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HEARING ON HR 21: OCEAN CONSERVATION, EDUCATION, AND NATIONAL STRATEGY FOR THE 21ST CENTURY ACT "OCEANS-21"

BEFORE THE COMMITTEE ON NATURAL RESOURCES SUBCOMMITTEE ON FISHERIES, WILDLIFE AND OCEANS U.S. HOUSE OF REPRESENTATIVES

April 26, 2007

Good afternoon Chairwoman Bordallo, Congressman Brown, and Members of the Committee. I am John H. Dunnigan, Assistant Administrator for Ocean Services and Coastal Zone Management at the National Oceanic and Atmospheric Administration (NOAA), in the Department of Commerce. Thank you for the opportunity to testify before you today on HR 21: *the Oceans Conservation, Education, And National Strategy For The 21st Century Act*.

In 2007, NOAA is very proud to be celebrating 200 years of science, service and stewardship to our nation. Much of America's scientific heritage is rooted in NOAA and its predecessor agencies — from the establishment of the Survey of the Coast in 1807 by Thomas Jefferson, to the formation of the Weather Bureau and the Commission of Fish and Fisheries in the 1870s. We continue to honor this legacy as we work with federal, state, tribal, and international partners, as well as Congress and other stakeholders, to fulfill our mission to conserve, manage, and protect our nation's ocean, coastal, and Great Lakes' resources. Understanding the linkages between the oceans and atmosphere regarding climate, weather, and ocean, coastal, and Great Lakes' processes is necessary for NOAA to meet the interests of the nation

While we acknowledge and appreciate the intent of the Committee to formulate a bill that provides guidance on ocean policy and governance, the Administration has serious concerns with H.R. 21 and therefore must oppose it in its current form. Over the past few years the Administration, including NOAA, has worked hard to address each of the priority areas contained within HR 21. We are committed to continuing these efforts and look forward to working with Congress to provide, amend, or reauthorize statutory authorities as appropriate to further these purposes. Many of the provisions in this bill are inconsistent with the President's Ocean Action Plan, are impractical, or are inconsistent with existing laws, some of which are quite recently enacted or amended.

In particular, the Administration opposes the provisions to create a national ocean policy that over reaches on ocean stewardship, possibly to the detriment of other significant national interests. The Administration also objects to the creation of a Ocean, Coastal, and Great Lakes Trust Fund, which circumvents the annual process to evaluate and make trade offs among different priorities for funding on an annual basis. In addition, Title III of HR 21 would statutorily create a number of positions and mechanisms within the Administration to provide high-level guidance and coordination for ocean issues. While the Administration supports the goals of these provisions, we believe there are effective mechanisms currently in place to achieve these purposes. Therefore the Administration objects to Title III, because it would limit and interfere with the President's flexibility to pursue these goals, because it would statutorily establish entities in the Executive Office of the President, and because it would statutorily establish a new Council of Advisors on Oceans Policy. Finally, while we support the passage of a NOAA Organic Act, we have strong concerns with the provisions in HR 21 that would constrain the agency's ability to best organize itself to meet current mission priorities. The Administration supports many of the principles embodied in this bill — such as, ecosystem-based approaches to management, the need for a strengthened NOAA, and regional ocean governance however, our concerns with the specific provisions in HR 21 are serious enough that we would oppose its passage in its current form.

The Administration has too many comments to discuss each one in detail in this statement, but we look forward to working with you, Chairwoman Bordallo, other Members of the Committee, and the sponsors of this legislation, to fashion a bill that addresses our mutual desire for ocean conservation and appropriate use of our oceans and coasts. I would like to review each of the main purposes of the bill and highlight key efforts the Administration has already undertaken, and continues to conduct, to advance our nation's ocean programs, policy, governance, and structure.

Establish in Law a National Policy Framework for Our Oceans

The bill, HR 21, seeks to establish a national oceans policy and national standards for actions affecting U.S. ocean waters or ocean resources. On September 20, 2004, the U.S. Commission on Ocean Policy fulfilled its congressional mandate by submitting recommendations for a coordinated and comprehensive national ocean policy to the President and Congress. The Commission's final report, *An Ocean Blueprint for the 21st Century*, contained 212 recommendations addressing a broad range of ocean and coastal topics. The U.S. Commission on Ocean Policy further outlined the need for enhancing ocean leadership and coordination, developing the institutional capacity to coordinate across jurisdictional boundaries, and strengthening the multi-agency structure in phases in order to enhance the goal of addressing management needs through an ecosystem-based approach to ocean and coastal resources.

In response to the Commission's findings and recommendations, the President issued Executive Order 13366 on December 17, 2004, establishing a Cabinet-level Committee on Ocean Policy, whose membership includes the Secretaries of Commerce, State, Defense, the Interior, Agriculture, Health and Human Services, Transportation, Energy,

and Homeland Security, and the Attorney General. Other members of the Committee on Ocean Policy include the Administrator of the Environmental Protection Agency, the Director of the Office of Management and Budget, the Administrator of the National Aeronautics and Space Administration, the Director of National Intelligence, the Director of the Office of Science and Technology Policy, the Director of the National Science Foundation, and the Chairman, Joint Chiefs of Staff; and the Assistants to the President for National Security Affairs, Homeland Security, Domestic Policy, Economic Policy, and an employee of the United States designated by the Vice President.

Executive Order 13366 also provides the following guidance: "It shall be the policy of the United States to

- A) coordinate the activities of executive departments and agencies regarding ocean-related matters in an integrated and effective manner to advance the environmental, economic, and security interests of present and future generations of Americans; and
- B) facilitate, as appropriate, coordination and consultation regarding ocean-related matters among Federal, State, tribal, local governments, the private sector, foreign governments, and international organizations."

At the same time, President Bush released the *U.S. Ocean Action Plan*, which identifies immediate short-term and medium-term actions necessary to more effectively manage coastal and ocean resources. The *U.S. Ocean Action Plan* includes a set of Guiding Principles (in the introduction) that set the stage for activities of the Committee on Ocean Policy. To summarize, these principles include:

- o Balancing continued conservation with public use,
- o Employing the best science to inform decision-making,
- o Continuing to work towards an ecosystem-based approach to management that does not erode local and state authorities,
- o Encouraging innovation and employing economic incentives over mandates where possible, and
- o Establishing strong partnerships between federal, state, tribal, and local governments, the private sector, international partners, and other interests.

The U.S. Ocean Action Plan additionally identifies six National Ocean Priorities:

- 1) Enhancing Ocean Leadership and Coordination,
- 2) Advancing Understanding of Oceans, Coasts, and Great Lakes,
- 3) Enhancing the Use and Conservation of Ocean, Coastal and Great Lakes Resources.
- 4) Managing Coasts and Their Watersheds,
- 5) Supporting Maritime Transportation, and
- 6) Advancing International Ocean Science and Policy.

The Administration believes these are bold steps in the right direction toward the intent of the Commissions' recommendation, and these steps have had a broad impact on how NOAA operates. There are many agencies with important ocean and coastal responsibilities with which NOAA partners, and we take great pride and place great

importance in continuing to strengthen our role as the lead civilian ocean agency. In the two years since the *U.S. Ocean Action Plan* (the *Plan*) was released, the federal agencies, together with their state, local, territorial, and tribal and private sector partners have made substantial progress in meeting their commitments to the actions in the *Plan*. Examples of the progress made in a banner year for oceans conservation include:

- The recent release of the report *Charting the Course for Ocean Science in the United States in the Next Decade: An Ocean Research Priorities Plan and Implementation Strategy*, discussed in more detail below, which presents research priorities that focus on the most compelling issues in key areas of interaction between society and the ocean;
- Creation of the Papahānaumokuākea Marine National Monument the largest single conservation area in our Nation's history and the largest fully-protected marine area in the world;
- Reauthorization the Magnuson-Stevens Fishery Conservation and Management Act;
- Support of state-led regional management partnerships, including the Gulf of Mexico Alliance, the Northeast, Northeast regional ocean council, Great Lakes Regional Collaboration, West Coast Regional Effort;
- Finalization of a conservation plan with the State of Florida for the Dry Tortugas in the Florida Keys; and
- Enhancement of ocean literacy initiatives and interagency cooperation, including a national Conference on Ocean Literacy during National Oceans Week.

For a complete list of elements of progress and opportunities beyond the *Plan*, the Committee on Ocean Policy released the *U.S. Ocean Action Plan Implementation Update* in January 2007 (http://ocean.ceq.gov/oap_update012207.pdf). I am happy to report that the Administration has made significant progress in completing the commitments of the *U.S. Ocean Action Plan* (83% of the actions have been met, the remaining 17% are on schedule to be completed by their target dates), and that federal agencies are moving forward with new activities in these areas to continue to improve our management and protection of ocean resources.

In addition to codifying the Committee on Ocean Policy structure within the Administration, HR 21 would also impose an ecosystem-based mechanism to review impending management actions. The standards proposed in HR 21 would require that no federal action, including federally permitted and federally funded actions, that may significantly affect U.S. ocean waters or ocean resources proceed until a determination is made that it will not significantly harm the health of marine ecosystems. It would also have to be determined that it is not likely to significantly impede restoration of the health of any marine ecosystem.

Within a year of enactment, NOAA would be required to issue regulations that implement the new national standards, in consultation with the newly authorized Committee on Ocean Policy. Within 180 days prior to taking action that may

significantly affect U.S. ocean waters or ocean resources, an agency would be required to certify, in consultation with NOAA, whether such actions comply with the national oceans policy and national standards and submit the certification to NOAA for review. NOAA would be required to determine whether it concurs with the agency's finding and provide a written analysis within 90 days.

These standards differ significantly from, and may conflict with, the national standards in many regulatory authorities, such as the recently reauthorized *Magnuson-Stevens Fishery Conservation and Management Reauthorization Act* and the *Energy Policy Act*. The review could delay urgent actions. Requiring federal agencies to certify that federal actions are consistent with this National Ocean Policy and then requiring NOAA to issue written opinions on each of these federal actions would overwhelm the federal system, delay urgent actions, and reduce NOAA's and other agencies' abilities to meet existing mandates. In addition, the Administration does not support vesting the sole authority to regulate all ocean-activities with any one agency. In short, these provisions may actually weaken our ability to manage ocean, coastal, and Great Lakes resources.

We believe that any new mandates should be consistent with existing federal laws and regulations and international law, as well as consider competing interests including freedom of navigation, on which the global economy depends, homeland security and national defense. The Administration supports a framework for regional collaboration among agencies, states, and tribes that would allow for coordination of mandates under various legislative structures and that would provide a basis to assess research priorities, share information, and allow for coordinated management actions. NOAA has taken steps to coordinate its various science and management actions in 10 regions of the country and we believe this to be a valuable model if extended government-wide.

Strengthen NOAA: A NOAA Organic Act

A priority identified in both the final report of the U.S. Commission on Ocean Policy and the *Ocean Action Plan* is the passage of a *NOAA Organic Act*. HR 21 seeks to reestablish NOAA, stipulating its mission and functions and requiring a plan for NOAA's reorganization within 18 months of enactment. We believe it is necessary to consolidate NOAA's many responsibilities, which now reside in over two hundred separate statues, into one authorization. An Organic Act should encompass the full spectrum of NOAA's responsibilities, for example including programs to protect and restore the nation's fisheries, and its responsibilities to provide products that foster safe transportation on marine highways. The Administration transmitted a proposal for such legislation to the 109th Congress and will be doing so again in the 110th. We are hopeful that the Members of this Committee will play an integral part in its passage.

Most importantly, the Administration believes that NOAA must maintain its current flexibility in determining how best to structure itself to address current and future needs. In responding to the recommendations of the U.S. Commission on Ocean Policy thus far, flexibility has proved to be a vital tool for NOAA leadership. This will continue to be the case as state and regional initiatives continue to evolve, and as science and management matures to address existing mandates for ecosystem based management. An

organizational structure that serves the nation well today, or in 18 months, may not be the best structure to serve the nation in the future. We believe that specific programmatic changes should be made through current authorization bills that are revisited every few years.

Establish a National Governance Structure

Title III of HR 21 would statutorily create a number of positions and mechanisms within the Administration to provide high-level guidance and coordination for ocean issues. The Administration believes in enhancing coordination of the ocean-related activities of the Federal Government and has placed a high importance on providing advice to the President on ocean issues. We believe there are effective mechanisms currently in place to achieve these purposes. The Administration objects to Title III, because it would limit and interfere with the President's flexibility to pursue these goals, because it would statutorily establish entities in the Executive Office of the President, and because it would statutorily establish a new Council of Advisors on Oceans Policy.

For example, HR 21 authorizes a Committee on Ocean Policy to succeed the Committee on Ocean Policy established under Executive Order 13366. The existing Committee on Ocean Policy created a framework to coordinate the ocean and coastal related activities of over 20 federal agencies that administer over 140 laws. While still young, the coordinated ocean governance structure under the existing Committee on Ocean Policy has demonstrated significant progress in enhancing ocean leadership and coordination, developing the institutional capacity to coordinate across jurisdictional boundaries, and strengthening the agency structure in phases in order to enhance the goal of addressing management needs through an ecosystem-based approach.

The existing committee conducts its operational work through the Interagency Committee on Ocean Science and Resource Management Integration (ICOSRMI) and its subordinate bodies, the Subcommittee on Integrated Management of Ocean Resources (SIMOR) and the National Science and Technology Council's (NSTC) Joint Subcommittee on Ocean Science and Technology (JSOST). Within this new coordinated ocean governance structure, ICOSRMI is incorporating the mandate and functions of the National Oceanographic Partnership Program's National Ocean Research Leadership Council into its broader ocean and coastal policy mandate, which now includes ocean resource management. The ICOSRMI is comprised of Under/Assistant Secretaries or their equivalents from the executive branch agencies and departments of the Committee on Ocean Policy, and is co-chaired by the White House's Council on Environmental Quality (CEQ) and Office of Science and Technology Policy. The White House has continued to demonstrate leadership and support in this effort, which has been critical to providing the high-level guidance and support necessary to focus the group on achievable goals, and to maintain its momentum. NOAA has taken a leadership role in both SIMOR and the JSOST, serving as co-chair on each respective group and further supporting their activities.

SIMOR seeks to identify and promote opportunities for collaboration and cooperation among agencies on resource management issues, and to build partnerships among federal,

state, tribal, and local authorities, the private sector, international partners, and other interested parties. SIMOR's counterpart in the new coordinated ocean governance structure is the JSOST. The JSOST seeks to identify national ocean science and technology priorities and to facilitate coordination of disciplinary and interdisciplinary ocean research, ocean technology and infrastructure development, and national ocean observation programs.

The role of the JSOST is exemplified in the recently released report *Charting the Course* for Ocean Science in the United States in the Next Decade: An Ocean Research Priorities Plan and Implementation Strategy. Reflecting input from a diverse group of federal agencies, state and local governments, academic researchers, non-governmental organizations and private citizens who share interest and responsibility for ocean science and management, Charting the Course for Ocean Science identified 20 national ocean research priorities, which are oriented round the most compelling scientific challenges and opportunities we face, including stewardship of natural and cultural resources, increasing resilience to natural hazards, enabling marine operations, understanding the ocean's role in climate, improving ecosystem health, and enhancing human health.

Most importantly, JSOST accomplished the exceedingly difficult task of identifying among the full range of opportunities, four critical research areas where the need is highest and potential benefits greatest. These four areas constitute the near-term opportunities which will be pursued vigorously over the next few years, and it is these areas that the President is supporting in his FY08 Budget Request to Congress, including:

- 1. Response of Coastal Ecosystems to Persistent Forcing and Extreme events. This topic focuses on improving forecasts of coastal response to a variety of natural events and human influenced processes.
- 2. Comparative Analysis of Marine Ecosystem Organization. This area focuses on understanding complex marine ecosystems in ways that will allow us to improve resource management.
- 3. Sensors for Marine Ecosystems. This area focuses on the development of new data collection tools and technologies to better understand various biological and chemical processes.
- 4. Meridional Overturning Variability. This area emphasizes the importance of improving our ability to observe, understand and predict changes in Atlantic ocean circulation, a key driver of climate variability and potentially of rapid climate change.

The JSOST was created through expansion of the former NSTC's Joint Subcommittee on Oceans in 2005 to include the issues of science and technology. Because of this evolution, the JSOST continues to report to the NSTC Committee on Science and the Committee on Environment and Natural Resources, in addition to the ICOSRMI. This dual reporting mechanism ensures that actions undertaken by JSOST are both influenced by and influence broader agency actions involving environmental and natural resource policy; thus strengthening ties with programs designed to address land use, fresh water quality and quantity, and air quality.

ICOSRMI seeks advice from its federal advisory committee, the Ocean Research and Resource Advisory Panel, comprised of 18 members from academia, as well as the public and private sectors, with interest and expertise in ocean science and resource management. ICOSRMI also coordinates with the National Security Council's Global Environment Policy Coordinating Committee and its Subcommittee on Ocean Policy.

Establish a Regional Governance Structure

HR 21 instructs NOAA and appropriate states to establish nine Regional Ocean Partnerships comprised of federal, state, tribal, international, Regional Fisheries Management Council, and local government representatives; and it ensures that each Partnership contains an equal number of non-federal voting representatives on each Partnership. There are several concerns with the partnerships as proposed in the bill. For example, the strategic plans could create significant overlap with existing management plans. It is unclear how these existing activities would be taken into consideration and how the transition will be made to the proposed strategic plans.

The Administration recognizes that regional bodies possess the unique ability to focus discussion on areas of most need, and provide lasting commitments to the stewardship of regional resources by those most affected by them. Through existing authorities, the Administration is currently supporting the formation of regional collaborative partnerships to advance region-specific science and management needs, including the West Coast Governors' Partnership for Healthy Oceans, Northeast Regional Ocean Council, Gulf of Mexico Alliance, and Great Lakes Regional Collaboration. Using the coordinated ocean governance structure of the existing Committee on Ocean Policy, SIMOR has led the development of regional teams to serve as the federal mechanism to engage the state and regional initiatives. In addition, SIMOR and JSOST have jointly gained from federal-state task teams that provide linkages on specific issues, such as identifying regional science priorities for the *Charting the Course for Ocean Science in the United States for the Next Decade: An Ocean Research Priorities Plan and Implementation Strategy*.

As an example of the success currently possible under Executive Order 13366 and existing authorities, the Gulf of Mexico Alliance is a state/federal collaboration made up of the Governors of the five Gulf States and supported by the Gulf of Mexico Federal Workgroup (a sub-group of the Subcommittee on Integrated Management of Ocean Resources), consisting of 13 agencies/departments. The Alliance, working in partnership with the Federal Workgroup, developed the *Governors' Action Plan for Healthy and Resilient Coasts*. This Plan, released in March 2006, identifies five regionally significant issues. These priorities represent an initial focus for action through the Alliance: water quality for healthy beaches and shellfish beds, wetland and coastal conservation and restoration, environmental education, identification and characterization of Gulf habitats, and reductions in nutrient inputs to coastal ecosystems. Work is underway to implement the *Action Plan*. The Federal Workgroup will continue to support the Gulf States in several specific areas including: increasing federal participation where appropriate; addressing interagency coordination and identifying opportunities to streamline intra- and

inter-agency functions; promoting opportunities for bilateral coordination with, and participation by, Mexico and its Gulf Coast states; and promoting regional collaboration including identifying needs for observations and management tools that could be forwarded to the JSOST.

In addition to supporting the formation of regional collaborative partnerships, NOAA is expanding on previous regional capabilities in order to provide a framework that will draw together NOAA capabilities to better respond to customer needs in the field. Regional Teams were recently established under this initiative to provide a NOAA-wide mechanism for addressing geographically-specific, multi-line office, multi-disciplinary environmental problems that the agency has been asked to address (Integrated Ecosystem Assessments, Integrated Water Resource Services, and Hazard Resilient Coastal Communities). In addition, each regional team will assess NOAA activities in the context of existing regionally-distinct priorities. In this regard, NOAA should be well prepared to address priorities identified at the regional level.

The Administration's position, articulated in the U.S. Ocean Action Plan, supports regional collaboration and supports continued movement towards ecosystem-based management approaches. Of particular importance is the respect for initiatives that are state-led and focus on state/regional priorities, in the spirit of cooperative conservation, and allow for flexibility in approaches to development of the initiatives and in the allocation of funding. The Administration supports the concept that regional ocean partnerships should be a forum for coordination. We believe that several of the principles outlined in the National Governors Association policy statement on ocean and coastal policy are closer to our position than that of HR 21. Specific examples include:

- Regional ocean partnerships should be voluntary, flexible, and state-driven,
- Regional ocean partnerships should be a forum for coordination, not a new large bureaucracy, and
- There should be an open and transparent process for stakeholder and citizen participation.

Promote Ecosystem-Based Management

HR 21 would require the use of ecosystem-based approaches to management, which has been an operating model for NOAA under its various mandates for a number of years. The use of ecosystem-based management is a principal that the Administration supports. Most recently, the Administration has taken significant steps to protect vulnerable marine ecosystems, including coral reefs, seamounts, hydrothermal vents, and cold-water corals, from fishing and other impacts within our domestic waters within existing and expanded authorities. In June 2006, President Bush designated the Papahanaumokuakea Marine National Monument (in the Northwestern Hawaiian Islands), which is a fully protected marine area co-managed by NOAA, the U.S. Fish and Wildlife Service, and the state of Hawaii. Encompassing nearly 140,000 square miles, this monument is more than 100 times larger than Yosemite National Park, larger than 46 of our 50 states, and more than seven times larger than all our national marine sanctuaries combined.

The reauthorization of the *Magnuson-Stevens Act* provided new authorities for NOAA to implement ecosystem approaches to management through the identification and protection, as appropriate, of unique deep coral habitats, the ability to provide incentives to reduce seabird interactions under federal fishery management plans, and the authority to provide technical advice and assistance, including grants, to fisheries management councils for the development and design of regional ecosystem pilot projects. These initiatives are important expansions of existing authorities necessary to realize the goal of ecosystem-based management. Coordination of these efforts with NOAA and interagency authorities is an important additional step.

The United States is also a leader in promoting the need for similar conservation and management measures internationally, including through the United Nations (UN) and its Food and Agriculture Organization (FAO). In October 2006, President Bush issued a memorandum to Secretary of State Rice and Secretary of Commerce Gutierrez, which promoted the sustainable management of global fisheries resources and called for an end to destructive fishing practices on the high seas. The U.S. delegation to the 2006 UN General Assembly fisheries resolution negotiations promoted the position as outlined in the Presidential Memorandum, specifically urging nations to prohibit their vessels from engaging in destructive fishing practices on the high seas until applicable conservation and management measures, authorized by a competent Regional Fisheries Management Organization (RFMO), are in place. The ultimate consensus-based language of the resolution includes management provisions for RFMOs and nations to prevent bottom fishing from causing harm to vulnerable marine ecosystems (VMEs) and calls upon the FAO to develop further management guidance. At the recent session of the FAO Committee on Fisheries, held March 5-9, 2007 in Rome, Italy, a major topic of discussion was the role of the FAO in implementing the UN General Assembly resolution. Among the requests made of FAO, a priority for the U.S. was the development of standards and criteria for use by nations and RFMOs in identifying VMEs and the impacts of fishing on such ecosystems. As a result, the FAO plans to develop technical guidelines for the management of deep-sea fisheries on the high seas by early 2008.

Because HR 21 would require an ecosystem-based approach to the management of fisheries, marine mammals, protected species, coral reefs, and protection and management of ocean and coastal areas, it could affect many regulatory programs currently administered by federal agencies and would create an additional regional layer of ecosystem administration. The steps to enable cross-legislative and cross-agency collaboration, consistent with ecosystem-based approaches to management, are not detailed in the bill. We believe that a non-mandatory, nonstatutory regional consultative mechanism can accomplish much of the intent of the bill, without delaying necessary management actions required under existing law, and is the preferable approach. Consideration should be given to reconciling any new consultation process with the requirements for interagency consultation pursuant with existing mandates.

The additional layer of regulatory review proposed by this bill could significantly distract us from our goal. We suggest that any bill designed to promote ecosystem-based management follow a more step-wise approach — one based on expanding the mission,

enhancing capabilities to provide technical advice and collaboration, and encouraging discretionary development of pilot projects.

The *U.S. Ocean Action Plan* and the final report of the U.S. Commission on Ocean Policy endorse implementation of a sustained Integrated Ocean Observing System (IOOS). IOOS is the U.S. component of the Global Ocean Observing System, and is the key ocean component of the U.S. Integrated Earth Observation System (IEOS) now being developed. Both IOOS and IEOS will become part of GEOSS — the Global Earth Observation System of Systems. IOOS is envisioned as an interagency, end-to-end system designed to meet seven societal goals by integrating research, education, and the development of sustained ocean observing capabilities. The need to integrate data derives from NOAA's core missions. The challenges society faces today (coastal populations at risk, compromised ecosystems, climate change, increased maritime commerce) threaten jobs, revenue, and human health. Answers to these problems require access to better information.

Developing IOOS is a top priority for NOAA. In December 2006, NOAA reconfirmed its commitment to IOOS by establishing a NOAA IOOS Program. Responsibilities of the new NOAA IOOS Program include serving as the central focal point for the administration of NOAA's IOOS activities, interface to regional partners, establishing an initial operating capability for data integration, requirements definition, conducting system acquisition and closely coordinating and collaborating with federal partners through the National Office for Integrated and Sustained Ocean Observations (Ocean.US). The NOAA IOOS Program and Ocean.US will be co-located to improve communication, coordination, and information exchange.

Capacity that can contribute to a U.S. IOOS currently exists within NOAA. This capacity includes observing platforms, communications lines, computers and people that manipulate and distribute data, and people that develop data products. The IOOS Program will focus on identifying this internal capacity and coordinating this capability through an Initial Operating Capability for data integration to serve U.S. IOOS goals. The initial focus will be integration of five core IOOS variables (temperature, salinity, sea level, surface currents, and ocean color). These integrated data will be accessible in useful formats for ingest into four priority NOAA data products: coastal inundation, hurricane intensity, harmful algal bloom forecasts, and integrated ecosystem assessments. These data products will be tested and evaluated to measure improvements to baseline conditions resulting from access and ingest of integrated data. Once improvements are demonstrated, product enhancements will be benchmarked for operational use.

The NOAA IOOS Program will continue to support development of infrastructure and management to enable a fully configured and scalable U.S. IOOS. NOAA recognizes it is nationally important to have infrastructure in place to characterize, understand, predict and monitor changes in coastal-ocean environments and ecosystems. This infrastructure is necessary to help states and regions more efficiently and effectively manage resources and meet federal environmental and natural resources compliance requirements. This infrastructure is also critical to understanding and mitigating the effects of severe

weather, global-to-regional climate variability, and natural hazards. NOAA intends to continue supporting the development and integration of the regional coastal components of IOOS. This includes supporting effective regional management structures required to achieve development and integration of operational regional coastal ocean observing systems. NOAA's goal is to demonstrate value in this integration, and extend this integrated data capability across the country by enabling our regional partners to contribute their data, and also access the full suite of existing integrated data through distributed and coordinated data integration and communication networks.

The National Office for Integrated and Sustained Ocean Observations (Ocean.US) has the lead for planning the multi-agency IOOS effort. NOAA is heavily involved in this planning, and has been designated by the Administration as the lead federal agency for administration and implementation of IOOS. Coordination among all contributing agencies continues to grow through participation in the Interagency Working Group on Ocean Observations established under the JSOST and chaired by NOAA with vice chairs from the National Aeronautics and Space Administration (NASA), the Navy, and the National Science Foundation (NSF).

Ocean Stewardship Through Education

The Administration supports efforts to enhance responsible ocean stewardship through ocean education and outreach, information collection, and citizen involvement. Ocean education is an important component of the President's *U.S. Ocean Action Plan* and together, SIMOR and the JSOST have formed the joint Interagency Working Group on Ocean Education, to identify opportunities and articulate priorities for enhancing ocean education, outreach, and capacity building. Ocean management is more effective with an ocean literate public, and to this end, NOAA leverages many opportunities to advance ocean education in support of its mission goals. Our formal and informal activities include scholarship and fellowship programs, education and research grants, and strategic partnerships with education institutions and industry. In 2006, NOAA's Education Office provided scholarship and internship opportunities to over 230 undergraduate students. NOAA's education investment is also geared towards hiring students trained through these scholarship and internship opportunities. Through December 31, 2006, NOAA has hired 32 students trained through its Graduate Sciences Program. Also in 2006, 33 teachers participated in NOAA's Teacher at Sea Program.

To raise national attention to the need for ocean literacy, NOAA, EPA, the Department of the Interior, NSF, NASA, and the National Marine Sanctuary Foundation, co-hosted CoOl — the Conference on Ocean Literacy — on June 7-8, 2006, in Washington, D.C., as part of the presidentially proclaimed National Oceans Week. The conference brought together key participants to discuss the essential principles of ocean literacy, and the current challenges and opportunities for both formal and informal education efforts in educating the public to make informed, responsible decisions about the ocean and its resources. The conference extended beyond Washington, D.C., through five regional workshops hosted by aquariums across the country including: Aquarium of the Pacific, Long Beach, CA; John G. Shedd Aquarium, Chicago, IL; J.L. Scott Aquarium, Ocean Springs, MS; National Aquarium in Baltimore, Baltimore, MD; and National Mississippi

River Museum and Aquarium, Dubuque, IA. The conference resulted in a *Conference on Ocean Literacy Report*, which makes recommendations for future efforts in formal education, informal education, and for creating diversity in the ocean workforce.

Funding

Finally, H.R. 21 would provide significant new funding, particularly to coastal states through the Ocean, Coastal, and Great Lakes Trust Fund. We recognize the important role states, tribes, and local governments play in managing these important resources. Through ICOSRMI, the Administration is finding ways to partner more effectively with our state, tribal, and local partners so that the significant federal and non-federal resources that are already devoted to ocean and coastal issues are used more efficiently and produce better outcomes. Any additional resources for ocean and coastal issues should be considered within the full context of the different priorities for federal spending. As such, we strongly oppose the establishment of an Ocean, Coastal, and Great Lakes Trust Fund that would circumvent the Administration's and Congress's ability to evaluate and modify federal funding priorities on an annual basis.

Conclusion

In conclusion, I would like to reiterate the importance of the efforts of the U.S. Commission on Ocean Policy, and stress that the Administration is strongly committed to continued implementation of the recommendations of the *U.S. Ocean Action Plan* and sound ocean stewardship. The federal agencies involved in ocean and coastal conservation management activities will continue to work with its partners in a collaborative and systematic fashion, as we believe collaboration is critical to make our ocean, coasts, and Great Lakes cleaner, healthier and more productive. We look forward to continuing to work with the Members of the Committee in raising the bar for the long-term conservation and management of our coastal and ocean resources.

Thank you again for your time and I am happy to answer any questions that the Members of the Committee may have.