related responsibilities, including the U.S. Departments of Agriculture, Commerce, Defense, Energy, Health and Human Services, Homeland Security, Interior, Labor, State, and Transportation, and the U.S. Environmental Protection Agency (EPA), the National Aeronautics and Space Administration (NASA), and the National Science Foundation (NSF). The goal of moving toward an ecosystem-based management approach requires that all agencies consider how the central functions of assessment, prediction, and operations, resource management, and scientific research and education fit within their missions. The structure and coordination of these primary functions within each agency should assure they are complementary and support each other.

Federal Ocean and Coastal Activities in Agencies other than NOAA

The U.S. Department of the Interior's (DOI's) mission is to protect the nation's treasures for future generations, provide access to the nation's natural and cultural heritage, provide wise stewardship of energy and mineral resources, foster sound use of land and water resources, and conserve and protect fish and wildlife. Several agencies within DOI have ocean and coastal functions including the U.S. Geological Survey (USGS), the National Park Service (NPS), the U.S. Fish and Wildlife Service (USFWS), and the Minerals Management Service (MMS). USGS provides scientific information to describe and understand the Earth, minimize loss of life and property from natural disasters, and manage water, biological, energy, and mineral resources. The goal of NPS is to conserve the scenery, the natural and historic objects and the wildlife therein, and to provide for the enjoyment of these resources in a manner that will leave them unimpaired for future generations. Many units within the National Park System are located in coastal areas. The USFWS mission is to conserve, protect, and enhance fish, wildlife, and plants and their habitats for the continuing benefit of the American people. MMS assesses the nature, extent, recoverability, and value of leasable minerals on the outer Continental Shelf. It oversees the development and efficient recovery of mineral resources and promotes the use of safe offshore operational technologies.

The mission of the U.S. Environmental Protection Agency (EPA) is to protect human health and to safeguard the natural environment—air, water, and land—upon which life depends. Within the EPA, the Office of Water includes the Office of Wetlands, Oceans, and Watersheds, which addresses wetlands protection, protection of ocean and coastal environments including watersheds and estuaries, management of dredged material, and water quality monitoring.

The National Aeronautics and Space Administration's Earth Science Enterprise studies the Earth from space through environmental research programs and observing systems to meet the needs of the nation's scientific communities.

The U.S. Army Corps of Engineers' Directorate of Civil Works, located in the U.S. Department of Defense, administers flood control and shore protection programs, environmental restoration programs, and the regulation of U.S. waters and wetlands.

The U.S. Coast Guard, a multi-mission agency recently transferred from the U.S. Department of Transportation to the new U.S. Department of Homeland Security, is the principal federal marine enforcement agency for environmental and natural resource regulations in U.S. ocean and coastal waters, and regulates vessel and port safety, security, and environmental protection.

The U.S. Navy contributes significant resources to ocean science activities. Through the Office of Naval Research and the Naval Meteorological and Oceanography Command, the Navy has been instrumental in a number of areas since long before the creation of NOAA. Some of these areas include global ocean and seafloor data collection, archival, modeling, data fusion, and product generation, as well as a wide array of ocean research and technology, diving and salvage technology, deep submergence, ocean engineering and construction, and medical research.

Other agencies in the Departments of Defense and Homeland Security also carry out activities with significant ocean components, although typically in a military or security context quite different from the resource management focus of the primary ocean agencies. Programs with ocean-related functions also exist within the Departments of Agriculture, Energy, Health and Human Services, Justice, Labor, State, and Transportation and in the National Science Foundation and the U.S. Agency for International Development.

Departments and agencies often support very similar or overlapping activities. In some cases, this programmatic overlap can provide useful checks and balances when agencies bring different perspectives and experiences to the table. Furthermore, some entities, such as the U.S. Navy, the U.S. Department of Justice, or the National Science Foundation, have such distinct missions that their ocean- and coastal-related components could not be simply removed and transferred without harm to the overall enterprise. Programs that are not suitable for consolidation will need to be coordinated through the National Ocean Council and the regional ocean councils.

However, during the 1970 reorganization that established NOAA, many ocean and coastal programs were left in other agencies. Since that time, ocean- and coastal-related programs have continued to proliferate throughout the federal government. In a number of cases, the number of separate agencies addressing a similar issue is not helpful. Such fragmentation diffuses responsibility, introduces unnecessary overlap, raises administrative costs, inhibits communication, and interferes with the development of a comprehensive management regime that addresses issues within an ecosystem-based context.

Departments and agencies with programs that may be appropriate for consolidation include the U.S. Department of the Interior (DOI), EPA, USACE's Directorate of Civil Works, and NASA. These agencies carry out important functions related to managing and protecting marine areas and resources, conducting science, education, and outreach, and carrying out assessment and prediction in the ocean, coastal, and atmospheric environments. In Phase II of strengthening the federal agency structure, judicious consolidation of ocean- and coastal-related functions will improve policy integration and program effectiveness.

Recommendation 7-3. The Assistant to the President, with advice from the National Ocean Council and the Presidential Council of Advisors on Ocean Policy, should review federal ocean, coastal and atmospheric programs, and recommend opportunities for consolidation of similar functions.

Specific recommendations on program consolidation can be found in Chapter 9 (area-based ocean and coastal resource management), Chapter 14 (nonpoint source pollution), Chapter 16 (vessel pollution), Chapter 17 (invasive species), Chapter 20 (marine mammals), Chapter 22 (aquaculture), and Chapter 26 (satellite Earth observing operations).

Because the legislative process to create or reorganize agencies is often contentious, lengthy, and uncertain, involving multiple committees in both houses of Congress, limited reorganization authority has been granted to the President at various times. In its 2003 report, the Volcker Commission supported the reinstatement of presidential reorganization authority, with suitable congressional oversight, to streamline improvements in the executive branch.³ Allowing the President authority to propose expedited agency reorganization, with a congressional review and approval process that is timely, constitutionally valid, administratively workable, transparent, and accountable, would provide an excellent mechanism to achieve reorganization of federal ocean- and coastal-related agencies and programs more expeditiously.

Recommendation 7-4. Congress should authorize the President to propose structural reorganization of federal departments and agencies.

In particular, such legislation should:

- *require Congressional approval of the President's reorganization proposal before it can take effect.*
- *preclude Congress from amending the President's proposal.*
- *require Congress to vote on the President's proposal after submission of the plan by the President.*

Historical Precedent for Presidential Reorganization of the Executive Branch

By historical practice and case law interpretation, the President and Congress have operated on the premise that the power to establish, structure, and reorganize federal agencies is a legislative power, conferred on Congress by the U.S. Constitution. In the absence of a specific statute stating otherwise, the President lacks authority to reorganize executive branch departments and agencies.

Over the last one hundred years Congress has intermittently granted the President such authority, with a variety of restrictions and with provisions for expedited congressional approval or disapproval of the President's proposals. A total of eighteen reorganization acts were passed between 1932 and 1984.

In 1970, President Nixon used the authority of the Reorganization Act of 1949, which authorized the President to propose agency reorganization subject to congressional disapproval, to propose successfully the creation of the National Oceanic and Atmospheric Administration and the U.S. Environmental Protection Agency. The most recent presidential reorganization authority expired at the end of 1984.

MANAGING ALL NATURAL RESOURCES IN AN ECOSYSTEM-BASED MANAGEMENT APPROACH: PHASE III

Based on a growing understanding of ecosystems, including recognition of the inextricable links among the sea, land, air, and all living things, a more fundamental reorganization of federal resource agencies will eventually be needed.

As noted, the major ocean- and coastal-related functions of assessment, prediction, and operations, resource management, and research and education reside in a variety of agencies. Strengthening the performance of ocean, coastal, and atmospheric programs through coordination and consolidation are important steps in moving toward an ecosystem-based management approach. By immediately establishing the National Ocean Council and strengthening NOAA, followed by the consolidation of suitable ocean and coastal programs and functions, the nation will be poised to take a further step in strengthening the federal government structure.

Consolidation of all natural resource functions, including those applicable to oceans and coasts, would enable the federal government to move toward true ecosystem-based management. This could be implemented through the establishment of a Department of Natural Resources or some other structural unification that brings together all of the nation's natural resource programs.

Recommendation 7-5. Following the establishment of the National Ocean Council and the Presidential Council of Advisors on Ocean Policy, the strengthening of the National Oceanic and Atmospheric Administration, and consolidation of similar federal ocean and coastal programs, the President should propose to Congress a reorganization of the federal government that recognizes the links among all the resources of the sea, land, and air and establishes a structure for more unified, ecosystem-based management of natural resources.

Thirty Years of Proposals to Reorganize Federal Management of Ocean and Coastal Resources

Between 1971 and 2001, there were over twenty congressional proposals, two presidential proposals, and proposals by a federal ocean advisory committee, to improve the management of oceans and other natural resources within the federal government. Details of these proposals are shown below. The icons on the left correspond to Figure 7.1.

■ **Ash Council Proposal (1971) for a Department of Natural Resources:** The proposal of the President's Advisory Council on Executive Reorganization called for eight cabinet-level agencies, including a Department of Natural Resources, which would include an Oceanic, Atmospheric, and Earth Science Administration made up of the National Oceanic and Atmospheric Administration and the U.S. Geological Survey. The proposal was modified in 1972 to also address the nation's energy resources in the form of a Department of Energy and Natural Resources. Neither proposal was acted upon by Congress.

■ **Moss Proposal (1973) for a Department of Natural Resources and Environment:** The proposal (S.27) called for the creation of a new Department of Natural Resources and Environment, and transferred all of the functions of the Department of the Interior, the Water Resources Council, the Energy Research and Development Administration, the Nuclear Regulatory Commission, and the Federal Energy Administration to the new department. Various functions of the U.S. Department of Commerce (including NOAA), the Department of Defense (civil works and civil regulatory functions), the Department of Agriculture, the Department of Transportation, and the Environmental Protection Agency, were also to be transferred to the new department. The proposal was introduced again in 1975 (also S.27), but no action was taken on either proposal.

■ **Dingell Proposal (1973) for a Department of Natural Resources:** The proposal (H.R. 3249) called for redesignating the Department of the Interior as the Department of Natural Resources and moving NOAA to this department. No action was taken.

■ **Holifield Proposal (1973) for a Department of Energy and Natural Resources:** The proposal (H.R. 9090) called for establishing an executive department to be known as the Department of Energy and Natural Resources, with five administrations to include an Oceanic, Atmospheric, and Earth Sciences Administration. NOAA and several other agencies would be transferred to the new department, with a division of function among the five administrations. No action was taken.

■ **McDade Proposal (1974) for a Department of Natural Resources:** The proposal (H.R. 12733) called for redesignating the Department of the Interior as the Department of Natural Resources within which a National Oceanic and Atmospheric Agency would be established. No action was taken.

■ **Tunney Proposal (1975) for a Department of Natural Resources:** The proposal (S. 2726) called for establishing a new Department of Natural Resources in the executive branch, transferring all of the functions of the Department of the Interior, the Federal Energy Administration, the Federal Energy Research and Development Administration, and the Water Resources Council to the new department. Various functions of the Departments of Commerce, Defense, Agriculture, and Transportation would also be transferred to the new department. The proposal also called for the establishment of an Executive Office of Resource and Materials Policy and a Joint Congressional Committee on Energy, Materials, and the Environment. No action was taken on this proposal.

■ **Ribicoff Proposal (1976) for a Department of Energy and Natural Resources:** The proposal (S. 3339) called for establishing a Department of Energy and Natural Resources, headed by a Secretary of Energy and Natural Resources, to assume the nonregulatory functions of specified agencies dealing with the management and conservation of natural resources and energy research. It also proposed to establish, within the Executive Office of the President, the Natural Resources Council to facilitate communication among federal agencies responsible for natural resource management and policy and to recommend improvements in such management and policy. No action was taken.

■ **Hollings Proposal (1976) for a Department of the Environment and Oceans:** The proposal (S. 3889) called for creating a Department of the Environment and Oceans, transferring into this new department existing agencies such as the Environmental Protection Agency, NOAA, and the U.S. Coast Guard, as well as a number of services and programs from both the U.S. Army Corps of Engineers and the Department of the Interior, to deal with the nation's "common property resources." No action was taken.

■	<p>Percy Proposal (1977) for a Department of Energy Supply and Natural Resources: The proposal (S. 591) called for reorganizing federal energy-related activities in the executive branch, temporarily establishing an Energy Policy Council and a cabinet-level Committee on Conservation to establish energy policy objectives. The proposal also called for establishing an executive Department of Energy Supply and Natural Resources, transferring energy and natural resources functions from the Department of the Interior, the Federal Energy Administration, the Energy Research and Development Administration, and the U.S. Forest Service to the new agency, and transferring additional functions to existing departments and agencies. No action was taken.</p>
■	<p>Brooke Proposal (1977) for a Department of Environment and Natural Resources: The proposal (S. 1481) called for creating a Department of Environment and Natural Resources, transferring all functions of the Environmental Protection Agency and the Department of the Interior to the new department. Additional authority with respect to oceans, vessel and facility pollution control, coastal zone management, and atmospheric services was also to be transferred to the new department. No action was taken.</p>
■	<p>President Carter’s Reorganization Proposal (1978) for a Department of Natural Resources: The proposal called for a larger governmental reorganization, which included a new Department of Natural Resources, to address the problems being faced on a national scale in the area of natural resource development, with the mission of “managing the nation’s natural resources for multiple purposes, including protection, preservation, and wise use.” The composition of this new department would be a large part of the Department of the Interior, NOAA, the U.S. Forest Service, and a number of programs from the Department of Agriculture and the U.S Army Corps of Engineers’ Directorate of Civil Works. Within the department would be created five administrations, one of which would be the Oceanic and Atmospheric Administration to include the functions of NOAA; the Bureau of Land Management’s Outer Continental Shelf (OCS) program; the USGS Conservation Division’s OCS program; U.S. Fish and Wildlife Service’s anadromous fisheries and marine mammal programs; and the Bureau of Reclamation’s Weather Modification program. This plan was not adopted.</p>
◆	<p>National Advisory Committee on Oceans and Atmosphere (advisory to NOAA) (1971–87): This body, created in 1971 as a result of the Stratton Commission, made a number of recommendations for reorganization. In its 1978 and 1979 reports, the National Advisory Committee on Oceans and Atmosphere recommended that “the President and the Congress should refashion the non-military federal structure dealing with the atmosphere, coastal zone, polar regions, and the oceans...[so as to] centralize programs and federal management elements...to improve control of activities relating to economic development, environmental protection, and scientific and technological capabilities in the oceans and affecting the atmosphere.” These recommendations were never implemented.</p>
◆	<p>Scheuer Proposal (1983) for an independent NOAA: The proposal (H.R. 3355) called for establishing NOAA as an independent agency, granting the agency coordination responsibility for oceanic and atmospheric matters, and setting forth enforcement authority of the administration. No action was taken.</p>
◆	<p>Forsythe Proposal (1983) for an independent NOAA: The proposal (H.R. 3381) also called for establishing NOAA as an independent agency, granting it coordination responsibility for oceanic and atmospheric matters, and setting forth enforcement authority of the administration. The bill reported to the House from the Committee on Merchant Marine and Fisheries, but the proposal was never adopted.</p>
◆	<p>Weicker Proposal (1987) for an independent NOAA: The proposal (S. 821) called for establishing NOAA as an independent federal agency. No action was taken.</p>
◆	<p>Lowry Proposal (1988) for an independent NOAA: The proposal (H.R. 5070) called for establishing NOAA as an independent agency to administer features of U.S. policy with respect to civil oceanic, coastal, and atmospheric activities and programs and their administration. No action was taken.</p>
▲	<p>Unsoeld Proposal (1993) for transfer of NOAA functions: The proposal (H.R. 2761) called for transferring to the Department of the Interior of the following NOAA offices and assets: the National Ocean Service, the National Marine Fisheries Service, the Office of Oceanic and Atmospheric Research, the fleet of research and survey vessels; and the NOAA Corps. It also called for the transfer of components of the National Ocean Service that carry out coastal management and assessment programs to the Environmental Protection Agency. No action was taken.</p>

▲	<p>Chrysler Proposal (1995) for transfer of NOAA functions: After the House and Senate passed the Concurrent Resolution on the Budget for Fiscal 1996 (H. Con. Res. 67), which called for eliminating the Department of Commerce as part of a congressional effort to streamline government, increase efficiency, and save taxpayer dollars, Congressman Chrysler introduced H.R. 1756, proposing to eliminate various parts of NOAA and transfer other parts of the agency to other existing agencies as part of an overall proposal to dismantle and wind up the affairs of the Department of Commerce over a period of three years. As with other proposals of this magnitude, the bill was referred to eleven committees, involving an additional ten subcommittees. Several committee members strongly dissented in the House Committee on Ways and Means report (Rept. 104-260), but no specific mention was made about NOAA. Although several subcommittees discharged or reported on the bill, no further action was taken.</p>
◆	<p>Abraham Proposal (1995, 1997) for an independent NOAA: The proposal (S. 929) called for reestablishing NOAA as an independent executive entity, following the abolishment of the Department of Commerce and transferring the functions from the former NOAA to a new NOAA. It also set forth other administrative changes, as well as the coordination of environmental policy. The proposal was reported out of committee to the Senate floor, but action was never taken. Variations of this proposal were introduced again in 1997 (S.1226 and S.1316), but no action was taken.</p>
▲	<p>Royce Proposal (1997) for transfer of NOAA functions: This proposal (H.R. 1319), similar to earlier House proposals to dismantle the Department of Commerce, called for the termination of various parts of NOAA and the transfer of other parts of the agency to other existing agencies. No action was taken.</p>
◆	<p>Royce Proposal (1997) for an independent NOAA: This proposal (H.R. 2667) was similar to other House proposals to terminate the Department of Commerce, except that it called for creating an independent NOAA, to which any of the former NOAA's functions that were not already terminated or transferred to other agencies by the bill would be transferred. No action was taken.</p>
▲	<p>Young Proposal (1998) for transfer of certain NOAA functions: The proposal (H.R. 4335) called for transferring to the Secretary of the Interior the functions of the Secretary of Commerce and the National Marine Fisheries Service under the Endangered Species Act of 1973. No action was taken.</p>
◆	<p>Royce Proposal (1999) for an independent NOAA: The proposal (H.R. 2452) called for reestablishing NOAA as an independent agency in the executive branch, under the supervision and direction of an Administrator of Oceans and Atmosphere. Certain functions would be transferred to a new NOAA: National Marine Fisheries Service functions; all functions performed by the National Ocean Service, including the Coastal Ocean Program; National Environmental Satellite, Data, and Information Service functions; Office of Oceanic and Atmospheric Research functions; and National Weather Service functions. Other programs would be transferred to other existing agencies: coastal nonpoint pollution functions would be transferred to the Environmental Protection Agency Administrator; aeronautical mapping and charting functions would be transferred to the Transportation Administrative Services Center at the Department of Transportation; and functions relating to mapping, charting, and geodesy would be moved to the U.S. Army Corps of Engineers. This proposal was part of a larger proposal to terminate the Department of Commerce. It was introduced again in 2001 (H.R. 375). No action was taken on either proposal.</p>

¹ U.S. Commission on Marine Science, Engineering, and Resources. *Our Nation and the Sea: A Plan for Action*. Washington, DC: U.S. Government Printing Office, 1969.

² National Commission on the Public Service. *Urgent Business for America: Revitalizing the Federal Government for the 21st Century*. Washington, DC: Brookings Institution Center for Public Service, 2003.

³ Ibid.

