



U.S. COMMISSION ON
OCEAN POLICY



DEVELOPING A
NATIONAL OCEAN POLICY

Mid-Term Report of the U.S. Commission on Ocean Policy

S E P T E M B E R 2 0 0 2

U.S. COMMISSION ON
OCEAN POLICY



1120 20TH STREET, NW * SUITE 200 NORTH * WASHINGTON, DC 20036

PHONE: 202-418-3442 * FAX: 202-418-3475

September 17, 2002

The President
The White House
Washington, D.C. 20500

Dear Mr. President:

I am pleased to submit for your review the enclosed report, *Developing a National Ocean Policy: Mid-Term Report of the U.S. Commission on Ocean Policy*. Its purpose is to provide you with a summary of our activities, plans, and some preliminary observations as the Commission moves to complete its fact-finding phase. Additionally, this report is a means to keep the vast numbers of deeply interested parties all across the Nation aware of our progress.

When Congress passed the Oceans Act of 2000 (P.L. 106-256), it acknowledged the importance of the seas to this country and the critical role oceans play in our lives. Pursuant to that law, you appointed 16 highly qualified and dedicated public servants to serve on the U.S. Commission on Ocean Policy. It is with great honor that each of the Commissioners has undertaken this effort to develop recommendations for a long-needed comprehensive ocean policy for our Nation.

In September 2001, the Commission began a series of public meetings across the country to hear about the most pressing issues that the Nation faces regarding both use and stewardship of our oceans. This report covers the two meetings held in Washington, D.C. last year and the first six of nine scheduled regional public meetings to be held this year, during which we heard from nearly 300 witnesses and conducted 13 site visits to various marine-related institutions. These witnesses represent a cross-section of interests in ocean affairs, including Federal and State governments at all levels, industry, public interest groups, the academic community, and many interested citizens.

At the half-way point in the Commission's effort, I can state that our work is proceeding well and on schedule. As you can see in this report, we review the creation, organization, and activities of the Commission. More importantly, we offer a summary of what the Commission has heard so far, including different perspectives on the most complex coastal and ocean issues facing our Nation. The report also includes information we have received on opportunities that exist for ensuring that the oceans, which border and protect us, are healthy and wisely managed for future generations to use and enjoy.

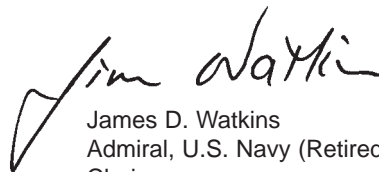
COMMISSIONERS

ADMIRAL JAMES D. WATKINS, USN (RET.), CHAIRMAN * ROBERT BALLARD, PH.D. * MR. TED A. BEATTIE * MRS. LILLIAN BORRONE * DR. JAMES M. COLEMAN
MS. ANN D. AMATO * MR. LAWRENCE DICKERSON * VICE ADMIRAL PAUL G. GAFFNEY II, USN * PROFESSOR MARC J. HERSHMAN * MR. PAUL L. KELLY
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DR. THOMAS R. KITSOS, EXECUTIVE DIRECTOR

As the Commission completes its regional hearing schedule and enters its deliberative phase, we will use the wealth of information and advice we have received to develop recommendations to you and the Congress. These recommendations will set the foundation for the coherent, comprehensive, and long-range national policy to explore, protect, and use ocean and coastal resources as called for in the Commission's enabling legislation. Implementation of such a policy may well call for new and creative governance mechanisms, which we fully intend to address in our final report to you in June 2003.

The report is also being sent to the Congressional Leadership in both House and Senate. On behalf of each Commissioner, I would like to thank you for your continuing interest in our work.

Very Respectfully,

A handwritten signature in black ink that reads "Jim Watkins". The signature is written in a cursive, slightly slanted style.

James D. Watkins
Admiral, U.S. Navy (Retired)
Chairman

Enclosure

U.S. COMMISSION ON
OCEAN POLICY



1120 20TH STREET, NW * SUITE 200 NORTH * WASHINGTON, DC 20036

PHONE: 202-418-3442 * FAX: 202-418-3475

September 17, 2002

The Honorable J. Dennis Hastert
Speaker of the House of Representatives
Washington, D.C. 20515

Dear Mr. Speaker:

I am pleased to submit for your review the enclosed report, *Developing a National Ocean Policy: Mid-Term Report of the U.S. Commission on Ocean Policy*. Its purpose is to provide you with a summary of our activities, plans, and some preliminary observations as the Commission moves to complete its fact-finding phase. Additionally, this report is a means to keep the vast numbers of deeply interested parties all across the Nation aware of our progress.

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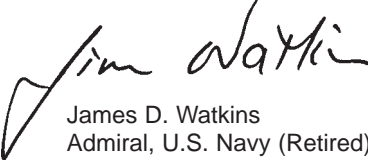
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Very Respectfully,



James D. Watkins
Admiral, U.S. Navy (Retired)
Chairman

Enclosure

cc: The Honorable Richard A. Gephardt

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1120 20TH STREET, NW * SUITE 200 NORTH * WASHINGTON, DC 20036

PHONE: 202-418-3442 * FAX: 202-418-3475

September 17, 2002

The Honorable Tom Daschle
Majority Leader
United States Senate
Washington, D.C. 20510

Dear Mr. Leader:

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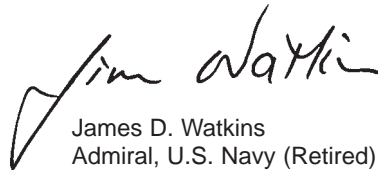
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Very Respectfully,

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James D. Watkins
Admiral, U.S. Navy (Retired)
Chairman

Enclosure

cc: The Honorable Trent Lott

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The following appendices to this document are available online at
www.oceancommission.gov:

- Appendix I: *A Synthesis of Testimony, Comments, and Recommendations from Presenters: September 2001 – June 2002*
- Appendix II: *Summary of Testimony, Comments, and Recommendations from Presenters: September 2001 – June 2002*
- Appendix III: *Toward a National Ocean Policy: Topics and Related Issues*

SOME MID-TERM OBSERVATIONS

The oceans are in trouble. Our coasts are in trouble. Our marine resources are in trouble . . . all, perhaps, in serious trouble. These are observations on which the 16 Commissioners of the U.S. Commission on Ocean Policy, after completing a portion of its extensive information gathering process, can readily agree. This same process, however, has also exposed the Commission to a wide range of new and exciting opportunities to address those troubles, opportunities which it intends to emphasize in its final June 2003 report to the President and Congress.

Notwithstanding these general assessments, the Commission is still gathering information through its public meeting schedule and other processes. No formal deliberative sessions have yet been held to fashion conclusions about the precise nature and depth of all of the Nation's ocean-related problems, the exact solutions to such problems, nor the specific policies to address them. Deliberative sessions of the full Commission will, however, commence later this year.

Since its first meeting in September 2001, the Commission has visited dozens of marine facilities and taken testimony from hundreds of presenters during these visits and extensive public meetings in Washington, D.C. and six coastal regions of the United States. Two additional regional meetings have been held (not documented in this report) and one more is scheduled. Several additional sessions back in Washington are also planned, the first occurring in late October.

While much more work and analysis needs to be done, some preliminary and more specific observations and challenges can also be highlighted:

- Dramatic increases in population and pollution along our shorelines clearly indicate that the Nation's capability to manage our coasts is inadequate and yet more critical today than it was 30 years ago when Congress enacted the Coastal Zone

Management Act . . . but what would be required to enhance that capability?

- The depletion of our fish stocks continues. Marine fishery management has an uneven, and often poor, record. Scientific advice has been ignored all too often at the expense of fisheries and the long-term sustainability of the fishing industry. Reform is needed . . . but what kind?
- Ocean pollution is a growing problem, much of it caused by nonpoint sources, such as farming practices, urban runoff, and air pollution deposition. The sources are numerous and dispersed while the solutions are elusive and challenging. All Americans should be able to enjoy clean and healthy beaches and wholesome seafood . . . but what can be done?
- Water-borne commerce is essential to the Nation's economic well-being. Over 95 percent of the cargo volume moving into and out of the United States is by ship and this is expected to double by the year 2020. It is imperative that our ports and marine transportation infrastructure have the capacity to handle this increase in a manner that protects and conserves critical coastal and marine resources through environmentally sound planning for port expansion, dredge material disposal, and management of ballast water and other discharges from commercial ships . . . but will we be able to establish a process to determine that the proper balance between economic and environmental considerations is struck?
- Oceans and climate are inextricably linked and climate change affects everyone and all aspects of our economy. Through greater understanding of the oceans, we can better position ourselves to predict droughts, with their devastating effect on agriculture; hurricanes and storm surges that affect coastal

areas; and public health threats now shown to emanate from a warming ocean. With modern technological advances, we have the opportunity, urged by many presenters, to develop truly integrated ocean and coastal observing and prediction systems that are more sophisticated than ever before . . . but will we seize the opportunity?

- Scientists are concerned with recent findings of abrupt climate changes that have occurred throughout recorded history. Significant climate changes have occurred in periods under 10 years and profoundly altered the landscape of large regions of the Earth. Although the oceans clearly play a crucial role in controlling climatic events, this is not understood in sufficient detail to predict or take action in a timely fashion on rapid climate change events and their impacts . . . but what can we do to strengthen our scientific understanding to lead to more informed public policy actions?
- The Arctic Ocean is one of the least understood of all of the world's oceans; yet, for our Nation, it is vitally important. The Arctic is a key component of global climate change, a known sink for contaminants, the habitat for one of the Nation's largest and most valuable fisheries, and the basis of subsistence for northern peoples. Overall funding for basic oceanic and atmospheric research in the Arctic has remained modest and relatively level since the Cold War era . . . but is this level of investment sufficient to better understand the environmental dynamics and unique processes of this important area?
- Particularly important features of our ocean and coastal environment may require special protection for future generations of Americans. Many presenters have stressed the need to protect and restore coral reefs and other ecologically unique and important coastal and estuarine habitats and to preserve marine biodiversity. Protection of these areas requires a more effective and coordinated

approach to avoid long-term damage . . . but will we be able to develop and accept those protections?

- Jurisdictional and legal confusion and ambiguity are not uncommon in our coastal laws. Multiple use problems are exacerbated by growing litigation, regulatory confusion and delay, and uncoordinated policy. Balancing the economic and ecological health of the oceans is made more difficult in some cases by this lack of coordination . . . but how can our laws and policies be better coordinated?
- The lives of all Americans—from landlocked States as well as coastal States—are affected by the oceans. And, in turn, all Americans affect the oceans wherever they may live. Yet, we do not fully understand the nature of these interactions and relationships. It is unclear whether we have devoted adequate resources to ocean science and technology to address these and other oceanic and atmospheric matters . . . if we have not, what would be a responsible education, management, and investment strategy?

The Commission is struck by the impressive scope and importance of these and many of the other issues that have come before it. As it concludes its information-gathering phase, and begins to analyze results and make recommendations to the President and Congress on a comprehensive national ocean policy, it encourages a heightened public awareness about the oceans and the consequences of the policy choices the Nation faces. The Commission is optimistic that it can provide answers to many serious challenges, yet it is concerned whether there is a sufficient sense of national urgency to implement a coordinated and comprehensive national ocean policy to address these challenges as contemplated by the Oceans Act of 2000.

A BRIEF HISTORY OF NATIONAL OCEAN POLICY

The national security of the United States depends in large measure on it being bordered by three oceans—the Atlantic, Pacific, and Arctic—and on our ability to understand and use those vast bodies of water. For much of our Nation’s history, the effort to understand the sea and its benefits were derived from work conducted primarily by the country’s institutions of national defense. In the immediate post World War II years, most government interest in the oceans was centered in the Office of Naval Research although a few other agencies, such as the Bureau of Commercial Fisheries and the Coast and Geodetic Survey, had missions requiring knowledge of the sea.

By the mid-1950s, for reasons ranging from the requisites of the cold war to a growing interest in marine science in the civilian sector, oceanography had become a respected academic and operational field of inquiry, a development that was soon recognized by Congress. In 1966, Congress enacted the Marine Resources and Engineering Development Act to provide for a “comprehensive, long-range, and coordinated national program in marine science.” Toward this end, the Act established the National Council on Marine Resources and Engineering Development and the Commission on Marine Science, Engineering and Resources. The charge to the Commission, commonly known as the Stratton Commission after its chair Dr. Julius A. Stratton, was to undertake a comprehensive analysis of ocean-related issues and activities to make recommendations for a national marine science program adequate to meet current and future national needs.

The result of the Stratton Commission’s nearly two years of unprecedented investigation of marine issues was a milestone report entitled *Our Nation and the Sea*, submitted to Congress in January 1969. The report

covered an extensive range of topics, from the preservation of coastal areas and the use of marine resources to marine technology and the training and education of the marine science workforce. The recommendations put forth in the report led to the creation of the National Oceanic and Atmospheric Administration in 1970 and the passage of the Coastal Zone Management Act in 1972, and made significant contributions to enactment of the Fishery Conservation and Management Act in 1976.

THE YEARS FOLLOWING THE STRATTON COMMISSION[†]

In the 33 years since the Stratton Commission released its report, pressures on coastal and ocean resources have increased. Coastal areas comprise only 17 percent of the U.S. contiguous land area, yet more than 50 percent of the U.S. population lives in these areas. Coastal population increases by 3,600 people per day, a rate of growth that may result in an additional 27 million coastal residents by 2015. One out of six U.S. jobs is marine-related, and one-third of the Gross National Product is produced in coastal counties. Over 90 percent of international trade is carried by sea, with values expected to double by 2010 to \$5 trillion in constant dollars, adding significant strain to port facilities. Offshore oil and gas provides 25 percent of U.S. domestic energy production. The 180 million visitors who enjoy coastal areas and coral reefs each year currently account for 85 percent of U.S. tourism revenues.

Our dependence on oceans is clear, as is our impact on the very resources that sustain life. Living ocean and coastal resources, once thought to be boundless, have revealed their limits. Coastal areas are essential spawning, feeding, and nursery areas for over three-quar-

[†] Data for this section were derived from various reports for the Departments of Commerce (NOAA), the Interior, Navy and other sources. Specific references may be obtained by contacting the U.S. Commission on Ocean Policy.

ters of U.S. commercial fish catches, but about 40,000 acres of coastal wetlands disappear yearly. Of the 23 percent of U.S. managed fish stock that have been fully assessed, over 40 percent are considered depleted or are being fished beyond sustainable levels. Over 40 percent of U.S. estuarine waters have been impaired in some manner for human use and support of aquatic life. Current projections indicate 50-60 percent of coral reefs may be lost during the next 30 years. Twelve billion tons of ballast water is shipped around the world each year, spreading alien and invasive species.

Further, there is an increasing recognition that the Nation's coasts and adjacent oceans are not only critical to coastal states and their residents but to all who live in the U.S. The oceans affect people and businesses throughout the Nation; conversely, inland America has a real and substantial effect on the health of our coasts. A system of responsible stewardship for sustaining resources in coastal and estuarine areas must start deep in every watershed in the Nation, whether in a coastal or landlocked state.

Our increasing use of marine resources, and conflicts over them, is further evidenced by the labyrinth of laws and regulations that govern our interaction with the coastal and oceanic environments. Individuals who work and live on the water, from fishers to corporations, face a Byzantine patchwork of federal and state authorities and regulations. Over 60 congressional committees and subcommittees oversee the nearly 20 federal agencies and permanent commissions with ocean-related activities, governed by over 140 federal ocean-related statutes.

Yet, despite our intimate connection with and dependence on the sea, it is estimated that 95 percent of the ocean is unexplored. It is the last frontier on Earth and the potential for discovery is vast. Exciting recent discoveries in the past three decades offer innumerable

economic and scientific opportunities that deserve examination. The discovery of hydrothermal vents, for example, has led to the identification of nearly 300 new types of marine animals with unknown pharmaceutical and biomedical potential. Deep-ocean exploration, in partnership with other nations, has begun to yield a cache of information and material, the value of which may prove beyond measure.

With the coastal population expected to rise dramatically over the next few decades, the need for a well-informed citizenry, educated in the importance of oceans and the value of the sea and coastal resources, is more critical now than ever. Recognition of this startling list of facts and statistics has called the Nation's attention yet again to the need for a commitment to developing a renewed, coordinated, and comprehensive national ocean policy.

COMMISSION MANDATE

To address this need for a national ocean policy, Congress enacted the Oceans Act of 2000 (Public Law 106-256) to establish an independent, federal ocean commission charged with reviewing for the first time in over 30 years the state of marine-related issues and the effects of federal ocean-related laws and programs. Congress passed the Act on July 25, 2000, and President Clinton signed it into law on August 7, 2000.

In accordance with guidelines set forth in the Oceans Act, in July, 2001 President George W. Bush appointed 16 citizens with wide and diverse backgrounds in marine-related concerns to serve on the U.S. Commission on Ocean Policy (Table 1). Members represent federal, state, and local government, private industry, academic institutions, and public interest groups involved in marine issues. The President selected 12 of the 16 members from lists submitted by the Senate Majority Leader, the Senate Minority Leader, the Speaker of the House of Representatives, and the Minority Leader of the House. The remaining four members were directly appointed by the President. Admiral James D. Watkins, USN (Retired), was elected chairman by his fellow Commissioners, at the first Commission meeting on September 17, 2001. Brief Commissioner biographies can be found on the Commission web site, www.oceancommission.gov.

The Commission is mandated to address numerous challenging issues ranging from the stewardship of fisheries and marine life to the status of human knowledge of the marine environment, as well as the relationship among federal, state, and local governments and the private sector in carrying out ocean and coastal activities. The Act requires that the Commission establish findings and make recommendations for reducing duplication, improving efficiency, enhancing cooperation, and modifying the structure of federal agencies involved in the world's oceans.

In coordination with the states, a science advisory panel, and the public, the Commission will develop a report making recommendations to the President and Congress on ocean and coastal issues for the purpose of developing a coordinated and comprehensive national ocean policy. This national ocean policy is intended to promote protection of life and property, responsible stewardship of ocean and coastal resources, protection of the marine environment and prevention of marine pollution, enhancement of maritime commerce, expansion of human knowledge of the marine environment, investments in technologies to promote energy and food security, close cooperation among government agencies, and preservation of U.S. leadership in ocean and coastal activities. In developing its recommendations, the Commission is statutorily required to give equal consideration to environmental, technical feasibility, economic, and scientific factors.

The Commission's report is required to include the following reviews, assessments, and recommendations with respect to ocean and coastal activities and resources:

- ▶ An assessment of facilities (people, vessels, computers, satellites);
- ▶ A review of the cumulative effect of federal laws;
- ▶ A review of the supply and demand for ocean and coastal resources;
- ▶ A review of the relationships among federal, state, and local governments, and the private sector;
- ▶ A review of the opportunities for the investment in new products and technologies;
- ▶ Recommendations for modifications to federal laws and/or the structure of federal agencies; and,
- ▶ A review of the effectiveness of existing federal interagency policy coordination.

The Commission will present its findings and recommendations in a final report to Congress and the President in 2003. The report will include comments from the Governors of coastal states regarding recommendations put forward by the Commission. The

President is required to submit to Congress, within 120 days of receiving the Commission's report, a statement describing the Administration's plan to implement or respond to the recommendations.

T A B L E 1
**U.S. COMMISSION ON OCEAN POLICY
 MEMBERS AND AFFILIATION**

MEMBER	AFFILIATION
Admiral James D. Watkins, USN (Ret.), Chairman	President Emeritus, Consortium for Oceanographic Research and Education
Robert Ballard, Ph.D.	Institute for Exploration
Mr. Ted A. Beattie	John G. Shedd Aquarium
Mrs. Lillian Borrone	Port Authority of New York and New Jersey (Retired)
Dr. James M. Coleman	Louisiana State University
Ms. Ann D'Amato	Office of the City Attorney, Los Angeles, CA
Mr. Lawrence Dickerson	Diamond Offshore Drilling, Inc.
Vice Admiral Paul G. Gaffney II, USN	National Defense University
Professor Marc J. Hershman	University of Washington
Mr. Paul L. Kelly	Rowan Companies, Inc.
Mr. Christopher Koch	World Shipping Council
Dr. Frank Muller-Karger	University of South Florida
Mr. Edward B. Rasmuson	Wells Fargo Bank Alaska
Dr. Andrew A. Rosenberg	University of New Hampshire
Mr. William D. Ruckelshaus	Madrona Venture Group

ORGANIZATION OF THE COMMISSION

WORKING GROUPS

During the first Commission meeting in September 2001, the Commissioners agreed to establish four working groups to address issues in the areas of: Governance; Stewardship; Research, Education and Marine Operations; and Investment and Implementation. These working groups are charged with reviewing and analyzing issues within their specific area of focus and reporting findings to the full Commission.

Based on the information gathered at public meetings, the working groups identify and review key issues, outline possible options for addressing these issues and determine the need for white paper development to provide more detailed information on specific topics. The work of each working group is shared among the other groups throughout the deliberation process to ensure thorough integration and coordination in developing the final Commission report and recommendations.

The Governance Working Group is examining the current roles of federal, state, and local governments as they relate to the oceans. This working group also is assessing the management of the coastal zone and nonliving marine resources, and will make recommendations or provide options to the full Commission for reform or improvement.

The Stewardship Working Group is assessing the current status of ocean stewardship; the behavior of people with respect to the oceans and incentives for responsible actions. This working group also addresses living marine resources, pollution and water quality in coastal and Exclusive Economic Zone waters and in the world's oceans. The group is concentrating on what can be done to responsibly and sustainably use the contiguous ocean areas and their resources and the global ocean system to which they connect.

The Research, Education and Marine Operations Working Group is acquiring data on and assessing the existing knowledge of ocean, and coastal research and exploration, education, marine operations, and marine commerce-related issues. This group will analyze such data and the current state of knowledge in these areas to assess their adequacy in achieving the national goals set forth in the Oceans Act of 2000.

The Investment and Implementation Working Group is focused on new investment and implementing strategies needed to carry out the Commission's proposed ocean policy. The working group will answer the question, "Given the issue-specific recommendations of the other working groups, what federal structures, processes, or investments are necessary to integrate, implement, and sustain the Commission's recommendations?"

SCIENCE ADVISORY PANEL

The Oceans Act of 2000 specifically directs the Commission to establish a multidisciplinary Science Advisory Panel consisting of experts in living and nonliving marine resource issues from outside the federal government. The panel will assist the Commission in preparing its report and ensure "that the scientific information considered by the Commission is based on the best scientific information available." The composition of the Science Advisory Panel was determined by the Commissioners with advice from the National Academy of Sciences. It represents some of the finest ocean science and marine policy practitioners and researchers in the Nation and reflects the breadth of issues before the Commission.

The panel members were appointed by the Ocean Commission Chairman and were nominally assigned to the four working groups. Any working group may call on any Science Advisory Panel member for technical advice. The list

of panel members is shown in Table 2. The Science Advisory Panel charter and brief member biographies are provided on the Commission web site, www.oceancommission.gov.

T A B L E 2
**U.S. COMMISSION ON OCEAN POLICY
SCIENCE ADVISORY PANEL MEMBERS AND AFFILIATION***

GOVERNANCE WORKING GROUP

Donald Boesch, University System of Maryland
Daniel Bromley, University of Wisconsin
Biliana Cicin-Sain, University of Delaware
DeWitt John, Bowdoin College
Michael Orbach, Duke University
Andrew Solow, Woods Hole Oceanographic Institution

STEWARDSHIP WORKING GROUP

Otis Brown, University of Miami
J. Frederick Grassle, Rutgers, State University of New Jersey
D. Jay Grimes, University of Southern Mississippi
Susan Hanna, Oregon State University
Ray Hilborn, University of Washington
David Prior, Texas A&M University
Warren Washington, National Center for Atmospheric Research

**RESEARCH, EDUCATION AND MARINE OPERATIONS
WORKING GROUP**

Kenneth Brink, Woods Hole Oceanographic Institution
Jacqui Michel, Research Planning, Inc.
John Orcutt, Scripps Institution of Oceanography
Shirley Pomponi, Harbor Branch Oceanographic Institution
Robert Spindel, University of Washington
Sharon Walker, J.L. Scott Marine Education Center and Aquarium

INVESTMENT AND IMPLEMENTATION WORKING GROUP

Robert Frosch, Harvard University
Robert Gagosian, Woods Hole Oceanographic Institution
Geraldine Knatz, Port of Long Beach
Marcia McNutt, Monterey Bay Aquarium Research Institute
Edward Miles, University of Washington
Carolyn Thoroughgood, University of Delaware
Robert White, The Washington Advisory Group

*Science Advisory Panel Members may be called upon by any working group for advice.

T A B L E 3

U.S. COMMISSION ON OCEAN POLICY REGIONAL MEETING SCHEDULE

Southeast Region - Delaware to Georgia

January 14-16, 2002:

January 14 - Regional site visits (Annapolis, MD; Charleston, SC)

January 15-16 - Public meetings in Charleston, SC

Florida and the Caribbean

February 21-22, 2002:

February 21 - Regional site visits (Puerto Rico; South Florida East Coast; West Coast, Tampa-Sarasota)

February 22 - Public meeting in St. Petersburg, FL

Gulf of Mexico Region - Alabama to Texas

March 6-8, 2002:

March 6 - Regional site visits (offshore New Orleans, LA; Stennis Space Center, MS)

March 7-8 - Public meetings in New Orleans, LA

Southwest Region - California

April 17-19, 2002:

April 17 - Regional site visits (San Diego, CA; Monterey, CA)

April 18-19 - Public meetings in San Pedro, CA

Hawaii and Pacific Islands

May 13-14, 2002:

May 13-14 - Public meetings in Honolulu, HI

Northwest - Washington and Oregon

June 12-14, 2002:

June 12 - Regional site visits (Olympia, WA; Seattle, WA)

June 13-14 - Public meetings in Seattle, WA

Northeast - New Jersey to Maine

July 22-24, 2002:

July 22 - Regional site visits (Southern New England; New York-New Jersey; Northern New England)

July 23-24 - Public meetings in Boston, MA

Alaska

August 21-23, 2002:

August 21-22 - Public meetings in Anchorage, AK

August 23 - Regional site visits (Dutch Harbor, AK; Juneau, AK)

Great Lakes

September 24-25, 2002:

September 24-25 - Public meetings in Chicago, IL

REGIONAL MEETINGS

To gather information on the wide array of coastal and ocean issues a national ocean policy is intended to address, the Commission is hearing about ocean and coastal issues in nine different areas around the U.S., its ocean coasts, and Great Lakes through a series of regional meetings and related site visits.

The Oceans Act requires the Commission to hold at least one public meeting in Alaska, the Northeast (including the Great Lakes), the Southeast (including the Caribbean), the Southwest (including Hawaii and the Pacific Territories), the Northwest, and the Gulf of Mexico. To obtain information from even greater representation of U.S. marine-related interests, the Commissioners agreed to visit Florida and the Caribbean, Hawaii and the Pacific Territories, and the Great

Lakes separate from and in addition to the regional groupings outlined in the Act. In addition to the public meetings, the Commissioners gain knowledge of important regional issues through associated site visits in and around each regional meeting venue. Prior to beginning its regional meeting schedule, the Commission held two public meetings in Washington, D.C.

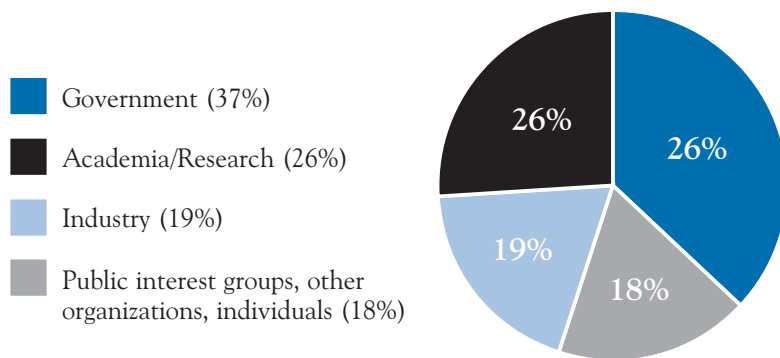
The regional meetings provide government agencies, nongovernmental organizations, industry, academia, and the public the opportunity to directly discuss ocean and coastal concerns with the Commission. During these meetings, Commissioners hold dialogues with invited speakers and seek comment from members of the public to gain insight into issues and opportunities facing each region, and to solicit recommendations for Commission consideration. The regional meetings highlight case studies of relevant issues and

frequently exhibit regional models with potential applicability to national policy. The accumulated information will form the basis for the Commission's recommendations for a coordinated and comprehensive national ocean and coastal policy and point to successful approaches that can serve as models.

Invited panelists are selected for each meeting based on information needs for the topics highlighted in each region, with a strong effort to maintain a bal-

ance of interests and gain perspectives from all sectors. During its two public meetings in Washington, D.C. and six regional meetings in various coastal areas, the Commission has heard from a total of 180 invited presenters, with an additional 115 comments from the public. A breakdown of invited panelists by affiliation is shown in Figure 1. To date, nearly 1,150 pages of testimony have been received, with some 3,000 pages of information filed in the official Commission record.

FIGURE 1
INVITED PANELIST AFFILIATION
(SEPTEMBER 2001 - JUNE 2002)



HIGHLIGHTS OF INVITED TESTIMONY AND PUBLIC COMMENT THROUGH JUNE 2002

Highlights of the reoccurring themes and some of the recommendations received by the Commission through June 2002 are described below. It is important to stress that the recommendations noted are those that have been provided to the Commission for its consideration through public testimony.‡

... COMPREHENSIVE OCEAN POLICY AND MANAGEMENT

Through testimony and public comment, managers and experts representing numerous organizations, every level of government, and the public have made clear that this Nation is not lacking in policies, laws, or rules that direct the use, protection, and management of ocean resources. What is lacking is a comprehensive strategy that would allow for the management of ocean resources within an integrated framework: one that would balance the protection of marine resources with responsible use. It is clear that the development of policies for marine resources has been piecemeal and single-issue oriented, and the sentiment that this approach has resulted in uncoordinated and often conflicting mandates is overwhelming.

In recent years the U.S. has increased its understanding of the interconnectedness of marine resources. Presenters have stressed integration of the policies that govern our use and stewardship of the ocean and coasts. Many suggestions have been offered, including basing governance structures on ecosystems and employing an approach that is proactive and adaptive; formulating national ocean stewardship principles and designing governmental approaches that incorporate those principles through public-private partnerships; finding ways to improve the governmental regime we currently have by better integrating horizontally and ver-

tically; and instituting a more consistent role for regional stakeholders and experts in ocean management.

... BALANCING ECONOMIC AND ECOLOGICAL HEALTH

The Commission has heard from many presenters that oceans and their resources are vital to the Nation's economy and, at the same time, that their ecological well-being is threatened by a variety of human activities.

Oceans are highways of commerce for international trade. Today, more than two billion tons of domestic and international freight move through U.S. ports annually. Marine fisheries provide food for the Nation and employment and a way of life for generations of fishers. Offshore oil and natural gas development makes a major contribution to the Nation's energy supply and contributes substantial revenues to land and water conservation programs and the U.S. Treasury. Ocean recreation, encompassing activities such as swimming, boating, fishing, and diving is a major source of revenue for coastal communities and states. However, the national population is rapidly increasing and demographics are changing as more people move to coastal areas. As a result, increasing human demands and impacts on coastal and ocean resources have had serious and deleterious effects on the health of estuaries, coastal waters, and the oceans.

Multiple use conflicts are on the increase, pitting various ocean stakeholders against each other in highly adversarial conflicts, often resulting in formal legal action. The Commission has heard that attempts to balance different—and sometimes competing—interests have mixed results, often because it is difficult for the various interests involved to work together toward a compromise solution that

‡ More detailed information on each presenter's statement before the Commission can be found in Appendix I, *A Synthesis of Testimony, Comments, and Recommendations from Presenters*, and Appendix II, *Summary of Testimony, Comments, and Recommendations from Presenters*. The appendices are available online at www.oceancommission.gov.

both protects the marine environment and maintains economic benefits. The Commission has also heard from some that there is a need for more transparency in the ocean and coastal decision making process, such as in fishery management.

Many who have come before the Commission have called for various types of new ocean governance regimes, including structural changes to address both substantive and procedural problems in policy development. Some presenters have discussed the need for new structures to coordinate institutional and individual efforts to address issues at all levels of government. Others have advocated improved governance systems to better balance opposing positions that will simultaneously assure the sustainability and viability of ocean resources, encourage responsible economic development, and protect social and cultural values associated with making a livelihood from the sea.

... HEALTHY ECOSYSTEMS

Much testimony and many recommendations have centered on concerns with ecosystem health and the need to revamp the Nation's policies to ensure that we achieve and sustain diverse ecosystems capable of supporting multiple uses. Identified threats include overfishing and bycatch, water and air-borne pollution, and habitat loss. Other stressors mentioned include vessel traffic and climate change.

Testimony has been presented to show that the stresses of human population growth and associated expanding development are reflected directly and acutely in coastal areas. Coastal habitats that are essential for fish, shellfish, and wildlife are being converted for other uses. Nonpoint source pollution, such as runoff from agricultural, suburban, and urban areas, is a chronic source of water quality degradation. Toxics and nutrients, sedimentation,

air-borne pollution and marine water-borne diseases threaten water quality and public health. Marine debris, whether washed into the water from the shore, or dumped into the water from vessels, is a significant problem. Aquatic nonindigenous and invasive species, often introduced through the release of ship ballast water, is a serious threat. These species often displace and eliminate native species, and alter the biology of existing communities and ecosystems.

... EDUCATION

Education regarding the importance of our oceans to the future health of our Nation is key to our ability to effectively manage and sustain these resources. Effective ways to disseminate knowledge and information about ocean resources to students, educators, the public, and decision makers should be put in place.

Today's students will be tomorrow's leaders. The Commission has heard from many witnesses that there is a need to educate students about the ocean and its resources. We need to support and better train our teachers so that they can include ocean-related content in the classroom. Suggestions from presenters include increasing teacher training in ocean sciences, facilitating interaction and collaborative efforts between ocean scientists and educators, and incorporating ocean science into national standards established for science education.

Testimony also has centered on the need to draw more high-quality students, especially those from traditionally underrepresented groups, to ocean science and engineering at the graduate level. The "graying" of the ocean science workforce and a decrease in enrollment in ocean science disciplines at the Ph.D. level underscore this need, according to many experts.

Most people do not understand the basic scientific processes that drive the marine environment and are unaware of the most pressing issues we face. The audience that needs to be reached is very broad—not only those people with a direct interest or involvement in marine affairs, but the millions of people who live near the ocean and the millions more who visit coastal areas each year. Even those who do not live near the oceans need to feel ownership and a sense of responsibility to care for ocean resources. Experts agree that a successful effort to reach this large audience will require coordinated and effective mechanisms to promote and enhance ocean education, both formal and informal, on a national level.

...SCIENTIFIC UNDERSTANDING AND KNOWLEDGE OF THE OCEANS

Oceans cover 71 percent of the earth's surface and contain a diversity of life—complex and interrelated physical, chemical, and biological systems—which greatly exceeds that found in terrestrial systems. Yet the seas are poorly understood with less than five percent of the world's oceans bottom having been studied and explored.

While we are aware that human activities are impacting the oceans and altering their various systems, we lack a meaningful understanding of the oceans' natural variability or their ability to assimilate these impacts. In addition, significant gaps exist in our understanding of the quantity, quality, and ecological value of our living marine resources; the nature of their habitats; and the interactions between land and air-based sources of pollution and their effects on ocean and coastal environments.

... DATA COLLECTION AND THE ABILITY TO SHARE DATA

Oceanographic data collected from a wide variety of sensors and platforms provide valuable information about ocean parameters such as currents, temperature, salinity, bottom topography and composition chemicals, and nutrients, as well as information on algae biomass and productivity, fish stocks, marine mammals, and habitats. This information has great potential to help us protect and manage our marine resources.

However, there is no marine equivalent to the networks of meteorological observation stations distributed on land on all continents. Ocean observation efforts are limited temporally and spatially. Presenters have stated that a national commitment to integrated and sustained ocean observation and prediction systems would provide an important means to support scientific research, operations, and management and inform the public, government, and industry.

The Commission also has heard that the scientific community's capacity to conduct oceanographic and marine ecosystem scientific research is significant, but that there is a need for a better and more comprehensive way to link the work of different disciplines in a manner that offers a more integrated understanding of the marine environment and the processes that control it. Further, there is a need for standardized practices and procedures and a mechanism for scientists and, in fact, ocean users, managers, and policymakers to be able to integrate hard data and the resulting knowledge so they can better anticipate or diagnose threats to our ocean resources.

...EXPLORATION AND DISCOVERY

At many venues, the Commission has heard that ocean exploration is critical to the advancement of science and to furthering our understanding of how life on earth works. Systematic ocean exploration can lead to more information about ocean ecosystems and enhance our ability to use, manage, and protect these areas. The oceans *are* our last frontier—bringing the excitement of discovery to the public can help promote widespread understand-

ing of not only how the oceans work, but why they are important. Further, a systematic survey and exploration of the U.S. Exclusive Economic Zones would become an important baseline for any integrated ocean observing system.

A better understanding of how our oceans work and their importance to our lives is the key to the cultivation and promotion of the ocean stewardship ethic that is needed to promote and protect the health of our ocean resources.

COMMISSION PRODUCTS

During the course of its first several months, the Ocean Commission developed several documents intended to identify key marine-related questions and issues and guide it through its data gathering and analysis process. Early in its work, the Commission took a public position on the United Nations Law of the Sea Convention and passed a resolution in support of that treaty. Two other key documents directly related to the Commission's policy development mandates are briefly described below. They are available in their entirety for review and comment on the Commission web site.

UNITED NATIONS LAW OF THE SEA CONVENTION: RESOLUTION

At its November 14, 2001, meeting in Washington D.C., the Commission unanimously adopted a resolution supporting United States accession to the United Nations Law of the Sea Convention. Subsequent to the adoption of the resolution, Chairman Watkins wrote a letter transmitting a copy of the Commission's action to the President, the Secretaries of State and Defense, and the Chairman and Ranking Minority Member of the Senate Committee on Foreign Relations. The text of the resolution follows:

United Nations Law of the Sea Convention

The National Commission on Ocean Policy unanimously recommends that the United States of America immediately accede to the United Nations Law of the Sea Convention. Time is of essence if the United States is to maintain its leadership role in ocean and coastal activities. Critical national interests are at stake and the United States can only be a full participant in upcoming Convention activities if the country proceeds with accession expeditiously.

DEVELOPING A NATIONAL POLICY FOR OUR OCEAN FUTURE: THE ELEMENTS DOCUMENT

Developed by the Commission in early 2002, and approved for public release at its California regional meeting in April 2002, Developing a National Policy for our Ocean Future outlines broad elements that the Commission believes should be part of a desirable national ocean policy. This document serves as a framework for the Commission's inquiry and eventual development of recommendations that it will include in its final report. The elements specified by the Commission are:

1. **A coordinated and comprehensive framework** that defines the appropriate role for all levels of government, the private sector, and citizens and residents in managing ocean and coastal resources.
2. **Sustainable use** of ocean resources in a manner that adequately protects fragile and unique coastal and marine areas.
3. **Public education in marine affairs and sciences** that raises awareness of the nation's wealth of coastal and ocean resources, and the connection between the atmosphere and the ocean, and also identifies the potential benefits and costs inherent in their use, and explains the role of governments and citizens and residents as ocean stewards.
4. **Technical knowledge of the marine realm**, including information on the interaction between the atmosphere and the ocean, on ocean features, dynamics, and ecosystems that is used to improve sustainable and beneficial use and conservation of marine resources.
5. **Ongoing monitoring** that leads to adaptive management of our ocean resources.
6. **Public safety and security** from natural and man-made hazards and threats along the nation's coasts

and in U.S. ports, harbors, and waterways.

7. **Ample opportunities for people** to enjoy and benefit from the marine environment, including its natural amenities, aesthetic beauty, and historic and cultural resources, for inspiration and renewal as well as for recreational and educational pursuits.
8. **U.S. commitment to global marine affairs** through development and exchange of expertise with other nations with regard to ocean and coastal governance, stewardship, education, science, and exploration.
9. **Investment** in ocean-based commerce, marine technology development, resource protection and use, environmental restoration, recreation, and expansion of marine knowledge by both the public and private sectors for the benefit of the nation and the world.
10. **A well-designed management system** that ensures the oversight and sustained attention to the implementation of all the elements of the national ocean policy.

TOWARD A NATIONAL OCEAN POLICY: OCEAN POLICY TOPICS AND RELATED ISSUES

Toward a National Ocean Policy (see Appendix III) is an effort to define a working strategy that will allow the Commission to determine the scope and the content of an integrated national ocean policy and to consider options to address key issue areas as required by the Oceans Act. This document represents the Commission's ongoing process to identify, clarify, and organize the many ocean policy issues it must address in the course of developing policy recommendations.

Based on testimony received in the public meetings held to date, Commissioners developed the wide range of issues contained in the document. Organized under the nine broad topical headings (Table 4), these are questions that may be considered by the Commission as it enters its deliberation stage in the fall 2002. While all questions are important, some may not be addressed in the final Commission report as issue prioritization may become necessary. It is a work in progress and part of an iterative process that will be constantly revisited as the Commission's work moves forward.

T A B L E 4
TOPICAL HEADINGS USED TO CATEGORIZE ISSUES IN
"TOWARD A NATIONAL OCEAN POLICY"

Topic 1:	Living Marine Resources
Topic 2:	Pollution and Water Quality
Topic 3:	Governance
Topic 4:	Coastal Zone Management
Topic 5:	Nonliving Marine Resources
Topic 6:	Research, Exploration, and Monitoring
Topic 7:	Education
Topic 8:	Technology and Marine Operations
Topic 9:	Investment and Federal Government Implementation

FUTURE COMMISSION ACTIVITIES

This Mid-Term Report describes the work undertaken by the U.S. Commission on Ocean Policy through the end of June 2002 and highlights some of the many challenges to continued ocean health that the Commission will consider. As the Commission completes its regional meeting schedule and enters its next phase of work, it will be developing policy options and formulating recommendations to the President and Congress about how best to manage, use, and protect ocean resources in a manner that balances protection with responsible use and ensures a healthy, vital ocean for future generations.

As of July 1, 2002, the Commission had completed six of its nine regional meetings. Some issues not yet covered but identified as important for consideration in the final report were addressed in meetings already held in Boston, Massachusetts in July and Anchorage, Alaska in August or will be addressed at the meeting scheduled in Chicago, Illinois in late September or at subsequent meetings.

A minimum of two follow-up public meetings are currently planned for the remainder of 2002. The first, scheduled for Washington, D.C., in October, will include a meeting covering issues more appropriate for discussion at the national level. Another meeting is scheduled for the Washington, D.C. area in November. Additional public meetings may be scheduled as needed in 2003.



U.S. COMMISSION ON
OCEAN POLICY



1120 20TH STREET, NW
SUITE 200 NORTH
WASHINGTON, D.C. 20036
202-418-3442
WWW.OCEANCOMMISSION.GOV