

JOINT OCEAN COMMISSION INITIATIVE

U.S. OCEAN POLICY REPORT CARD

2007

Attached is the Joint Ocean Commission Initiative's 2007 U.S. Ocean Policy Report Card. The report card is a retrospective assessment of the nation's collective progress made during 2007 toward implementing the recommendations of the U.S. Commission on Ocean Policy and the Pew Oceans Commission. The results of this evaluation are based upon careful monitoring of ocean policy developments and communication with leaders in Congress, the Administration, and the states who are responsible for creating and implementing new and improved policies.

The Joint Initiative added a new subject, "Links between Oceans and Climate Change," to call attention to the important relationship between oceans and climate change. Given the staggering economic and ecological ramifications associated with climate change, the Joint Initiative stresses that a better understanding of ocean-related processes and their impacts will be necessary for policy makers and the public to make informed decisions on mitigation and adaptation strategies.

For 2007, the overall grade rose modestly to a C, up from a C- average in 2006. As the individual grades indicate, there have been modest improvements. There are two areas of notable progress:

- States and regions continued to move ocean policy reform forward, making significant strides in improving the management of coastal and ocean resources, and proving that Americans value the economic, environmental, and security benefits of our ocean, coastal, and Great Lakes waters.
- U.S. ratification of the Law of the Sea Convention gained significant momentum due to support from President Bush and his Administration, action in the Senate, and the efforts of a diverse coalition of industry, military, and environmental leaders. Securing Senate approval of the Convention will require strong support from President Bush to ensure that the important national security, economic, and environmental interests that the treaty provides are realized.

Unfortunately, stagnant funding remains the major constraint to making substantial progress in addressing the problems facing our oceans and coasts. Even with a dramatic increase in Fiscal Year (FY) 2008 funding for oceans proposed by the U.S. House of Representatives, these gains were largely erased in the omnibus appropriations bill, a process that also resulted in the elimination of most funding requested by the President to support his new ocean research plan. Despite a continuing dialogue regarding funding needs, the flat budgets endured by most federal ocean and coastal programs over the past four years is at the core of the slow pace of national ocean policy reform.

The Joint Initiative remains committed to providing constructive assistance to leaders at all levels of government, as well as the nongovernmental, academic, and the private sectors, to help our nation realize a coordinated, comprehensive, coherent, and effective national ocean policy.

The Joint Ocean Commission Initiative is a collaborative effort of the U.S. Commission on Ocean Policy and Pew Oceans Commission to catalyze ocean policy reform. Led by Admiral James D. Watkins (U.S. Navy, Ret.) and the Honorable Leon E. Panetta, the primary goal of the Joint Ocean Commission Initiative is to accelerate the pace of change that results in meaningful ocean policy reform. For more information, please visit www.jointoceancommission.org.

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Subject	Grade	Comments Examples below do not reflect the full scope of activities upon which final grade is based. See full comments attached.
National Ocean Governance Reform (2006=C-)	D ↓ Lack of policy and framework hampers progress. Consideration, but no enactment of legislation.	Notable Progress <ul style="list-style-type: none"> • House deliberation on comprehensive ocean governance reform • Progress by the House and Senate Commerce Committee on ocean legislation • National stakeholder process to strengthen the Coastal Zone Management Act Improvements Needed <ul style="list-style-type: none"> • Reform national ocean governance by enacting legislation that creates a national ocean policy, codifies NOAA, and strengthens federal coordination • Pass pending ocean legislation, including ocean observing, ocean exploration, coastal land conservation, and ballast water management • Reauthorize and strengthen the Coastal Zone Management Act, National Marine Sanctuaries Act, and Oceans and Human Health Act • Create a national framework to help initiate and coordinate regional efforts
Regional and State Ocean Governance Reform (2006=A-)	A- - Promising strides in regions and states on a variety of ocean issues.	Notable Progress <ul style="list-style-type: none"> • Progress establishing and implementing state ocean legislation in MA, NJ, and NY and noteworthy progress in AK, CA, FL, HI, LA, OR, and WA • Significant progress in Gulf of Mexico and West Coast regions Improvements Needed <ul style="list-style-type: none"> • Strengthen existing initiatives, including expanding state commitment and federal support • Implement regional initiatives in Southeast and Mid-Atlantic
International Leadership (2006=D-)	C+ ↑ Significant support for Law of the Sea Convention but need Senate approval.	Notable Progress <ul style="list-style-type: none"> • Presidential support for the Law of the Sea Convention • Senate Foreign Relations Committee approval of the Convention • Active support for the Convention by a bipartisan coalition of industry, military, and environmental leaders • Administration support for international ocean policy issues Improvements Needed <ul style="list-style-type: none"> • Senate approval of the Law of the Sea Convention
Research, Science, and Education (2006=D+)	C- ↑ Increasing recognition of the need to strengthen ocean science and education but limited progress.	Notable Progress <ul style="list-style-type: none"> • Administration focus on implementing the Ocean Research Priorities Plan and Implementation Strategy • Continued efforts to develop ocean and coastal observing systems • Expanded federal support and coordination on ocean education • Congressional deliberation on ocean science legislation Improvements Needed <ul style="list-style-type: none"> • Fund implementation of the Ocean Research Priorities Plan and Implementation Strategy • Pass pending ocean science legislation on ocean observing, ocean acidification research, ocean exploration, and coastal and ocean mapping • Reestablish a congressional science and technology advisory office
Fisheries Management Reform (2006=B+)	C+ ↓ Slow progress implementing fisheries management reform.	Notable Progress <ul style="list-style-type: none"> • Initial steps implementing the Magnuson-Stevens Reauthorization Act • Fewer stocks overfished or experiencing overfishing • Progress toward establishing limited access privilege programs • U.S. leadership on international fisheries and habitat conservation Improvements Needed <ul style="list-style-type: none"> • Expedite implementation and funding for Magnuson-Stevens Reauthorization Act reforms • Increase emphasis on incorporating science into decision-making • Improve recreational fisheries monitoring and management • Increase commitment to international fisheries conservation
New Funding for Ocean Policy and Programs (2006=F)	D+ ↑ Efforts to address funding needs but still inadequate.	Notable Progress <ul style="list-style-type: none"> • House joined the Senate in increasing funding support for NOAA • Presidential funding support for Ocean Research Priorities Plan and Implementation Strategy • Ocean research recognized as part of national competitiveness initiative Improvements Needed <ul style="list-style-type: none"> • Increase funding for ocean research, management, and infrastructure, including ocean and coastal observing systems • Establish an integrated budget for federal ocean programs • Establish a dedicated ocean trust fund for state and federal programs
Links between Oceans and Climate Change (New)	C New Subject: Initial recognition of role of oceans but need real progress.	Notable Progress <ul style="list-style-type: none"> • Expanded state efforts to mitigate and adapt to impacts of climate change on coastal communities and resources • Increased recognition by Congress of the role of oceans in climate change and the impacts of this change on oceans and coasts Improvements Needed <ul style="list-style-type: none"> • Enact legislation that incorporates ocean science, management, and education into a strategy to mitigate and adapt to climate change • Expand ocean research, observing, modeling, and information delivery systems • Increase federal support of state and regional efforts to address ocean-related impacts of climate change

National Ocean Governance Reform

2007

Grade: **D**

Why is national ocean governance reform important? The health of our ocean and coastal ecosystems is declining at an alarming rate in the face of increasing pressures such as coastal development, pollution, overfishing, and invasive species. Our current governance approaches and structures greatly hinder effective mechanisms for reversing this downward trend. Significant obstacles include a lack of a clear national ocean policy, confusing and overlapping jurisdictions, and fragmented laws. We must unify our nation around a common goal of protecting and restoring our ocean and coastal ecosystems so that they will continue to be healthy and resilient and able to provide the goods and services that people want and need. Sound ocean policy requires protecting our oceans and coasts while also understanding the relationships among social, cultural, economic, and ecological factors.

What was done in 2007 to address national ocean governance reform?

- House deliberation on comprehensive ocean governance reform
- Progress by the House and Senate Commerce Committee on ocean legislation
- National stakeholder process to strengthen the Coastal Zone Management Act

The Joint Initiative is encouraged by actions in the House to promote comprehensive ocean governance legislation—the Ocean Conservation, Education, and National Strategy for the 21st Century Act. The bill calls for many of the ocean governance reforms recommended by the Joint Initiative including: creating a national ocean policy, reforming and codifying the National Oceanic and Atmospheric Administration (NOAA), codifying and strengthening a coordinating structure for ocean policy in the White House, developing a coordinated and comprehensive offshore management regime, creating a framework for regional ocean governance, and establishing an ocean trust fund.

In addition to the ocean governance legislation, the House and Senate also considered and advanced bills addressing other important ocean and coastal issues. The House passed legislation addressing maritime pollution, coral reef conservation, ocean and coastal mapping, and ocean observing. The Senate Commerce Committee passed legislation addressing coastal land conservation, ballast water management, ocean observation, ocean exploration, coral reef conservation, as well as climate change research.

Recognizing the need to reauthorize the Coastal Zone Management Act (CZMA), NOAA and the Coastal States Organization conducted a robust stakeholder process to engage state coastal managers and federal agency partners as well as representatives from state and local governments, industry, academia, and recreation and nongovernmental groups to gather input on priority issues and innovative ideas for improving the Act. The Joint Initiative applauds this effort to engage a broad spectrum of stakeholders and encourages continued constituent involvement to move CZMA reauthorization legislation in 2008.

What remains to be done to improve the grade? To realize the goals of improving the economic and ecological health of our oceans through effective governance structures and mechanisms, we must enact legislation that develops a national ocean policy, codifies and reforms NOAA, establishes a permanent

interagency coordinating structure in the White House, provides a structure for federal agencies to support and participate in regional partnerships, and institutes coordinated and comprehensive management of offshore waters. Congress must act boldly to transform the current national management regime into a truly effective system for managing our coasts and oceans into the future.

Effective national ocean governance includes federal support for regional and state ocean governance activities that are currently underway around the country. Many regions and states are organizing from the “bottom up,” often through the vision and leadership of governors. While federal agencies provide expertise and tools to assist these efforts when requested, a national framework is needed to provide structure for the proactive federal participation needed to help initiate new efforts or further stimulate existing efforts. Active participation by federal agencies could increase the stability of existing efforts, promote progress in efforts that have stalled, and help empower states and regions in initiating new efforts where gaps exist. All levels of government need to play a role in regional and state efforts to effectively address the critical issues facing marine ecosystems.

The Joint Initiative recognizes the importance of reauthorizing and strengthening the CZMA to provide a forward-looking approach to coastal management that promotes new methods for addressing new or evolved issues. We need an improved CZMA that empowers coastal states and communities to make important decisions about activities that take place in coastal areas and provides an integrated framework for managing the trade-offs associated with making those decisions. The CZMA needs to provide clear direction to the federal-state coastal management partnership by providing measurable goals and objectives to guide management decisions. The Joint Initiative applauds efforts by NOAA to develop a viable proposal for reauthorizing and updating this law, and encourages passage of progressive legislation in 2008.

The Joint Initiative also urges the House and Senate to work together to pass pending ocean legislation. These bills would establish federal programs to address critical issues such as coastal land conservation, ballast water management, coral reef conservation, ocean acidification, ocean exploration, ocean observation, ocean mapping and charting, and climate change research. Enactment and funding of these bills would represent a substantial commitment to improving our understanding of ocean ecosystems and a significant step forward in safeguarding valuable ocean and coastal resources.

Congress should also work toward reauthorizing the National Marine Sanctuaries Act and the Oceans and Human Health Act. These bills, which enhance the protection of natural and cultural ocean resources and improve our understanding of the links between oceans and human health, are part of the legislative foundation of a comprehensive national ocean policy.

Regional and State Ocean Governance Reform

2007

Grade: **A-**

Why is regional and state ocean governance reform important? Regional governance mechanisms are needed to achieve a more coordinated, ecosystem-based management approach for improving ocean and coastal health. Such mechanisms enable governments at all levels to work together to identify regional goals and priorities, improve responses to regional needs, and develop and disseminate regionally significant research and information. While the problems facing marine ecosystems must be addressed at the local level, additional tools and support that the federal government can provide are also needed to truly resolve the most pressing issues. Multi-state initiatives and efforts at the state level can strengthen the voice of local stakeholders in communicating those needs to the federal government.

What was done in 2007 to address regional and state ocean governance reform? Over the last few years, ocean governance efforts have emerged in a number of regions and states. The Joint Initiative applauds these efforts and urges further state commitment and federal support for sustain their progress.

State ocean legislation:

- **Massachusetts** – The State Senate and House have both passed various versions of the Massachusetts Ocean Act, a landmark bill that would create an integrated system for managing the state’s coastal waters. The Joint Initiative encourages the state’s legislative bodies to maintain the bill’s core strengths for more comprehensive planning and authorize the Ocean Act in 2008. Similar leadership in the Northeast Regional Ocean Council is encouraged.
- **New Jersey** – The New Jersey Coastal and Ocean Protection Council was established by state legislation and signed by the Governor in early 2008 to promote ecosystem-based management of the state’s ocean and coastal resources. The Joint Initiative urges the expeditious appointment of Council members and state funding for Council activities.
- **New York** – The New York Ocean and Great Lakes Ecosystem Conservation Council, which was established by law in 2006, is using ecosystem-based management as the new approach for managing the state’s ocean and coastal resources. The Council moved forward on ecosystem-based management demonstration projects, an ocean and coastal atlas, and agency guidelines for implementing an ecosystem-based approach. The Joint Initiative encourages the state legislature and Governor to support and embrace the Council’s groundbreaking work.

State ocean governance efforts:

- **California** – The California Fish and Game Commission approved a network of 29 marine protected areas off the state’s central coast in 2007. The network covers 204 square miles of ocean, roughly 18 percent of state waters, with a portion set aside as no-take zones. The second phase of the process to develop the nation’s first statewide network of marine protected areas also began in the north central coast region of the state.
- **Florida** – The Governor’s Action Team on Energy and Climate Change is showing strong leadership by moving to address the impacts of climate change on the state, including adaptation strategies to protect coastal resources and communities.

- *Washington* – The 2007 Washington State legislature approved substantial funding for Puget Sound restoration and recovery, including formation of a new agency, the Puget Sound Partnership. The Partnership works with communities, agencies, and organizations to create an Action Agenda to identify priorities and serve as a roadmap for restoration and protection efforts. The Joint Initiative applauds Washington’s governor and legislature for embracing the Puget Sound Partnership.
- *Other state initiatives* that address important ocean issues include the Alaska Ocean Policy Cabinet; Hawaii Ocean and Coastal Council; Louisiana Coastal Protection and Restoration Authority; and Oregon Ocean Policy Advisory Council.

Regional ocean governance initiatives:

- *Gulf of Mexico* – During 2007, the Gulf of Mexico Alliance continued making significant strides on implementing the commitments of the 2006 Governors’ Action Plan. The five Gulf state governors also reaffirmed their commitment to the Gulf of Mexico Alliance and its work to protect the waters and coastline of the Gulf of Mexico. The Joint Initiative commends the Gulf states’ leadership and achievements in regional ocean governance reform, as well as the active engagement by federal agencies to support progress in the region.
- *West Coast* – The West Coast Governors’ Agreement on Ocean Health released its Draft Action Plan in 2007 for public comment; the final version is scheduled for release in 2008. The Action Plan will set forth priority actions for Washington, Oregon, and California in addressing shared challenges to ocean health and advancing an ecosystem-based approach to ocean management. Momentum for ecosystem-based management continued to grow in the region as six local ecosystem-based pilot projects that had progressed independently for years started to explore ways to coordinate and share lessons learned on implementing ecosystem-based approaches.
- *Other multi-state initiatives* that are actively addressing regional ocean issues include: Chesapeake Bay Program; Great Lakes Regional Collaboration; Gulf of Maine Council on the Marine Environment; Long Island Sound Study; and Northeast Regional Ocean Council.

What remains to be done to improve the grade? Many regions and states are developing and implementing ocean governance mechanisms and these efforts require committed participation and support to secure their progress and viability over the long term. A purposeful, proactive, and coordinated federal role in facilitating and supporting these regional and state activities remains an important need that could be addressed through the development of a national framework. Such a framework would enable more federal participation in stimulating existing efforts, fostering renewed progress in efforts that have lost momentum, and helping to initiate new ocean governance efforts in coordination with states and other partners.

The Joint Initiative encourages existing regional and state efforts to continue their progress and urges increased state commitment and federal support to strengthen these activities. We encourage efforts to collaborate regionally in the Caribbean and Pacific Islands, and recognize two regions—the Southeast and Mid-Atlantic—that have shown interest in and a need for regional ocean governance but have not yet established regional governance structures. State agencies in North Carolina, South Carolina, Georgia, and Florida are laying the groundwork for a possible South Atlantic Alliance, which will hopefully come into existence in 2008. The Joint Initiative urges these regions to move forward in developing regional-level ocean governance mechanisms.

International Leadership

2007

Grade: **C+**

Why is international leadership on ocean issues important? Oceans and the activities that occur on them, both our own and those of other nations, are vital to our economy, national security, and the long-term health of the planet. By virtue of having one of the world's largest exclusive economic zones, our nation's interests are deeply entwined with those of every other country that shares jurisdiction over the world's oceans. The lack of U.S. participation in the Law of the Sea Convention is significantly compromising our national economic, security, and conservation interests. The President and Senate must work together to approve U.S. participation in the Convention to avoid further jeopardizing U.S. sovereignty.

What was done in 2007 to address international leadership on ocean issues?

- Presidential support for the Law of the Sea Convention
- Senate Committee on Foreign Relations approval of the Convention
- Active support for the Convention by a bipartisan coalition of industry, military, and environmental leaders
- Administration support for international ocean policy issues

The Law of the Sea Convention is a comprehensive and progressive international accord supported by more than 150 countries, including virtually every industrialized nation except the United States. Our accession to the Convention would protect national security interests, secure sovereign rights over extensive marine areas, promote international commerce, and further the conservation of ocean resources. For these reasons President Bush, his Administration, and a variety of prominent national leaders are calling for Senate approval of the Convention. The Joint Initiative is also encouraged by the growing bipartisan coalition of military, industry, international, and environmental interests that actively supports the Law of the Sea Convention.

The Administration exhibited significant leadership in 2007 on international ocean issues as exemplified by its support for the Coral Triangle Initiative on Coral Reef, Fisheries, and Food Security. This initiative targets major threats, including resource exploitation and climate change impacts, to the biologically diverse ecosystems in the East Asian/Pacific region. The Administration also negotiated new management measures for high seas bottom fisheries in the South Pacific, staved off Japan's push to allow the resumption of commercial whaling, pursued global shark conservation efforts, and promoted interagency coordination on Arctic issues in support of the International Polar Year.

What remains to be done to improve the grade? Despite a strong statement of support issued by the President, approval by the Senate Committee on Foreign Relations, and overwhelming bipartisan public support, the Senate failed to provide its advice and consent to the President to join the Convention in 2007. This is due in large part to constituent opposition being driven by misperceptions about the Convention. The President and his Cabinet have the platform to communicate accurate information and to work with Senators to secure their support for the Convention.

The Convention has been thoroughly reviewed in Senate hearings and public forums, and U.S. accession is supported by a broad coalition of stakeholders. The Administration has clearly voiced its support for the Convention, with the Secretary of State, Defense, and Homeland Security, as well as the Joint Chiefs of Staff stating that joining the Convention will strengthen our ability to defend essential freedoms of navigation and overflight. Major U.S. industries, including offshore energy, shipbuilding, and maritime transportation and commerce support joining the Convention because its provisions help protect U.S. economic interests and provide the certainty and stability crucial for investment in global maritime enterprises. Environmental organizations also strongly support the Convention and rely on the legal framework it provides as the basis for global marine conservation efforts addressing the continuing decline of fish, turtles, sharks, and whales, as well as corals and other important habitat.

As one of the few remaining nations that is not a party to the Convention, the U.S. is unable to participate as a member of key bodies that guide activities in national and international waters, such as the International Seabed Authority and the Commission on the Limits of the Continental Shelf, further jeopardizing opportunities to benefit from and conserve ocean resources of economic and ecological importance. The Joint Initiative strongly urges the Senate to expeditiously provide its advice and consent to the President for U.S. accession to the Convention.

The Joint Initiative also strongly encourages President Bush to publically reiterate his strong desire for the Senate to act on the Convention, stressing that accession supports our vital national security, economic, and international leadership interests. As an issue that enjoys bipartisan support, the President's personal commitment and engagement is essential to ensuring Senate action on the Convention and would underscore his growing leadership on ocean issues and provide a lasting legacy.

Research, Science, and Education

2007

Grade: **C-**

Why are research, science, and education important? Changes in the oceans are having a significant impact on our society, as sea-level rise threatens coastal infrastructure and natural habitats, harmful algal blooms cause biological dead zones and threaten human health, and changes in ocean currents shift weather patterns and, in turn, impact agricultural activities far from the coast. Addressing these issues will require an enhanced understanding of ocean and coastal processes in the context of the interconnections among land, ocean, atmosphere, and the impact of human activities on these processes. The Joint Initiative calls for a greater commitment to basic and applied research, monitoring and modeling, the infrastructure supporting ocean-related science, and the translation of scientific information into timely products that can be used by policy makers and managers. In addition, greater emphasis must be placed on enhancing our nation's commitment to formal and informal education. Building a scientifically literate public with a strong stewardship ethic will require both the incorporation of ocean sciences into the education curriculum, as well as a more aggressive campaign to educate the general public about the importance of oceans to their health and economic well-being.

What was done in 2007 to address research, science, and education?

- Administration focus on implementing its *Ocean Research Priorities Plan and Implementation Strategy*
- Continued efforts to develop ocean and coastal observing systems
- Expanded federal support and coordination on ocean education
- Congressional deliberation on ocean science legislation

The Joint Initiative's 2006 report card highlighted the Administration's *Ocean Research Priorities Plan and Implementation Strategy*¹ as a major achievement. The plan represents the first comprehensive effort to identify core programs and activities required to enhance our understanding of oceans and coasts. In 2007 the federal agencies responsible for implementing the plan worked together to lay the groundwork for moving forward on research and outreach activities, despite the lack of funding. These activities reflect many of priorities called for by the Joint Initiative, including ocean forecasting, scientific support for ecosystem-based management, and ocean observing capabilities.

The Joint Initiative commends the continuing interagency and regional collaboration on implementing integrated ocean observing systems, and applauds NOAA's commitment to help lead this effort. These systems, which marry data from sensors at the bottom of the ocean to the satellites far above the Earth, allow us to better understand and forecast change and its impacts, moving the nation closer to an ecosystem-based management approach that is responsive to challenges facing managers and policy makers. The Joint Initiative also believes that refocusing the regional observing systems into a competitive program within a national framework will greatly enhance progress toward an Integrated Ocean Observing System (IOOS). To further advance ecosystem-based management in the regions, the Joint Initiative encourages coordination between the regional observing systems and regional ocean governance efforts.

¹Ocean Research Priorities Plan and Implementation Strategy: ocean.ceq.gov/about/sup_jsost_prioritiesplan.html

The Joint Initiative also commends the codification of NOAA as a lead agency for ocean education as part of the America COMPETES Act. The Act provides a broad education mandate for NOAA to support educational activities at all levels to increase public awareness and understanding of ocean science and stewardship. In addition, the National Science Foundation added three new Centers for Ocean Science Education Excellence, responding to demand for a technically competent and ocean literate workforce.

Other significant achievements in ocean education included the Administration's Marine Debris Initiative, aimed at increasing public awareness of the impacts of marine debris, and the designation of Veracruz Aquarium in Mexico as the first international Coastal Ecosystem Learning Center. These outreach efforts reflect a growing recognition of the importance and effectiveness of proactive education in communicating the economic and ecologic importance and vulnerability of ocean and coastal resources.

Finally, Congress made progress moving ocean science legislation in 2007, including bills addressing ocean acidification, ocean exploration, ocean observing, and coastal and ocean mapping.

What remains to be done to improve the grade? The science needs of the ocean and coastal community reach across governmental, academic, and nongovernmental entities. These needs are recognized and addressed in the Administration's *Ocean Research Priorities Plan and Implementation Strategy*. Funding remains the limiting factor for successful implementation of the priorities. Congress should build on the President's FY 2009 budget request using the plan as its guide to direct funding in support of modernization of ocean science and research.

The development and deployment of observation systems remains critical to advancing our understanding and monitoring of oceans and coasts, a need that is becoming increasingly important given the key role oceans play in climate change. Unfortunately, underfunding of IOOS and related ocean infrastructure such as satellites, ships, sensors and buoys has severely limited progress in ocean science. The Joint Initiative strongly urges Congress to pass legislation mandating the implementation of a comprehensive IOOS to ensure that credible and timely information is available to manage our coasts and oceans. Congress should also reestablish its Office of Technology Assessment or a similar advisory body to provide objective and authoritative scientific and technical guidance increasingly complex and contentious issues facing our nation.

The lack of ocean science legislation passed by Congress and signed by the President since the release of the reports of the Pew and U.S. Ocean Commission remains a major disappointment. While individual bills have passed both the House and Senate, no ocean science legislation has been enacted by Congress, despite growing public concern over the health of ocean and coastal waters. In 2008 Congress should pass and fund pending ocean science bills addressing ocean acidification, ocean exploration, ocean observing, and coastal and ocean mapping, while also looking toward reauthorization of the Oceans and Human Health Act to improve our capacity to understand and predict ocean-related human health impacts.

Finally, Congress and the Administration must fully integrate oceans into the national competitiveness initiative. A technically literate workforce benefits the entire nation, and oceans provide a compelling environment to entice students into the world of math and science, while also instilling a strong stewardship ethic.

Fisheries Management Reform

2007

Grade: **C+**

Why is fisheries management reform important? Fishing is a way of life with a rich heritage that has contributed much to the social, cultural, and economic well-being of the nation. Over the last 30 years, however, the fishing industry has evolved from one with little regulation and seemingly boundless opportunity to one where many fish stocks are overexploited and the industry is highly regulated and, in many instances, struggling. Our fisheries management regime must be improved if we are to sustain the U.S. fishing industry, maximize economic and social benefits, and sustain living marine resources held in public trust for the benefit of all.

What was done in 2007 to address fisheries management reform?

- Initial progress implementing the Magnuson-Stevens Reauthorization Act
- Fewer stocks overfished or experiencing overfishing
- Progress toward establishing limited access privilege programs
- Improved U.S. leadership on international fisheries and habitat conservation

In the 2006 report card the Joint Initiative recognized the passage of the Magnuson-Stevens Reauthorization Act (MSRA) as an important step toward more effective management of the nation's fisheries. This Act set forth key provisions advocated by the Joint Initiative, including strengthening the role of scientific advice and requiring annual catch limits and accountability measures for all U.S. fisheries. In 2007, the Joint Initiative is encouraged to see initial steps by NOAA Fisheries in implementing actions required by the Act. Noteworthy activities by the agency included initiating formal rulemaking on high profile actions, such as addressing overfishing and catch limits and soliciting comments on new guidelines to implement the limited access privilege program provisions of the Act.

The Joint Initiative also commends the agency for addressing depleted fish stocks during 2007, eliminating overfishing on seven stocks, removing two stocks from the overfished list, and designating three stocks as being rebuilt. In addition, three new dedicated access privilege programs were added in 2007. Dedicated access privilege programs represent an innovative, market-based approach to fisheries management, and the Joint Initiative is encouraged by the efforts of some Regional Fishery Management Councils and fishing communities to evaluate and implement these programs, and by NOAA Fisheries' progress on establishing national guidelines to guide regional implementation.

The Administration showed noteworthy leadership in 2007 on international fisheries issues, as exemplified by new management measures negotiated for high seas bottom fisheries in the South Pacific. The Administration strongly supported continuation of an international moratorium on commercial whaling and led a multilateral effort to strengthen protections for vulnerable and endangered shark populations around the world. The United States also joined other countries in promoting an end to unregulated deep-sea trawling, which causes devastating damage to deep-water ecosystems.

What remains to be done to improve the grade? While the MSRA was a major accomplishment in 2006, the real goal is immediate and long-term improvements in the management of domestic and international fish stocks. Despite progress made by NOAA Fisheries in 2007, the agency is behind schedule developing some key regulations, making it difficult to judge whether they will lead to more effective implementation of the Act. NOAA Fisheries needs to release strong implementing regulations in early 2008 to ensure forward progress on fisheries management reform.

The MSRA requires science to be used as the basis for determining harvesting levels. The Joint Initiative urges stronger commitment by Regional Fishery Management Councils to strengthening the scientific process and to adhering to the harvest levels recommended by their Science and Statistical Committees to continue to sustain fishing communities and the living marine resources on which they depend.

The MSRA also included provisions for creating an improved recreational fishing data collection program and implementing a recreational fishermen registry program. Due to increasing popularity of marine recreational fishing, and its growing proportion of the total catch in some fisheries, collecting timely and consistent data for recreational fisheries represents an important factor in effective fisheries management. Timely attention to improving recreational fisheries management, including an expanded system for monitoring this sector to better understand its impact and to further inform management decisions, is needed.

Effective implementation of the MSRA at the national and regional levels is heavily dependent upon providing sufficient resources and mustering the political will to implement the law consistent with the Joint Initiative's principles for fisheries management reform. NOAA Fisheries funding levels in 2007 were significantly inadequate to effectively implement the new provisions and pre-MSRA mandates. Congress and the Administration need to provide adequate funds and resources to ensure effective and efficient implementation of the new law.

While the Administration showed leadership on several international fisheries issues in 2007, stronger advocacy and increased support for international fisheries conservation is a continuing need. In particular, stronger U.S. advocacy for measures to control high seas bottom trawling in the North Pacific and the Atlantic is key. In addition, U.S. accession to the Law of the Sea Convention would provide the legal framework needed to enable U.S. leadership in addressing declines of fish, turtles, sharks, whales, coral reefs, and other living marine resources.

New Funding for Ocean Policy and Programs

2007

Grade: **D+**

Why is new funding for ocean policy and programs important? As a major contributor to the U.S. economy, the coastal economy generates half the nation's Gross Domestic Product. Despite the role oceans and coasts play in supporting our economic well-being, they remain poorly understood and under-appreciated. The American public, the Administration, and Congress have not made oceans a priority and, as a consequence, chronic underinvestment has left much of our ocean-related infrastructure in poor condition, management programs struggling to uphold their responsibilities, ocean scientists competing for a smaller percentage of the federal research budget, and ocean science virtually absent from the education curriculum. Maintaining the economic and ecological viability of our oceans and coasts will require decision makers to have access to sound information and up-to-date tools and technologies. These needs can only be met by increasing funding for ocean-related science, management, and education.

One of the most pressing issues in the ocean community is the lack of new funding to support core programs and new initiatives. At a time when recognition of the challenges to our oceans and coasts has significantly increased—due in large part to growing public awareness of the potential impacts of climate change—flat funding for ocean programs has severely hampered our capacity to better understand the problems threatening our oceans and coasts as well as slowed our progress in developing solutions to resolve them.

What was done in 2007 to address new funding for ocean policy and programs?

- House joined the Senate in increasing funding support for NOAA
- Presidential funding support for the *Ocean Research Priorities Plan and Implementation Strategy*
- Ocean research and education recognized as part of national competitiveness initiative

It is significant and commendable that the House of Representatives for the first time in several years joined the Senate in recommending increased funding for our lead ocean agency, NOAA. The House funding support for NOAA represented an increase of approximately \$500 million from prior years, reversing its troubling trend of significantly underfunding the agency. While these gains failed to materialize in the FY 2008 omnibus appropriations bill, and NOAA remained flat funded at \$3.9 billion, there is considerable promise in the growing recognition of the critical products and services provided by ocean programs that support the nation's economy and help protect the health of marine ecosystems.

The Joint Initiative believes that oceans lie on the cusp of emerging as a national priority, given their role as a primary driver of climate change. The timely release of the *Ocean Research Priorities Plan and Implementation Strategy* and the inclusion of \$143 million in the President's FY 2008 funding request to implement the plan was a major accomplishment. When viewed with the major shift in support for increased funding for ocean programs by the House, continued strong support by the Senate, and the inclusion of ocean research and education as part of the President's Competitiveness Initiative, the opportunity for significant progress in advancing ocean science, management, and education appears promising.

What remains to be done to improve the grade? The House and Senate made efforts to increase funding for ocean programs in FY 2008. However, this momentum stalled in the final FY 2008 omnibus appropriations bill and funding for core federal programs and new initiatives was generally stagnant in 2007. NOAA's budget remained level at \$3.9 billion for the fourth straight year; this flat funding effectively eroded program capability due to a failure to even adjust for the costs of inflation. The National Aeronautics and Space Administration (NASA) support for the earth science programs remained weak in 2007 and failed to address substantial cuts made to the program in previous years. Funding for ocean and coastal programs in the Department of the Interior, Environmental Protection Agency, and U.S. Army Corps of Engineers also suffered. While funding support for basic ocean research in the Navy and National Science Foundation (NSF) increased slightly in 2007, these levels remain significantly below those called for by the Joint Initiative. Resolving the continued under-funding of ocean programs requires immediate action. Congress should pass FY 2009 spending bills that fully fund existing ocean programs across the federal government.

Ocean and coastal management programs that work to address on-the-ground problems need significant new funding to tackle both existing and emerging issues. Nonpoint source pollution, fisheries management, coastal development, coral reef conservation, harmful algal blooms, and invasive species are just a few of the issues that managers struggle to address. These issues have a substantial impact of the economic and ecological viability of our oceans and coasts, as well as human health, and it is time to provide managers with the information and tools they need to address these major challenges.

Increased funding is needed to strengthen programs responsible for providing the valuable scientific information that drive many management actions and policy decisions. Securing funding to begin implementing the *Ocean Research Priorities Plan and Implementation Strategy* is an important step toward enhancing core ocean and coastal science programs, as well as supporting new efforts with the potential to significantly advance scientific knowledge. Substantial and sustained funding is also needed to modernize ocean science infrastructure, from satellites to in-water sensors, to the computer systems used to integrate the data provided by these systems. Continuing support for an Integrated Ocean Observing System remains a high priority as a mechanism to strengthen interagency collaboration and federal-state cooperation in the effort to understand and address changes impacting our oceans and coasts.

The effort to increase ocean funding would be greatly enhanced by the development of an integrated ocean budget for federal ocean and coastal programs and the establishment of a dedicated ocean policy trust fund. An integrated budget would increase the capacity of the President and Congress to assess ocean funding distribution and identify funding needs, while also providing the President with a vehicle to support interagency budget initiatives, further encouraging coordination among federally-funded programs. The establishment of a dedicated ocean policy trust fund, capitalized with revenue derived from commercial activities in offshore waters, as well as potential funds generated by programs to curb greenhouse gas emissions, should be made available to state and federal ocean agencies to support ocean-related programs, including those targeted at addressing climate-related impacts on coastal ecosystems and communities. The Joint Initiative urges greater attention to the establishment of an ocean trust fund and stands ready to engage the Congress and Administration in an ongoing discussion about the sources and uses of such a fund.

Links between Oceans and Climate Change

2007

Grade: **C**

Why is addressing the links between oceans and climate change important? Increasing concerns about climate change have elevated the need to take action to mitigate its causes and make preparations to adapt to anticipated economic and environmental impacts. Oceans play a fundamental role in mitigating climate change by serving as a major heat and carbon sink. They also bear numerous impacts of climate change as exemplified by the acidification and warming of ocean waters which, in turn, affect the health of marine ecosystems and species. As sea levels continue to rise, coastal areas must assess and adapt to the associated impacts on coastal resources, communities, and economies. The interrelationship between oceans and climate change must be recognized, understood, and integrated into climate change policies. As part of a comprehensive approach to climate change, the future impacts of climate change on our ocean and coastal resources and communities must be addressed.

What was done in 2007 to address the links between oceans and climate change?

- Expanded state efforts to mitigate and adapt to impacts of climate change on coastal communities and resources
- Increased recognition by Congress and the Administration of the role of oceans in climate change and the impacts of this change on oceans and coasts

States around the country are moving ahead to address climate change issues through enhanced awareness, mitigation, and adaptation. While these efforts often fall under broad statewide climate change initiatives, several include specific strategies to mitigate and adapt to potential impacts of climate change on coastal communities and resources. Policies and strategies to encourage adaptation to climate change impacts include: modifying wetland protection and restoration policies; increasing shoreline setbacks; revising public infrastructure siting policies; incorporating climate change impacts into state and local planning efforts, developing decision-support and visualization tools; and promoting outreach activities related to climate change. The Joint Initiative applauds these states for taking action to mitigate and adapt to climate change impacts in coastal areas and encourages greater commitment to these actions.

On the national level, Congress considered several pieces of legislation calling for improved understanding of specific impacts of climate change on ocean and coastal ecosystems (e.g. acidification, sea level rise, climate research, coral degradation, and habitat loss) as well as for the advancement of strategies to assist coastal communities in adapting to climate change impacts. The Senate advanced a major climate bill that acknowledges the role of oceans in climate change and would provide significant funding for mitigation, adaptation, and restoration activities. The deliberations by the House and Senate on bills recognizing the role of oceans in climate change exemplifies an increased awareness of the interrelationship between the oceans and climate change processes.

What remains to be done to improve the grade? The federal government should support states and regions as they move forward on implementing strategies to better understand, adapt to, and mitigate climate change impacts on coasts and oceans. Federal agencies should work with states to: improve the availability of high-resolution topographic and bathymetric data; develop methods for modeling

shoreline and habitat changes associated with sea level rise; develop assessments of social, legal, and economic issues related to sea level rise and shoreline management options; and expand training and outreach to increase awareness of climate change impacts and adaptation strategies. Expanded implementation of the regional component of the integrated ocean observing systems would allow states and regions to better understand, mitigate, and adapt to climate change impacts.

Federal support for states and regions on climate change issues should run parallel with an effort at the national level to enact legislation that incorporates oceans into a national initiative to understand, mitigate, and adapt to climate change. Congress needs to recognize the role of oceans in mitigating climate change and incorporate provisions related to ocean science, management, and education into climate change legislation.

The Joint Initiative offers several specific recommendations for governance reform to address the links between oceans and climate change. Congress should create a Climate Change Response Office to design and implement a strategy that balances the need for basic and applied research, monitoring and analysis, and modeling and forecasting with the goal of translating data into useful information that can help develop sound climate change policies. An integrated assessment evaluating the collective effort of federal programs would provide a baseline from which to measure progress and would ensure the national is maximizing the use of available data and information to improve the health of our oceans.

The Joint Initiative stresses the need to expand ocean research, monitoring, modeling, and information delivery systems. Credible and timely scientific information that will be essential as the nation moves forward in responding to the challenges associated with climate change. A more comprehensive and robust science enterprise is required to forecast more accurately the magnitude and intensity of climate-related changes on multiple scales, as well as to evaluate options for mitigation and adaptation. Unfortunately, the existing ocean and coastal science supporting climate change research, observation, and socioeconomic analysis is limited. In addition, innovative data management systems, and the funding to support them, are needed to support the translation of ocean data and research into the information needed to inform climate change policies and management approaches.

Congress can address some of these needs by fully funding implementation of the Administration's *Ocean Research Priorities Plan and Implementation Strategy*. The plan provides a roadmap for research on the ocean's role in climate change that will improve our ability to enhance the resiliency of ocean and coastal ecosystems and economics to climate-induced changes. Congress should also authorize and fund the Integrated Ocean Observing System, which provides valuable data for detecting climate-related changes and for refining climate change models, thereby reducing the level of uncertainty associated with their projections. This support should also extend to major observing initiatives supported by NSF and remote sensing satellite programs supported by NASA's Earth Science Program.

Guiding Principles for Ocean Policy

2007

The Joint Initiative believes the following principles should guide ocean policy reform.

National Ocean Governance Reform

- ***A National Ocean Policy.*** A national ocean policy is needed to acknowledge the importance of oceans to the nation's economic and ecological health and to protect, maintain, and restore marine ecosystems so that they remain healthy and resilient and able to deliver the services humans want and need.
- ***Management Decisions Grounded in an Ecosystem-based Approach.*** In carrying out a national ocean policy, we need to implement an ecosystem-based management approach that examines the links among living and nonliving resources. Instead of managing one issue or resource in isolation, we need to move toward a management approach that considers human activities, their benefits, and their potential impacts within the broader context of interconnected social, economic, and ecological factors.
- ***A Stronger NOAA Capable of Implementing an Ecosystem-based Management Approach.*** NOAA should be codified through passage of an organic act for the agency, and that act should establish NOAA as the lead ocean agency and articulate a core mission of: assessment, prediction, and operations; ecosystem-based management; and science, research, and education. An organic act should also call for reorganization of the agency to better equip it to carry out its core mission and to remain science-based, but with its management programs better connected to make use of that science in decision making.
- ***Federal Agency Coordination and Leadership.*** Eleven cabinet-level departments and four independent agencies have responsibilities for ocean and coastal policy and management. High-level attention to carry out a national ocean policy and improved coordination and communication among ocean agencies would greatly enhance the effectiveness of our management of ocean and coastal resources.
- ***Improved Federal Agency Structures.*** A stronger NOAA and more effective federal agency coordination are essential to improving our national ocean governance. However, to truly recognize the connections among the sea, land, air, and all living creatures, the current federal structure should be reconsidered to further strengthen, through reorganizing and consolidating programs where appropriate, the federal government's ability to carry out a national ocean policy.
- ***Coordinated Management of Offshore Waters.*** A coordinated offshore management regime is needed to improve governance of federal waters, avoid and minimize conflicts among users, safeguard human and marine health, and manage our offshore waters for maximum long-term benefit of the nation and all its citizens.
- ***A Fair Return for Use of Offshore Resources.*** Our offshore waters are held in the public trust for the benefit of the entire nation. As such, when these publicly owned resources are used by the private sector for private gain, it is appropriate and fair for the public to receive some return for that benefit. Revenue collected from private use of ocean space and resources should be put toward the management and understanding of our oceans.
- ***Regional Approaches and Strong State and Local Role Supported by a National Framework.*** A national framework is needed to support and guide the development and implementation of regional plans and processes that involve federal, state, tribal, and local governments.

Regional and State Ocean Governance Reform

- ***Collaborative and Coordinated Approaches through Regional Governance Mechanisms.*** Provide support for coordinated, integrated ecosystem-based management that builds on current regional and ecosystem-based efforts and enhances those efforts to enable all ocean and coastal areas to be managed in a way that supports healthy, productive, and resilient marine ecosystems that will benefit current and future generations.
- ***Regional Plans and Processes with Several Elements.***
 - Goals that conserve ecosystem services that support human well-being.
 - Prioritized and coordinated management of activities within a management area.
 - Permitted uses that are compatible in order to minimize conflicts.
 - Consideration of all aspects of an ecosystem—natural, social, and economic—and how these aspects interact with and affect the ecosystem as a whole.
 - Relevant scientific information that is continuously improved and fully utilized.
 - Enhanced public education that is delivered through formal and informal means.
- ***Regional Research and Information.*** Decision makers at all levels, but particularly at the local level, need accurate and timely information about ocean and coastal ecosystems, including how human activities impact those ecosystems.
- ***Regional Ecosystem Assessments.*** Assessments of the natural, cultural, social, and economic attributes in a region would help guide management decisions and improve the process mandated under the National Environmental Policy Act by providing a single science-based regional assessment that can be the basis for individual Environmental Impact Statements.
- ***Enhance Regional Governance Capacity by Improving Federal Coordination in Regions.*** Our governmental institutions need to be recalibrated to enable government at all levels to work together more effectively at the regional level. One step toward improved regional coordination is for federal agencies to identify opportunities and further coordinate existing programs and activities to assist and support more effective implementation of regional approaches.

International Leadership

- ***Living Marine Resources.*** Promote adoption and observance of international standards for the sustainable harvest of coral reef and other living marine resources.
- ***International Trade.*** Negotiate and work with other nations to establish provisions in international trade agreements that are consistent with the recommendations of the U.S. Commission on Ocean Policy and the Pew Oceans Commission.
- ***Implementation and Enforcement.*** Provide adequate funding for full implementation and enforcement of those international conventions and agreements that the U.S. has ratified.

Research, Science, and Education

- ***Best Available Science and Information.*** Ocean policy decisions should be based on the best available understanding of the natural, social, and economic processes that affect ocean and coastal environments. Decision makers should be able to obtain and understand quality science and information in a way that supports informed management of ocean and coastal resources.
- ***Ecosystem-based Management.*** U.S. ocean and coastal resources should be managed to reflect the relationships among all ecosystem components, including humans and nonhuman species and the environments in which they live. Applying this principle will require defining relevant geographic management areas based on ecosystem, rather than political, boundaries.

- ***Ocean–Land–Atmosphere Connections.*** Ocean policies should be based on the recognition that the oceans, land, and atmosphere are inextricably intertwined and that actions that affect one Earth system component are likely to affect another.
- ***Stewardship.*** The principle of stewardship applies both to the government and to every citizen. The U.S. government holds ocean and coastal resources in the public trust—a special responsibility that necessitates balancing different uses of those resources for the continued benefit of all Americans. Just as important, every member of the public should recognize the value of the oceans and coasts, supporting appropriate policies and acting responsibly while minimizing negative environmental impacts.

Fisheries Management Reform

- ***Ecosystem-based Management.*** Fisheries management should be informed and guided by long-term objectives set for both the fishery and the ecosystem, and thereby consider linkages between different living and nonliving components of the sea, land, atmosphere, and the health and vitality of human communities.
- ***Base Management on Independent Science.*** Strengthen the use of science in management by requiring Regional Fishery Management Councils to adhere to allowable biological limitations determined by their Science and Statistical Committee, setting catch limits at or below these limitations, and establishing consistent and independent peer review processes for the science used in decision making.
- ***Fallback Provisions.*** As an incentive toward timely and responsible action to address overfishing and the degradation of essential fish habitat, require fallback provisions to be implemented when management plans are not developed within a required time frame.
- ***Dedicated Access Privileges.*** Authorize fishery managers to use dedicated access privileges as an important tool to better manage fisheries resources. Establish national guidelines that allow for regional implementation that is consistent with those guidelines.
- ***Enforcement.*** Expand cooperative fisheries enforcement programs between federal and state enforcement entities. The programs should clarify the role of the Coast Guard and should emphasize joint training, stronger and more consistent information sharing, and increased use of enforcement technology such as Vessel Monitoring Systems.
- ***Cooperative Research.*** Direct the National Oceanic and Atmospheric Administration to create an expanded, regionally-based collaborative research program that involves the fishing community and federal, state, and academic scientists. Research should benefit from linkages to the Integrated Ocean Observing System. Funds for such cooperative research projects should be awarded on a competitive basis.
- ***Bycatch Reduction.*** Bycatch should be addressed continuously to ensure the sustainability of fisheries and ecosystem services. Fishermen should be allowed to keep fish they catch within conservation limits, rather than be forced to discard and waste one species because it is in a target fishery for another. Bycatch reduction efforts should include accounting for such resources with regard to total allowable catch.
- ***Council Membership.*** Require governors to submit a slate of candidates that represents a broad cross-section of the public as nominees to the Regional Fishery Management Councils.
- ***Training.*** Require training on a variety of topics relevant to fishery management for new Regional Fishery Management Council members and make such training available to representatives from interest groups and industry.

- **Education.** Foster public understanding of ocean resources, including the importance of conservation measures aimed at sustaining fisheries and the linkages between human health and the health of oceans.
- **International Leadership.** Promote adoption and observance of international standards for the sustainable harvest of coral reef and other living marine resources.

New Funding for Ocean Policy and Programs

- **Provide Funding Commensurate to the Challenge.** Current ocean and coastal funding is insufficient to address current challenges or to begin to anticipate and plan for future challenges.
- **Share Funding with Nonfederal Partners.** Many of the actions necessary to improve the health of ocean and coastal waters will be initiated and implemented at the regional, state, and local levels. Federal funding should be available to assist nonfederal governments, as well as the academic community, in meeting these goals.
- **Require Payment for the Use of a Public Resource.** The use of a publicly-owned resource by the private sector in federal waters should be contingent on a reasonable return of some portion of the revenues to taxpayers in order to support programs that will help sustain the health and vitality of our nation's oceans and coasts.

Links between Oceans and Climate Change

- **Oceans and Climate Change Connections.** Climate change policies should be based on the recognition that oceans play a fundamental role in the complex and dynamic interactions of climate change, and that climate change and its associated impacts drive significant changes in ocean and coastal health.
- **National Climate Change Response Strategy.** A national climate change response strategy is needed to balance the need for research, monitoring, modeling, and forecasting with the goal of translating data into useful information to shape climate change policies and management strategies. Ocean science and management must be key elements of a response strategy.
- **Ocean Science and Research.** Credible and timely science-based information is essential to understanding the ocean's role in climate change. Better science and robust research are required to forecast more accurately the magnitude and intensity of climate change, as well as to evaluate options for mitigation and adaptation.
- **Management Strategies for Climate Change Impacts.** Coastal and ocean managers at all levels need sound information and up-to-date tools and technologies to better assess climate change impacts and evaluate management options. Implementation of effective management strategies is crucial to mitigating impacts on human communities, ecosystems, and economies.
- **Funding for Mitigation and Adaptation.** Given the role of oceans as a key driver of climate change and the impact this change is having on ocean ecosystems and coastal communities, a portion of any funding generated as a result of a new national climate change policy should be used to support ocean science and management focused on implementing mitigation and adaptation strategies.