January 10, 2002

To: Admiral James D. Watkins, Chairman, and members of the U.S. Commission on U.S. Ocean Policy
From: Dr. Biliana Cicin-Sain, Director, Center for the Study of Marine Policy, University of Delaware

Dear Admiral Watkins and members of the Commission:

Thank you very much for the opportunity to contribute to the very important work of the Commission. Those of us in the academic marine policy community have long argued for the need for a comprehensive review of U.S. national ocean policy in our publications and conferences, and supported the passage of the Oceans Act. We are ready to support the Commission in every manner possible.

By way of background, my Center has specialized in the study and analysis of concepts and practices in integrated coastal and ocean management, both in the United States and around the world. We have produced a range of publications on this subject and organized a number of conferences, briefings, an international website (http://icm.noaa.gov), and other such efforts, that we will make available to the Commission. Together with other scholars, we have also created a network of marine policy academics, the Ocean Governance Study Group, which has also produced useful publications and discussions that we are pleased to make available to the Commission.

While in its work, particularly in these regional hearings, the Commission will be exploring many issues, some sectoral, others cross-sectoral, the Commission will ultimately need to draw a bottom line on the elements of a national ocean policy and on associated organizational/institutional issues to achieve such a policy, since that is a prime purpose of the Oceans Act.

In this testimony, then, my intent is to address major issues in national ocean policy. More specifically, I review: major challenges in U.S. ocean governance; the need to move toward a more integrated system; and possible ways for moving toward more integrated ocean policy at both national and regional levels. I also attach some materials on priority policy issues in various sectoral areas and on new international developments in marine affairs.
Major Challenges in U.S. Ocean Governance

My studies of U.S. ocean policy over time have suggested an expression that encapsulates the current policy status: “U.S. ocean policy today is less than the sum of its parts.” That is, while the nation has made great strides in certain sectors of ocean policy (e.g., in the management of point sources of marine pollution, the protection of marine mammals, the establishment of coastal management), overall, the separate parts of the policy don’t fit well together. There are many instances of conflicting, overlapping or duplicative policies, and there is no vision of how the various parts may be harmonized, and of how overall guidance and principles may be developed to more effectively govern the offshore domain.

This syndrome of being “less than the sum of its parts,” is rooted, in large part, in structural problems in the ocean governance regime. As a result of the body of largely single-purpose ocean and coastal laws enacted in the 1970s, the ocean governance structure is generally based not on the management of ocean areas, but, rather, on the promotion, management, or control of specific ocean resources such as oil and gas or fish. The challenge that the nation faces in the twenty-first century is moving from this “first generation” system of ocean governance—single-use and resource-based—to a “second generation” based on the notion of multiple-use management within designated ocean and coastal areas. Specific challenges that must be addressed include:

Ocean Governance Challenges

- Move away from predominantly sectoral management to area-based, multiple-use management;
- Provide overall national guidance on use of U.S. waters (0 to 200) through the articulation of a national ocean policy;
- Develop a code of ocean stewardship principles;
- Develop more integrated planning and decision-making capacity for resolving ocean use conflicts and anticipating new uses;
- Integrate better the actions of ocean-related federal agencies (horizontal integration);
- Integrate better the actions of ocean-related state and federal entities (vertical integration).

Moving Toward More Integrated Governance at the National Level

The main thrust underlying the Oceans Act is the need to move toward more integrated management of the U.S. oceans and coasts. This is a theme echoed in many recent reports and publications (e.g. NRC 1997; Heinz Center 1998; U.S. DOC et al 1998; Cicin-Sain and Knecht 2000).
The U.S. is not alone in confronting this problem. Nations around the world are now experimenting with methods of integrating and harmonizing the multiple uses of their oceans and coasts, and are attempting to operationalize the vision espoused in Agenda 21, the action plan emanating from the 1992 Earth Summit, which notes that governance of ocean and coastal areas must be “integrated in content and precautionary and anticipatory in ambit.” Nations cannot solely rely on traditional approaches that govern only one resource or use at a time, but must also consider the effects of one resource or use on other resources, uses, and the environment (UNCED 1992).

Moving toward more integrated management of oceans and coasts, however, is particularly difficult to achieve in the U.S. because we already have in place a vast array of ocean-related laws, institutions, experiences, interest groups, and public values, generally each pushing for protection or development of a particular part of the marine environment (such as fisheries, oil and gas, marine mammal protection, etc.). We are thus not able to “start from scratch,” but must build on a highly complicated system of ocean laws, policies, and practices.

The major institutional options for achieving greater integration include: naming of a lead agency, creation of an interdepartmental coordinating body (such as a national ocean council), creation of a larger agency encompassing a wider range of ocean functions, which would typically involve government reorganization, and creation of a standing ocean commission.

Regarding government reorganization vis-à-vis the oceans, there have been a number of proposals that have been discussed in the past in the U.S., including changing NOAA into an independent oceans agency, creating a Department of Oceans, and creating a Department of Natural Resources. All these options, which should be discussed by the Commission, would be useful in elevating ocean concerns on the national agenda, but, as all reorganization efforts, are difficult to achieve and require the expenditure of significant political capital.

Moving toward integrated management, in my view, does not necessarily imply full integration, in the sense of government reorganization and creation of a larger bureaucratic entity. Although there are good examples of effective integrated marine ministries (e.g. Korea’s Ministry of Maritime Affairs and Fisheries), this is difficult to achieve in the U.S. case given that there are already so many agencies that play ocean-related roles. Even if some reorganization were to take place (and some such reshuffling may well be desirable), there would still remain agencies and activities within the purview of other Departments, still necessitating interagency coordination.

In my view, then, it is useful for the U.S. to consider the creation of a National Ocean Council to oversee the making and implementation of a comprehensive national ocean policy. In the U.S., we have no existing interagency mechanisms that fits the need. All the existing mechanisms only deal with partial aspects, e.g., the Subcommittee on Oceans Policy (a subgroup of the Global Environmental Policy Coordinating Committee), chaired by the Department of State, coordinates national position on internationally-driven ocean developments, especially
Law of the Sea, and does not operate openly; the Ocean Principals group is an ad hoc and informal meeting of the leaders of principal ocean agencies; the National Oceanographic Partnership Program is concerned with the ocean sciences; The Year of the Ocean Task Force brought the federal agencies together temporarily during the Year of the Ocean (1998); the Oceans Report Task Force (1999-2001) brought agencies together to implement the Clinton Administration’s ocean policy priorities; the Interagency Committee for the Marine Transportation System is bringing agencies together in the marine transportation area; the National Dredging Team was formulated to address, on an inter-agency basis, problems of port dredging.

There is growing use of ocean and coastal councils/interagency committees around the world. A recent global survey showed that in 2000 there were 98 nations engaged in initiatives in integrated coastal and ocean management at national and/or local levels, and that 42% of countries report having some sort of coordinating mechanism for ocean and coastal management (Cicin-Sain et al, 2001). Canada and Australia have national ocean councils and useful lessons can be learned from their experiences. Most recently, the December 2001 global conference assessing the status of oceans and coasts 10 years after the 1992 Earth Summit encouraged “the creation of national ocean and coastal councils to formulate national policies on oceans and coasts and to implement, in a coordinated fashion, clusters of international agreements on oceans and coasts” (Bernal and Cicin-Sain 2002).

Some ideas on the possible characteristics of a National Ocean Council, to elicit discussion on this question would include:

Possible Characteristics of a National Ocean Council

• A National Ocean Council should be connected to the highest levels of government reporting directly to the President or to the Vice-President, as the Marine Science Council of the late 1960s was connected to the Vice-President’s office.

• Its principal role would be to provide broad national guidance on the overall goals for the nation’s oceans and coasts and to articulate the principles that should be used to guide decisionmaking throughout the ocean governance system.

• The council would be composed of heads of ocean agencies, representatives from governors (perhaps 1 from each region), and a limited number of scientists and stakeholders, who would meet periodically (such as 3 times a year) to set overall goals and policies.

• The council would also operate Working Groups which would bring together, on a more frequent basis, staff from the various federal agencies, representatives of the states, scientists, and stakeholders to work on implementation, as well as to work on “problem clusters” of ocean issues that are particularly problematic or conflictual (for example, marine mammal/fisheries conflicts; OCS conflicts; conflicts associated with port dredging; problems related to beach erosion and replenishment).
• There would be a National Ocean Office to staff the council, carry out national assessments, conduct evaluations, etc.

_Council functions_

• Develop a national strategy for sustainable development for the U.S. ocean, including:
  --exploration, mapping, and analysis of resources potentially available for development and identification of critical areas that must be protected
  --a set of goals and specific targets for sustainable development, with an accounting of projected benefits/costs for current and future generations
  --a set of principles to govern use of the U.S. ocean
  --priorities for action and mechanisms for establishing priorities

• Review and assess the progress of individual agency programs in achieving national ocean goals, including review of the budget submissions of ocean agencies to ensure their consistency with agreed national ocean policy goals and objectives.

• Create and oversee the work of Working Groups formed to address specific ocean and coastal problems requiring concerted, high-level, attention.

• Provide guidance and oversight to any regional multiple-use councils which may be set up in various regions

• Provide leadership in international marine affairs, and oversee the implementation of international agreements on oceans and coasts

_Possible Principles for National Ocean Policy_

• Safeguard the health and integrity of marine ecosystems and protect marine biological diversity

• Promote the sustainable use and orderly development of the ocean zone to benefit the American public, including to create and maintain jobs, benefit U.S. industry, and enhance U.S. economic competitiveness

• Use the precautionary approach in decisionmaking

• Use environmental assessments in ocean decisionmaking

• Use the public trust doctrine to protect the interests of the whole community and the
interests of intergenerational equity

- Govern in partnership with states, territories, and commonwealths
- In the case of irreconcilable conflicts over ocean use, give priority to maintaining ecosystem health and integrity
- Ensure a good return to the public from the use of commonly held ocean and coastal resources
- Utilize the “user pays” principle, i.e., resource developers pay the full costs—ecological, economic, social—of their resource development. They should post bonds to pay for environmental restoration
- *Ensure that the processes for assessing, planning, and managing the ocean resources should:
  -- be easily understood and openly justified
  -- be certain
  -- have clear lines of accountability
  -- provide equity within and between generations
  -- be designed to deliver outcomes that balance long and short-term economic, environmental, social and cultural considerations
  -- involve the minimum effective regulatory burden on ocean users required to meet economic, environmental, cultural, and social objectives
  -- ensure cooperation and coordination between governments and across the sectors which use the oceans
  -- take into account wider interests and ensure effective community involvement
- Be consistent with U.S. obligations under international agreements
- Promote effectiveness and efficiency in government operations (reduction of duplication and overlap)
- Be adaptive and promote opportunities for innovation, data collection, and learning

*This point is drawn from the Australian national ocean policy

The Need for Incentives

In creating a National Ocean Council, it should be kept in mind that to achieve interagency collaboration on a continuing basis, agencies must be given positive incentives for collaboration with other agencies, such as, for example, creating possibilities for funding from
special sources aimed at achieving interagency cooperative activity. According to the literature, six kinds of incentives exist or can be developed to enhance the likelihood of interagency cooperation: financial incentives, perception of a shared problem, shared professional values, perception of political advantage, availability of fora for cooperation, and a desire to reduce uncertainties (see Weiss, 1987; Cicin-Sain and Knecht, 1998, pp. 149-160).

**Moving Toward Integrated Governance at the Regional Level**

While national level action to improve U.S. ocean governance is clearly needed, the great diversity that exists in different regions of the U.S. coastal ocean means that uniformity in approaches to ocean governance may not be the wisest nor the most feasible alternative. The character of state coastlines and adjacent ocean space and resources differs greatly in different coastal locations around the United States. Thus, more tailored approaches that take into account important differences in regional circumstances, interests, and policy needs may be more suitable and more likely to be considered for adoption and implementation. There are precedents for such flexibility in existing U.S. legislation, most prominently in the approach followed under the Coastal Zone Management Act of 1972 which, while providing for national guidance, allowed each participating state to formulate its own approach to and organization of coastal management.

Defining marine regions is complex and could be accomplished on a variety of bases. A major approach to delimiting marine regions is the Large Marine Ecosystem approach (LME) developed by Ken Sherman and others at the National Marine Fisheries Service’s laboratory in Narragansett, Rhode Island. LMEs are defined as:

…regions of ocean space encompassing coastal areas from river basins and estuaries on out to the seaward boundary of continental shelves and the seaward boundary of coastal current systems. They are relatively large regions of the order of 200,000 km² or larger, characterized by distinct bathymetry, hydrography, productivity, and trophically dependent populations” (Sherman 1994).

Sherman and his collaborators have identified 49 LMEs around the world, and 7 LMEs in U.S. waters.

While there has been much discussion of the need to manage marine regions on an ecosystem basis, there has been less discussion of how this might be accomplished from an institutional perspective, given the complexities of the existing governance structure. We have a situation where the states have control over the first 3 miles of ocean (and as noted below, a number of them have already created ocean plans for these areas); we have the 3 to 12 mile extended territorial sea with somewhat unclear legal status (Forman, Jarman, and Van Dyke 1992); we have federal entities operating generally single-purpose ocean programs in the area from 3 to 200 miles, and we have the EEZ spanning 188 miles from 12 to 200 miles offshore.
State-initiated regional ocean governance

To bring more coherence to this situation, one could start from the state side, and encourage the states to create ocean plans for the 0 to 3 mile area and encourage groupings of states, in conjunction with federal agencies, to develop ocean plans for the extended territorial sea and EEZ region adjacent to these states. A provision related to interstate compacts found in a previous version of the CZMA could be used to promote this process.

It is unclear to what extent there would be interest and sufficient capacity in all the coastal states in undertaking such a challenge. Interest in and capacity for ocean governance is not evenly spread out among the nation’s states and regions. In some states and regions, there is little interest in ocean governance questions, generally reflecting relatively few ocean resources, lack of economic interest in the adjacent ocean, and other such factors.

On the other hand, in a number of cases (e.g., Oregon, Hawaii, California), states have already developed comprehensive plans to guide ocean use activities, to resolve conflicts, and to anticipate new uses in state waters (0 to 3 miles offshore). Other states (such as Florida, Maine, Mississippi, North Carolina) have conducted major studies and analyses of ocean issues affecting their states. Oregon, moreover, has presented convincing arguments that its economic and environmental interests extend up to 85 miles offshore (well into federal waters), depending on the location of fisheries and other resources of direct and immediate interests to the state’s citizens. This zone, which generally coincides with the location of the continental shelf off its shores, has been named the “Oregon stewardship zone” (Oregon 1995).

In a number of cases, too, states have come together in regional groupings to begin to provide a regional perspective on ocean use and protection issues. Among the regions that are the furthest along are the Gulf of Maine region (with the Gulf of Maine Council, a state-initiated regional grouping involving 3 U.S. states and 2 Canadian provinces; the Pacific Coast states (through the regional-level work of the Western Governors’ Association and the Western Legislative Conference); the Pacific island region (through the Pacific Basin Development Council); and the Gulf of Mexico region (through the federally-initiated Gulf of Mexico Program).

A possible approach for encouraging this process further along and for achieving appropriate management of ocean regions might be as follows:

- Provide federal grants (with state match) for the development of ocean plans to be crafted by individual states or (preferably) by regional groupings of states;
- Foster an ocean plan approval process that incorporates a partnership between state and federal levels;
- Work to achieve proper integration between these efforts and the existing area-based, federally-supported ocean and coastal programs which are anchored in state partnerships (coastal management, estuary planning, and marine sanctuaries) as well as with the single-
sector programs (e.g., fisheries, oil and gas development);

- Provide support for these ocean plans to have legal standing through their incorporation into the state coastal management process, thus invoking the powers of federal consistency (some adjustments to the state coastal management process would have to be made if regional entities are carrying out the ocean use planning effort);

- Such a program could be tested on a voluntary basis, allowing coastal states and regions with particular interests and capacity to participate in such a program upon petition and on a pilot basis.

**Federally-initiated multiple use ocean councils**

At the same time as these state-based efforts have been going on, there have been proposals advanced by various groups and analysts to create ecosystem-based multiple-use regional ocean councils. Some have also raised the possibility of transforming the regional fishery councils into multiple-use councils. Internationally, both Australia and Canada have chosen to begin implementing their newly enacted national ocean policies in the context of preparing ecosystem-based plans for important ocean regions.

Others suggest a more ad hoc approach to regional ocean governance in response to pressing problems in particular regions. For example, the Marine Board’s report on marine area governance, *Striking a Balance: Improving Stewardship of Marine Areas* (NRC 1997) report recommends that regional marine councils representing federal and state agencies and other stakeholders should be created “in areas where there are substantial risks of damage to highly valued resources, or serious, long standing conflicts. Regional councils could be established at any time and should remain in existence for the duration of the problem but should not be permanent.” The councils would perform the following functions:

- Develop long range goals and plans
- Mediate and resolve disputes among agencies and stakeholders through environmental mediation and related tools
- Coordinate planning and management among state and federal agencies
- Coordinate fiscal planning including pooling funding from two or more government programs or agencies
- Facilitate intergovernmental agreements
- Execute stakeholder contracts (e.g., for management or restoration of specific resources)
- Engage local interests
- Monitor and evaluate the results of contracts and other management actions
- Provide technical assistance and training
- Ensure accountability

In my view, more analysis and discussion are needed on the question of regional ocean
governance. What is important, however, is from the outset to adopt several principles to guide these deliberations:

- Ocean regions should be delimited and managed using an ecosystem approach
- Federal and state entities should be partners in the management of marine regions
- Any regional institutions that are created for purposes of managing ocean regions should be coordinated with and overseen by the National Ocean Council

As the Commission visits different regions, it would be very useful to solicit the perspectives of stakeholders in each region on options for regional ocean governance which would work in their region.

*Possible Mechanism for Enacting a National Ocean Policy*

A possible mechanism would be enactment of a National Oceans Policy Act, containing several titles, e.g.:

Title I. National ocean policy: Definition, principles, etc.

Title II. Establishment and operation of the National Ocean Policy Council

Title III. Mapping and assessment of the Exclusive Economic Zone

Title IV. Delimiting ocean regions in the Exclusive Economic Zone

Title V. Development of regional ocean plans

In conclusion, I would also like to bring two other points to the attention of the Commission. 1) Given the Commission’s mandate to also address sectoral issues, in addition to cross-sectoral issues, I am attaching a table summarizing major priority policy challenges in various sectoral areas, drawn from my book, *The Future of U.S. Ocean Policy*. 2) Given the Commission’s expressed interest in international policy developments related to oceans and coasts, I am attaching a pre-publication copy of the *Co-Chairs’ Summary of the Global Conference on Oceans and Coasts at Rio plus 10: Toward the 2002 World Summit on Sustainable Development, Johannesburg* (held at UNESCO in Paris on December 3-7, 2001).

Thank you for the opportunity to comment on the important work of the Commission. I stand ready to support the work of the Commission in all possible ways.
Dr. Biliana Cicin-Sain  
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Attachments

Table on Major Domestic Policy Challenges  
Report on Global Oceans Conference

References cited


Sherman, K. 1994. Sustainability, biomass yields, and health of coastal ecosystems: An
ecological perspective. *Marine Ecology Progress Series* 112: 277-301.

