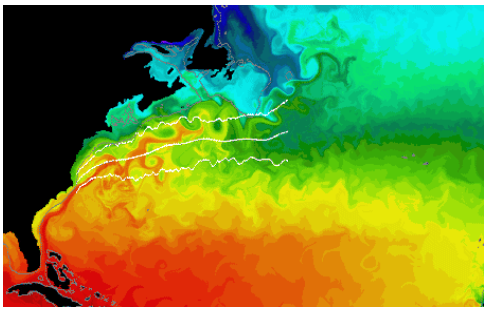
U.S. OCEAN ACTION PLAN UPDATE



U.S. OCEAN ACTION PLAN IMPLEMENTATION UPDATE

Prepared by
The Committee on Ocean Policy

JANUARY 2007

EXECUTIVE OFFICE OF THE PRESIDENT
COUNCIL ON ENVIRONMENTAL QUALITY
WASHINGTON, D.C. 20503

January 26, 2007

Dear Partners and Friends in our Ocean and Coastal Community,

On December 17, 2004, President Bush signed Executive Order 13366, creating the Cabinet Committee on Ocean Policy, and released the U.S. Ocean Action Plan in response to the Final Report of the U.S. Commission on Ocean Policy, "An Ocean Blueprint for the 21st Century." The Ocean Action Plan (OAP) provided 88 actions, and a set of principals to guide those actions, for strengthening and better coordinating US ocean policy by

- *Enhancing Ocean Leadership and Coordination*
- *Advancing our Understanding of Oceans, Coasts, and Great Lakes*
- *Enhancing the Use and Conservation of our Ocean, Coastal and Great Lakes Resources*
- *Managing Coasts and Their Watersheds*
- *Supporting Maritime Transportation*
- *Advancing International Ocean Science and Policy*

Since its release, the federal agencies, together with state, local, territorial, and tribal authorities, the private sector, international partners and, most important, those in our ocean communities made substantial progress in meeting their commitments to the actions in the plan. The Cabinet Committee on Ocean Policy presents this update on OAP implementation to identify specific areas of accomplishment and ongoing progress, along with opportunities that have led agencies to move beyond the OAP.

This report briefly describes the status of each of the actions and sub-actions outlined in the OAP. It also describes new activities beyond those in the OAP as well as planned next steps. We have met the OAP commitment for 73 of the 88 actions and nearly met the commitments in 4 larger multi-action items. Of the remaining 11 ongoing actions, the schedule for one item has been adjusted, while the remaining 10 items are proceeding on schedule. Four new actions relating to OAP priorities have been added, and additional activities that move beyond the commitments outlined in the OAP are reported for 22 of the 88 actions items.

In 2006 alone, we made great strides in advancing our understanding and enhancing the use and conservation of oceans and coasts. In June, President Bush established the Northwestern Hawaiian Islands Marine National Monument – the largest single area of conservation in our nation's history and the largest protected marine area in the world. As a capstone to National Oceans Week this past summer, the first-ever National Conference on Ocean Literacy was held in Washington, D.C. with 5 regional sites around the nation linked to the conference via satellite. Following the President's call to end overfishing, we worked with our partners to achieve that goal by reauthorizing our nation's premiere fishery management law – the Magnuson-Stevens Fishery Conservation and Management Act of 2006. And as planned, our scientists and policymakers completed the first-ever Ocean Research Priorities Plan and Implementation Strategy to provide a portfolio of vital research for the

next decade along with critical near-term priorities. Other important accomplishments this past year include enacted legislation to enhance our efforts to clean up and prevent marine debris and a strong U.N. resolution to stop destructive fishing practices on the high seas.

The Committee on Ocean Policy and its subcomponents continue to enhance coordination among the federal agencies and with partners at the state, territorial, tribal and local levels, with the goal of achieving meaningful results – making our oceans, coasts, and Great Lakes cleaner, healthier, and more productive. Thank you for your important contributions to the implementation of the U.S. Ocean Action Plan.

We are looking forward to continued great collaboration with our partners as we move beyond the Ocean Action Plan in 2007/2008.

Sincerely,

James L. Connaughton
Chair, Committee on Ocean Policy
Chair, White House Council on Environmental Quality

TABLE OF CONTENTS

CHAPTER 1: ENHANCING OCEAN LEADERSHIP AND COORDINATION

Improving Federal Coordination and Governance

Seek Passage of NOAA Organic Act Establishing NOAA within the Department of Commerce
The Administration's Bill was transmitted to Congress in April 2005. The Organic Act enables NOAA to work better by more broadly partnering with groups and allowing NOAA the authority to disseminate information. In the House, Rep. Vern Ehlers (R-MI) introduced his version of a NOAA Organic Act—HR 5450. It was jointly referred to both the House Science Committee and the House Resources Committee. HR 5450 was passed by the House on September 20, 2006. Subsequently it was sent to the Senate where it was received, read twice and referred to the Senate Committee on Commerce, Science and Transportation on September 21, 2006. (http://thomas.loc.gov)

Establish a New Cabinet-Level Committee on Ocean Policy
The Cabinet-level Committee on Ocean Policy (COP), created by President Bush through Executive Order 13366 on December 17, 2004, held its inaugural meeting on April 3, 2005. The COP's work is conducted through the Interagency Committee on Ocean Science and Resource Management Integration (ICOSRMI), the Subcommittee on Integrated Management of Ocean Resources (SIMOR), the National Science and Technology Council (NSTC) Joint Subcommittee on Ocean Science and Technology (JSOST), and the federal agency members. (http://ocean.ceq.gov/)

Establish New Interagency Committee on Ocean Science and Resource Management Integration
The Interagency Committee on Ocean Science and Resource Management Integration (ICOSRMI) is comprised of Under/Assistant Secretaries or their equivalents from the Executive branch agencies and departments of the Committee on Ocean Policy (COP). The ICOSRMI held its first meeting in January 2005. It is incorporating the mandate and functions of the National Ocean Research Leadership Council into its broader ocean and coastal policy mandate, which includes ocean resource management. (http://ocean.ceq.gov/about/icosrmi.html)

Establish New Subcommittee on Integrated Management of Ocean Resources
The Subcommittee on Integrated Management of Ocean Resources (SIMOR) convened in March 2005. SIMOR identifies and promotes opportunities for collaboration and cooperation among federal agencies and builds partnerships among federal, state, tribal and local authorities, the private sector, international partners, and others. These cooperative efforts help develop and implement management strategies that ensure continued conservation of coastal and marine habitats and living and non-living resources while also ensuring that the American public enjoys and benefits from those same resources. (http://ocean.ceq.gov/about/simor.html)

MOVING BEYOND THE OAP
SIMOR released its Work Plan in March 2006 focusing on four priority areas: Support regional and local collaboration; Facilitate use of ocean science and technology; Enhance ocean, coastal, and Great Lakes resource management to improve use and conservation; and

Enhance ocean education. Current activities include implementing 21 initial actions in the four priority areas.

NSTC Joint Subcommittee on Ocean Science and Technology
The National Science and Technology Council (NSTC) established a Joint Subcommittee on Oceans in 2003. At the direction of the Ocean Action Plan, this group was expanded in 2005 to include Science and Technology forming the Joint Subcommittee on Ocean Science and Technology (JSOST). The JSOST reports to the NSTC Committee on Science and the Committee on Environment and Natural Resources in addition to the Interagency Committee on Ocean Science and Resource Management Integration (ICOSRMI). (http://ocean.ceq.gov/about/jsost.html)

Ocean Research Advisory Panel
The existing federal advisory committee, the Ocean Research Advisory Panel, is expanding its scope of expertise by including in its membership experts in areas of resource management. The Committee, renamed the Ocean Research and Resources Advisory Panel (ORRAP), provides advice to the Interagency Committee on Ocean Science and Resource Management Integration (ICOSRMI), the Subcommittee on Integrated Management of Ocean Resources (SIMOR) and the Joint Subcommittee on Ocean Science and Technology (JSOST). (http://www.coreocean.org/Dev2Go.web?id=207773)

National Security Council Policy Coordinating Committee
The Subcommittee on Oceans Policy (Oceans Sub-PCC), of the National Security Council's Global Environment Policy Coordinating Committee, meets quarterly to discuss international ocean policy issues and provides a forum for exchanging information to develop U.S. policy positions for international negotiations. The group also provides updates on international activities to the Coordinated Ocean Governance Structure. The Oceans Sub-PCC coordinates with the Interagency Committee on Ocean Science and Resource Management Integration (ICOSRMI), and the Chair of the Oceans Sub-PCC serves as a member of the Subcommittee on Integrated Management of Ocean Resources (SIMOR) and the Joint Subcommittee on Ocean Science and Technology (JSOST). (http://ocean.ceq.gov/)

Support Regional Collaborations on Oceans, Coasts, and Great Lakes Policy in Partnership with Leadership of States, Localities, and Tribes

Support Great Lakes Interagency Task Force and Great Lakes Regional Collaboration
The Great Lakes Regional Collaboration (GLRC) released its Strategy to Restore and Protect the Great Lakes in December 2005. The strategy contains recommendations which are the product of over 1500 stakeholders from throughout the Great Lakes Basin. The recommendations are categorized in eight priority issue areas, including: aquatic invasive species; coastal health, habitat/species; non-point sources; areas of concern/sediments; persistent toxic substances; indicators & information; and sustainable development. In signing a resolution in support of the Strategy, the GLRC partners, including the federal government, the Great Lakes Governors, Mayors, and Tribes: (1) recognized that the GLRC Strategy will guide future efforts to protect and restore the Great Lakes; (2) affirmed their commitment to move the Collaboration process forward by working together toward implementation of near term actions as well as other future actions to

ensure a healthy Great Lakes ecosystem; and (3) pledged their continued support for the Collaboration. (http://www.glrc.us/)

Planned Next Steps: The Federal Interagency Task Force developed a list of 48 near term actions it would initiate in 2006, using existing funds, to help protect the Great Lakes. The Task Force is making considerable progress in moving forward on those actions, as well as implementing the other provisions of Executive Order 13340 on the Great Lakes.

Support a Regional Partnership in the Gulf of Mexico

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*. The 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. (www.gulfofmexicoalliance.org)

Planned Next Steps: The *Governors' Action Plan* includes 11 key actions across the Alliance's five priority issues. A companion document released concurrently with the *Governors' Action Plan*, the *Implementation Activities Matrix* details initial state and federal agency commitments to accomplish these 11 actions from March 2006 to March 2009. 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 Joint Subcommittee on Ocean Science and Technology. The Alliance held an "all hands" Action Plan Implementation and Integration Workshop in July 2006, to detail and expand implementation commitments made in the *Implementation Activities Matrix* and further regional collaboration in implementing the *Governors' Action Plan* by March 2009.

Advance Ocean Stewardship through Implementation of Cooperative Conservation Executive Order

In August 2004, President Bush signed Executive Order #13352 (Order) entitled Facilitation of Cooperative Conservation. The Order directs the Departments of Defense, Agriculture, Commerce (NOAA), the Interior and the Environmental Protection Agency to implement laws relating to the environment and natural resources in a manner that promotes cooperative conservation with an emphasis on local inclusion.

In August 2005, approximately 1300 of the Nation's conservation leaders met in St. Louis for the White House Conference on Cooperative Conservation. The conference produced a wealth of suggestions and ideas for implementing the principles set forth in the Order. During the conference, James Connaughton, Chairman of the White House Council on Environmental Quality (CEQ), announced the creation of the President's new Task Force on Cooperative Conservation.

Following the conference the Task Force identified a number of short-, mid-, and long-term objectives that would foster a more collaborative and efficient Federal workforce, solutions to statutory and regulatory barriers to cooperative conservation, and more effective local involvement in Federal decision-making. Progress is underway on these objectives and our nations oceans are benefiting as a result.

In addition to a number of administrative efforts, the Task Force has developed an interagency legislative package made up of components integrated by a common goal; to create tools and authorities that promote conservation partnership capabilities and resolve disputes through collaboration.

The package includes the Cooperative Conservation of Marine Estuarine, Coastal and Riverine Habitat Act. This proposed legislation would authorize the Secretary of Commerce to enter into cooperative partnerships and build local and regional capacity to support marine, estuarine, coastal, and riverine habitat protection and restoration. It would advance the National Oceanic and Atmospheric Administration's (NOAA) model of cooperative conservation by ensuring clear and flexible statutory authority for current NOAA programs that are generally authorized under disparate authorities. The bill would also provide the Secretary of Commerce with similar authorities as those provided to the Secretary of the Interior to provide regulatory assurances to those private landowners who undertake conservation measures on their land. (http://cooperativeconservation.gov/)

Advance Regional Fisheries Management

In the fall of 2004, thirteen southeastern States, the U.S. Department of the Interior, the National Oceanic and Atmospheric Administration, the Atlantic States Marine Fisheries Commission, the Gulf States Marine Fisheries Commission, the Gulf of Mexico Fishery Management Council, and the South Atlantic Fishery Management Council signed a Memorandum of Understanding (MOU) formalizing the creation of the Southeast Aquatic Resources Partnership (SARP). The SARP is currently developing aquatic nuisance species management plans and strategies for the Southeast and an Aquatic Habitat Plan for the Southeast that are intended to serve as the regional component of the National Fish Habitat Initiative. (http://www.sarpaquatic.org/)

MOVING BEYOND THE OAP

To formalize coordination and communication a full-time SARP Coordinator was established in September 2005 to enhance and stimulate aquatic conservation efforts at the regional level. SARP has also initiated a detailed strategy for developing the Southeast Aquatic Habitat Plan. The Southeast Aquatic Habitat Plan will be proposed for inclusion in the National Fish Habitat Plan. The final draft of the Southeast Aquatic Habitat Plan is expected to be released in late summer of 2007.

MOVING BEYOND THE OAP

Northeast Regional Ocean Council (NROC)

Although not specifically identified in the Ocean Action Plan, Governor Carcieri of Rhode Island called for a Northeast Regional Ocean Council at the April 2005 inaugural meeting of the Committee on Ocean Policy and the August 2005 New England Governor's meeting. At the initial NROC meeting in January 2006, the states were provided an opportunity to address issues using regional approaches. Among the topics discussed were energy projects and facilities siting (including pipelines, cables, wind projects, and LNG facilities), ocean mapping (to include Natural

Resources Conservation Service and Fish and Wildlife Service efforts regarding coastal soils and wetlands), and integrated monitoring.

In May 2006, at the New England Governors & Eastern Canadian Premiers conference, attendees signed Ocean Resolution 30. This Resolution reaffirms formation of NROC and the international Oceans Working Committee, which is a joint effort between NROC and their Canadian provincial counterpart. Ocean Resolution 30 focuses in the short-term on finalizing prioritization of a specific set of regional issues, and in the longer term, addressing a strategy to explore regional governance issues. Ocean Resolution 30 states that the Oceans Working Committee will work with federal agencies to form an Action Plan and Implementation Strategy.

New England state representatives are preparing a draft compendium of issues that they would like to see addressed regionally through a council such as NROC, and developing a draft set of expectations for participation by the federal partners.

CHAPTER 2: ADVANCING OUR UNDERSTANDING OF THE OCEANS, COASTS, AND GREAT LAKES

Expanding Our Scientific Knowledge of Oceans, Coasts, and Great Lakes

Develop an Ocean Research Priorities Plan and Implementation Strategy

The Joint Subcommittee on Ocean Science and Technology (JSOST) has actively worked to develop the Ocean Research Priorities Plan (ORPP) and Implementation Strategy. To facilitate public/stakeholder input into the process, a workshop was held in April 2006 in Denver, Colorado. Workshop participants included federal, state, and local governments, academia, educators, non-governmental organizations, and private industry. A public comment period for the planning materials for the ORPP followed the workshop. In June 2006, the JSOST held a day-long retreat to discuss the research priorities, which were produced using the input from the public comments and workshop. A draft of the ORPP was submitted to the ICOSRMI in July 2006. The ORPP was released for public and NRC review late summer 2006. The public comment period was 45 days from release; the NRC review period was three months. During the NRC and public review period, the JSOST began development of the Implementation Strategy. In addition, a series of public briefings were held around the country to inform and solicit comments from the ocean community on the ocean research priorities. Information sessions and panels were also conducted at several scientific conferences and organization meetings. (http://ocean.ceq.gov/about/jsost.html)

Planned Next Steps: The Plan was finalized in December 2006, is scheduled for release in January 2007.

Build a Global Earth Observation Network, Including Integrated Oceans Observation

Integrate U.S. Ocean Observing Efforts into the Global Earth Observing System of Systems: In April 2006, the Joint Subcommittee on Ocean Science and Technology (JSOST) established the Interagency Working Group on Ocean Observations (IWGOO) to advise and assist the JSOST on matters related to ocean observations. A function of the IWGOO is to integrate U.S. ocean observing efforts, including the Integrated Ocean Observing System

(IOOS), into the Global Earth Observing System of Systems (GEOSS) and to other international programs. The First Annual IOOS development plan was approved by the National Ocean Research Leadership Council (NORLC)/ Interagency Committee on Ocean Science and Resource Management Integration (ICOSRMI) in January 2006. The Plan addresses many recommendations of the U.S. Commission on Ocean Policy, including those for establishing an IOOS with an emphasis on regional development, developing the capacity for ecosystem-based management, and linking IOOS data and information to applications. (http://www.ocean.us/IWGOO)

The Data Management and Communications (DMAC) Steering Team established the IOOS-DMAC Guidelines/Standards Adoption Process in May 2006.

In January 2006, the Group on Earth Observations (GEO) released The GEO 2006 Work Plan, which was accepted as a living document, subject to further revision and finalization in 2006. The Work Plan sets forth a series of activities and tasks for the first year of GEOSS implementation. The program areas include: Disasters, Health, Energy, Climate, Water, Weather, Ecosystems, Agriculture, and Biodiversity. Within each program area there are specific ocean related activities to build a global earth observation network, including integrated ocean observations. (http://usgeo.gov/)

Lead Development of International Capacity Building Effort

There is an ever-growing need for capacity building to ensure the long-term operations, maintenance and development of ocean observation systems deployed in both national and international waters. U.S. leadership through the Group on Earth Observations and involvement in the Intergovernmental Coordination Groups for regional warning systems is generating political will for this collaborative, scientific endeavor.

U.S. Agencies, in cooperation with the Ocean Studies Board of the National Academies, hosted an international conference in November 2006 to consider the most effective mechanisms for building capacity for the protection and sustainable use of oceans and coasts. In addition, the U.S. has pioneered an effort to refine the role of the UN Educational Scientific and Cultural Organization (UNESCO) and sister UN agencies to build capacity in a more efficient manner, particularly with emphasis on capacities for natural hazard risk mitigation, including basic sciences and engineering. The U.S. has also begun to implement Sea Grant programs in South Korea, Latin America/Caribbean, and Indonesia, as a means to create an institutional environment for capacity building.

U.S. leadership in tsunami detection and mitigation has probably been the most visible example of U.S. engagement in the international transfer of U.S. ocean technology and expertise over the course of 2006. The U.S. remains committed to sharing best practices, promoting both interoperability and the full and open exchange of data and encouraging the participation of foreign scientists in U.S. government-sponsored oceans research.

Planned Next Steps: Funds were obligated in 2006 and preparations are underway for Global Sea Level Observing System (GLOSS) technology training workshops to be conducted in Mozambique and Mauritius in 2007. The U.S. is also helping to re-establish the water level network in the Caribbean in 2006-2007; this “Third Border Initiative”

includes equipment, training, and the development of a sustainable network in support of coastal hazard warning, planning, and mitigation. (http://www.gloss-sealevel.org/)

MOVING BEYOND THE OAP

NRC Study on International Capacity Building for the Protection and Sustainable Use of Oceans and Coasts

The National Science Foundation, and the National Oceanic and Atmospheric Administration, have joined the David and Lucille Packard Foundation, and the Gordon and Betty Moore Foundation to sponsor a study by the National Academies' National Research Council, entitled *International Capacity Building for the Protection and Sustainable Use of Oceans and Coasts*. The study will identify barriers to effective management of coastal and marine resources encountered in coastal nations, particularly in the developing world. In addition, the study will examine current and past efforts to build the scientific, technological and institutional capacities required for countries to develop and implement effective coastal and marine resource policies and recommend ways in which the United States and partner organizations, including governments, international bodies, and stakeholders, can help strengthen the marine protection and management capacity of other countries. (http://dels.nas.edu/osb/capacity_building.shtml)

Monitor and Share Data on Ocean Currents in the Gulf of Mexico through New MMS Program

Minerals Management Service (MMS) requires the Oil and Gas Industry to provide their deepwater ocean current profile data to NOAA's National Data Buoy Center (NDBC) for public display. All real-time phases of this initiative are complete, including automated quality control, email notifications of problems to operators, and program monitoring displays for use by MMS. The real time data may be viewed in both tabular and graphical format at (http://www.ndbc.noaa.gov/maps/ADCP_WestGulf.shtml).

Planned Next Steps: The final work to fully implement the MMS requirements is to allow for processing of delayed-mode data, and to reprocess data received prior to the implementation of Phase 2 quality control to place into a historical database. These efforts are nearing completion.

Share GIS Data Through New Corps of Engineers-NOAA Partnership

In June 2005, NOAA and USACE made available coastal topographic/bathymetric data collected via the Joint Airborne Lidar Bathymetry Technical Center of Excellence (JALBTCX) partners through a NOAA geospatial data portal. The initial datasets include pre and post-storm topography and hydrography Lidar for portions of the Gulf of Mexico and eastern Florida. More recently, data has been collected and made available for additional portions of the U.S. east coast. The coverage area of the newly added data covers approximately 500 meters inland and up to 1000 meters seaward of coastal New York, New Jersey, Delaware, Maryland, Virginia, and South Carolina.

A National Oceanic and Atmospheric Administration (NOAA)/U.S. Army Cops of Engineers (USACE) jointly funded project to fuse Lidar data and spectral imagery into new information products is coordinated through the National Oceanographic Partnership Program (NOPP) and underwent a positive program review in June 2006. In addition,

NOAA sponsored GIS training courses in August 2005 for USACE staff or invitees representing five states and several different Corps offices. (www.nopp.org)

Planned Next Steps: The JALBTXC National Coastal Mapping Program will continue to collect and make Lidar data available. In the coming weeks, the NOAA Coastal Services Center will be adding USACE Lidar data collected in coastal North Carolina, Georgia, and Florida, and in the next few months, expect to receive and make available data from the Northeast and Great Lakes coastal regions. The NOPP-funded project continues on schedule with field work as the next major component to the project.

Develop and Deploy New State of the Art Research and Survey Platforms

Under the current Ocean Action Plan, the Joint Subcommittee on Ocean Science and Technology (JSOST) chartered the Interagency Working Group for Facilities (IWG-F; previously the Federal Oceanographic Facilities Committee under the National Oceanographic Partnership Program) to develop the National Oceanographic Fleet Plan. This Plan defines an interagency strategy for federally-owned oceanographic research and survey vessels operated by both federal and academic organizations.

Planned Next Steps: The Federal Oceanographic Fleet Plan has been drafted and will be released in early 2007.

Ocean Salinity from Space

The National Aeronautics and Space Administration (NASA) has confirmed the development of the Aquarius instrument, which will be onboard Argentina's Satélite de Aplicaciones Científicas-D (SAC-D) satellite to be launched in July 2009. Aquarius will measure global sea surface salinity (SSS) from space with unprecedented precision, answering long-standing questions about how our oceans respond to climate change and the water cycle. For example, monthly SSS maps will give clues about changes in freshwater input and output to the ocean associated with precipitation, evaporation, ice melt, and river runoff. Aquarius data will also be used to track the formation and movement of water masses that regulate ocean circulation and Earth's climate. NASA is partnered with the Argentine space program, the Comisión Nacional de Actividades Espaciales (CONAE), on the SAC-D mission, building on a successful long-standing relationship between NASA and CONAE. Multiple universities, corporate and international partners are also involved in the mission. Prior estimates of a 2008 launch were revised before the Aquarius Mission Confirmation Review in September 2005 when Aquarius was confirmed for March 2009 launch. This date has since changed to July 2009 due to delays in CONAE's spacecraft acquisition. (http://aquarius.gsfc.nasa.gov/)

Planned Next Steps: Aquarius will orbit Earth for at least three years, repeating its global pattern every seven days. Within two months, Aquarius will collect as many SSS measurements as the entire 125-year historical record from ships and buoys, and provide measurements over the 25 percent of the ocean where no previous observations have been made. Aquarius measurements are expected to coincide with an extensive international oceanographic experiment to determine the annual Atlantic meridional overturning circulation variations, which are related to the SSS in the high latitudes of the North Atlantic.

Replacing ALVIN

The National Science Foundation (NSF) is providing funding for the first phase of construction of the Human Occupied Vehicle (HOV) as a replacement for the Deep Submergence Vehicle ALVIN through a cooperative agreement with the Woods Hole Oceanographic Institution. It is anticipated that the replacement will be able to reach more than 99 percent of the seafloor to depths of 6,500 meters (21,320 feet). In October 2005, Southwest Research Institute (SwRI) was awarded a subcontract for the design of the personnel sphere, a critical component to achieve successful vehicle development. (http://www.whoi.edu/marops/vehicles/newalvin/)

Planned Next Steps: A solicitation for design of the vehicle itself was released in late 2006, and engineering and testing of other vehicle aspects also continue, including the floatation system and energy source. Alvin will continue to operate during construction of its replacement.

A New Ocean Exploration Vessel for NOAA

In August 2005, the National Oceanic and Atmospheric Administration's (NOAA) Office of Marine and Aviation Operations awarded a contract to convert the former U.S. Navy surveillance vessel CAPABLE into a NOAA research ship (to be renamed OKEANOS EXPLORER) that will explore the world's oceans. The Navy provided support for the conversion contract and a separate purchase of highly specialized on-board and shore-side equipment to connect expeditions at sea in real time to teams of scientists, teachers, and students ashore via satellite and high-speed Internet pathways.

Planned Next Steps: The shipyard's work is expected to be completed in summer of 2007. Once operational, the ship will support the Office of Ocean Exploration (http://oceanexplorer.noaa.gov/).

A New Ocean Survey Vessel for EPA

The U.S. Environmental Protection Agency (EPA) completed conversion of the ex-Navy ship, *USNS BOLD*, in July 2005 and initiated ocean and coastal surveys the next month. The new Ocean Survey Vessel (OSV) *BOLD* is outfitted with state-of-the-art equipment used to collect samples, including water and sediments. These samples can then be processed and analyzed in onboard laboratories or onshore. With this capability, the OSV *BOLD* enables EPA to work with other federal, state, and academic partners to perform increased monitoring and data analysis of the health of ocean and coastal waters.

An important role of the OSV *BOLD* is to monitor dredged material disposal sites, thereby enabling the proper management of these sites which are critical to keeping our ports and waterways open. Additionally, the ship supports efforts to address pressing environmental concerns by collecting scientific data on the hypoxic zone in the Gulf of Mexico to assist in the cause and effect modeling efforts, monitoring coral reefs to further the development of criteria to measure coral health, and collecting data on harmful algal blooms. As one of its first efforts, the OSV *BOLD* provided a platform for assessing Hurricane Katrina impacts for EPA, the National Oceanic and Atmospheric Administration (NOAA), and state participants. Based on this experience, the ship provides the potential to develop top-of-the-line monitoring and analytical capability for future emergency response needs. (http://www.epa.gov/bold/)

Expanding the NOAA Fleet

The National Oceanic and Atmospheric Administration's (NOAA) fleet of Fisheries Survey Vessels (FSVs) consists of two ships currently in operation: the OSCAR DYSON, one of the most technologically advanced fisheries ships in the world (delivered to NOAA in January 2005), and the HENRY B. BIGELOW (delivered in July 2006). In June 2006, the keel-laying ceremony (first construction milestone) was held for the third NOAA FSV, to be named PISCES, with expected delivery to NOAA in late 2007. These ships have cutting-edge low acoustic signatures, and have the ability to perform hydro-acoustic fish surveys. They are also able to conduct bottom and mid-water trawls while running physical and biological-oceanographic sampling during a single deployment--a combined capability unavailable in the private sector. (http://www.omao.noaa.gov/)

Planned Next Steps: Design on the SWATH, a hydrographic vessel anticipated to be delivered in early 2008, has been completed and NOAA has awarded the contract for construction of the vessel.

MOVING BEYOND THE OAP

In June 2006, construction began on a fourth fisheries survey vessel (FSV), the keel laying ceremony is expected in spring of 2007. Students in grades 6-12 in the states of California, Oregon and Washington have an exciting opportunity to name the fourth fisheries survey vessel (FSV) for NOAA. Included in each entry, is an essay which must touch on how the name captures NOAA's fisheries research and one of the two Ocean Literacy themes, "the ocean supports a great diversity of life," or "the ocean and humans are interconnected."

Create a National Water Quality Monitoring Network

An intergovernmental workgroup including the U.S. Environmental Protection Agency (EPA), the U.S. Geological Survey (USGS), the National Oceanic and Atmospheric Administration (NOAA), and other federal and state partners, with contributions from academia and industry, completed a draft plan for the "*National Water Quality Monitoring Network for U.S. Coastal Waters and their Tributaries*" in January 2006. The proposed Network is unique in that it uses a multidisciplinary, integrated approach to addresses a broad range of resource components from upland watersheds to offshore waters. The draft was approved by members of the Advisory Committee on Water Information (ACWI) and submitted to the Council on Environmental Quality/National Science and Technology Council (CEQ/NSTC) in April 2006. In addition, the Network design was presented during the May 2006 National Water Quality Monitoring Conference to approximately 900 attendees from federal and state agencies, tribes, academia, private sector, and the volunteer monitoring community. (http://acwi.gov/)

Planned Next Steps: A final version of the report, incorporating reviewer comments, will be published and distributed in early FY 2007. Based on positive feedback from the Interagency Committee on Ocean Science and Resource Management Integration (ICOSRMI) and other interagency groups, a small workgroup consisting of representatives from the Office of Science and Technology Policy (OSTP), EPA, NOAA, and USGS is working on plans for two or more pilot studies. The pilot studies will focus on conducting a complete inventory of data collected in the pilot area to identify gaps between the Network design specifications and current data collection.

Coordinate Ocean and Coastal Mapping Activities

In June 2006, the Joint Subcommittee on Ocean Science and Technology (JSOST) established the Interagency Working Group on Ocean and Coastal Mapping (IWG-OCM) to advise and assist the JSOST on matters related to ocean and coastal mapping and charting. The IWG-OCM is currently working to develop an inventory of federal, federally-funded, and non-federal governmental ocean and coastal mapping and charting programs, operations, and prioritized needs, and has identified a task group to develop technical and resource requirements for inventory development and implementation. (http://ocean.ceq.gov/about/sup_jsost_iwgs.html)

Planned Next Steps: The task group will develop a proposal for approval by the IWG-OCM that defines objectives, schedules, and initial milestones for the inventory and includes a statement of work for technical development of the implementation plan and required software. Completion of the statement of work is targeted for the first quarter of FY 2007.

Implement New Legislation on Oceans and Human Health, Harmful Algal Blooms, and Hypoxia

In July 2005, the Joint Subcommittee on Ocean Science and Technology (JSOST) established the Interagency Working Group on Harmful Algal Blooms, Hypoxia, and Human Health (IWG-4H) to advise and assist the JSOST with regard to interagency requirements of the Oceans and Human Health Act of 2004 and the Harmful Algal Bloom and Hypoxia Amendments Act of 2004 (HABHRCA 2004). The IWG-4H serves as the Interagency Task Force on Harmful Algal Blooms and Hypoxia, which was reconvened as mandated by HABHRCA.

There has been substantial progress toward completing milestones for implementation of HABHRCA 2004. An International Symposium on Cyanobacterial Harmful Algal Blooms was held in September 2005 and the proceedings from this workshop will be the basis of a *Scientific Assessment of Freshwater Algal Blooms* report, due December 2006.

A draft of the *Prediction and Response Report* for HABs, which details HAB prediction and response related research and identifies opportunities to advance prediction and response efforts, has been approved by JSOST and submitted to the Interagency Committee on Ocean Science and Resource Management Integration (ICOSRMI) for their review and approval. This report is on schedule to be completed by December 2006.

The Gulf of Mexico Hypoxia Action Plan of 2001 was produced to meet mandates of the original HABHRCA legislation (1998). As a follow-up, the design process for the five-year reassessment of the Gulf of Mexico Hypoxia Action Plan of 2001 was completed in June 2005. This Gulf of Mexico hypoxia reassessment will inform development of the HABHRCA 2004 mandated *Scientific Assessment of Hypoxia*. Three of the four symposia planned as part of the reassessment have been held. (http://ocean.ceq.gov/about/sup_jsost_iwgs.html)

Planned Next Steps: The *Prediction and Response Report* will be published in the Federal Register by October 2006 for a 60 day public comment period. This report is the first step in a process to create the *National Scientific Research, Development, Demonstration, and Technology Transfer Plan* (*RDDTT Plan*) *on Reducing Impacts from Harmful Algal Blooms,* due December 2007. A workshop will be held in winter/early spring of 2007 as the next critical step for developing the *RDDTT Plan*.

The fourth symposium in support of the Gulf of Mexico hypoxia reassessment, the *Sources, Transport, and Fate of Nutrients in the Mississippi and Atchafalaya River Basins Conference,* will be held in November 2006. The reassessment will be completed in fall 2007 and will serve as a partial basis for developing the HABHRCA 2004 mandated *Scientific Assessment of Hypoxia.*

Share U.S. Ocean Science Expertise Abroad

In advancing international ocean policy and science, the Bush Administration supports the need to share U.S. oceans expertise abroad. This action item was reassessed in the end of 2005 and it was determined that existing and upcoming engagements would be best served through the enhancement of existing coordination mechanisms. The importance of sharing scientific expertise abroad is exhibited not only by the activities pursued under the Capacity Building Ocean Action Plan item, but also by the extra-budgetary and in-kind support provided to major international programs throughout 2006. To complement these federal activities, U.S. citizens have assumed leadership and participatory roles in major international research programs, such as those administered by the Intergovernmental Oceanographic Commission of UNESCO (IOC), the North Pacific Marine Sciences Organization (PICES), the International Council for the Exploration of the Sea (ICES), and the World Meteorological Organization (WMO). Further, bilateral science and technology partnerships have been secured during the year by U.S. research institutes, technical agencies and private organizations. These partnerships are facilitated by the enabling environments created by science attaché officers and scientific fellows posted at U.S. Embassies around the world. Following the international Capacity Building Conference in Panama City, the governance mechanisms for this area will be reassessed and actions taken as necessary to increase the U.S. scientific presence abroad.

Promote Lifelong Ocean Education

Increase Ocean Education Coordination

The Interagency Working Group on Ocean Education was established by the Interagency Committee on Ocean Science and Resource Management Integration (ICOSRMI) in January 2006. The working group reports to the co-chairs of the Joint Subcommittee on Ocean Science and Technology (JSOST) and The Subcommittee on Integrated Management of Ocean Resources (SIMOR) and coordinates with Ocean Research and Resources Advisory Panel (ORRAP). The Working Group is charged with improving coordination of federal programs focused on ocean education and outreach.

At the request of the SIMOR, the Interagency Working Group on Ocean Education submitted an implementation plan for increasing coordination in June 2006. This plan includes four focus areas: (1) Increasing coordination and promoting collaboration among federal agencies and their partners; (2) Evaluating the range of means to enhance the public's knowledge of ocean related matters and ensuring a coordinated education and outreach message; (3) Ensuring that data collected through ocean and Earth observations are translated into useable forms for teachers, students, and the general public; and (4) Assessing the current and future ocean workforce to determine if additional effort is needed to ensure adequate preparation of the nation's ocean workforce.

In support of these focus areas, the Interagency Working Group on Ocean Education, together with the National Marine Sanctuary Foundation and several other partners, convened a Conference on Ocean Literacy in June 2006 (http://nmsfocean.org/chow2006/cool.html). The Conference was held

in conjunction with National Oceans Week, as proclaimed by the President for the week of June 4 through June 10, 2006 (http://www.whitehouse.gov/news/releases/2006/06/20060602-6.html).

The Working Group also developed a survey for taking inventory of federal agency ocean education programs for the purpose of finding areas for increased coordination and collaboration. The survey has been completed. The Working Group is analyzing the data. In addition, the National Oceanographic Partnership Program is funding a study to assess the ocean-related workforce. The study is expected to be complete in May 2008.

Expand NOAA's Authority to Education and Outreach

The National Oceanic and Atmospheric Administration (NOAA) has expanded its education and outreach capabilities in several areas. The Ernest F. Hollings Scholarship Program was implemented in May 2005, and provides approximately 100 awards of up to $28,425 to college juniors and seniors pursuing undergraduate degrees related to oceanic and atmospheric science, research, technology, and education. The scholarship provides two years of academic assistance, a paid full-time summer internship at NOAA or a NOAA partner facility, and attendance at a Hollings Scholars Conference at the conclusion of the internship. The internship is intended to provide scholars with "hands-on" multidisciplinary training opportunities in NOAA-related science, research, technology, policy, management, and education activities. (www.orau.gov/noaa/HollingsScholarship/)

NOAA, in partnership with the Institute for Exploration/Immersion Presents and the Jason Foundation for Education, jointly sponsored the development of a new website launched in July 2006. The new website: OceansLive.org is designed to overcome the obstacles of experiencing the underwater environment and to inspire ocean literacy and conservation by bringing the wonders of the ocean world to classrooms and homes everywhere. The website features live images and real-time data made very accessible for students, teachers and the general public.

NOAA has also partnered with the Marine Advanced Technology Education Center (MATE) to offer workshops to teachers and students on building remotely operated vehicles (ROVs), a technology used in marine science and exploration. Technology and engineering skills are used to design and build ROV's from PVC pipe and other materials, then test them out in the pool. Students can also enter ROV competitions, sponsored by the MATE Center. NOAA will be working with High Tech High in San Diego and the Georgia Aquarium on future workshops.

Support the Ocean Science Initiative at the Smithsonian Institution

The National Oceanic and Atmospheric Administration (NOAA) and the Smithsonian are currently co-developing two critical components of their Ocean Science Initiative (OSI): the Ocean Hall exhibition slated to be in place for 30 years, and the new Ocean Web Portal. The Ocean Hall Exhibition represents a significant opportunity to present ocean education and science to the public, particularly with the "Oceans in the News" kiosk whereby current events on ocean science and stewardship will be featured, and thus, promote environmental literacy. The Ocean Hall exhibition is scheduled to open in September 2008. The Ocean Web Portal will provide virtual access to the museum's marine collections, research and exhibits to people around the globe. It may also include educational resources and interactive programs that enable users to gather data, make decisions and explore consequences. (http://ocean.si.edu/getinvolved/)

Planned Next Steps: A prototype for the portal will be launched in the spring of 2007.

Expand the Coastal America Learning Center Network
In January 2005, the North Carolina Aquarium Complex was dedicated as the 18th Coastal Ecosystem Learning Center (CELC). In May 2006, the CELC network expanded to 22 facilities with the addition of the Georgia Aquarium – the world's largest aquarium. Network expansion in 2006 included a Signature Project with U.S. Freedom Corps in activating volunteers nationwide in hands-on community conservation projects. (http://www.coastalamerica.gov/text/education.html)

MOVING BEYOND THE OAP
This December, the CELC network will lead a National Student Summit on Oceans and Coasts to promote public involvement and student leadership in Cooperative Conservation.

Expand the Sea Grant Program Internationally
The Administration is working to share the successful U.S. Sea Grant model of applied research, extension, and education to interested countries in Asia, Latin America, and North Africa. A proposal for Central American Free Trade Agreement (CAFTA) funds to support Ocean Action Plan activities was submitted in March 2006. A donor's conference for developing a Latin America Sea Grant trust fund is being planned for late 2007.

The Administration has been particularly active in Southeast Asia, participating in a May 2005 workshop focused on developing a regional Sea Grant model. In July 2006, U.S. Sea Grant extension experts from Florida Sea Grant led a training program in Padang, Indonesia for approximately 70 managers from Indonesia's Sea Partnership Program on development and implementation of a national extension training program. In 2007, the Sea Partnership Program will be linking into the Indian Ocean Tsunami Warning System's (IOTWS) Coastal Community Resilience programs. A proposal has been submitted for Asia-Pacific Economic Cooperation (APEC) funds to support tsunami resilience and mitigation activities within the sea Partnership Program.

In South Korea, two Sea Grant programs (Yeongnam and Honam) and California Sea Grant are continuing to formalize their sister-school relationships, and meetings were conducted in early July 2006 in Seoul and Mokpo to identify areas of collaboration. In January 2006, the Busan (South Korea) Sea Grant staff visited the National Oceanic and Atmospheric Administration (NOAA), the National Sea Grant Office, and four state Sea Grant Programs (MD, DE, USC, CA), to make a film focusing on the U.S. Sea Grant system that will be used to explain Sea Grant concepts in South Korea.

In 2005, NOAA participated in a scoping trip to North Africa to assess the interest and capacity for adapting the Sea Grant model. The need for a technical assistance plan was reassessed, and subsequently supplanted in support of proceeding with existing extension efforts already in place throughout North Africa. (http://www.seagrant.noaa.gov/)

Planned Next Steps: Renewed Sea Grant International Extension efforts for late FY07 and early FY08 are being discussed with the Department of State and other NOAA partners.

CHAPTER 3: ENHANCING THE USE AND CONSERVATION OF OCEAN, COASTAL, AND GREAT LAKES RESOURCES

Achieving Sustainable Marine Fisheries

Work with Regional Fisheries Councils to Promote Greater use of Market-based System for Fisheries Management

In the eight fisheries where dedicated access privileges (DAP) have been implemented since 1990, fishermen have enjoyed higher profits, lower costs, longer fishing seasons and a safer, more stable industry. These programs include individual fishing quotas, a community development quota program in western Alaska, and fishing cooperatives (IFQs), all of which provide for some selling and/or leasing of shares and are therefore market-based and driven. The Administration included in its Magnuson-Stevens Act proposal that it submitted to Congress in September 2005 a section devoted to Dedicated Access Privilege programs, including IFQs, community quotas, fishing cooperatives, and area-based quota programs.

In December 2006, Congress reauthorized the Magnuson-Stevens Fishery Conservation and Management Act, formally establishing the legal procedures and framework for Limited Access Privilege programs. These Limited Access Privilege programs provide exclusive harvest allocations to groups of individuals, communities, or more broadly defined entities called Regional Fishery Associations, and mandate that each program develop a formal policy on transferability. Transferability governs the selling and leasing of harvest privileges. Therefore, all Limited Access Privilege programs will include at least some market-based component, depending on the goals of the Regional Fishery Management Council (Council) that develops the program. To assist the Councils in developing these programs and meet a commitment in the U.S.OAP, NOAA Fisheries prepared a draft paper in November 2006 on the design and use of Limited Access Privilege programs that addresses, among other things, the transferability of these privileges. NOAA Fisheries plans to include the provisions of the reauthorized Magnuson-Stevens Act and issue these guidelines in 2007. (http://www.whitehouse.gov/news/releases/2007/01/20070112-3.html)

Planned Next Steps: To promote greater use of market-based systems for fisheries management, the Department of Commerce pledges to work with Regional Fisheries Management Councils, to double the number of DAPs by 2010. This goal will bring eight new fisheries under market-based management programs. Toward this goal, NOAA Fisheries has already approved three new Limited Access Privilege programs – for Gulf of Mexico Red Snapper, Gulf of Alaska rockfish, and the Georges Bank fixed gear sector – that will take effect in Calendar Year 2007.

Foster a Balanced Representation for Regional Fishery Management Councils

New Regional Fishery Management Council members were selected for 2006 in June. The National Oceanic and Atmospheric Administration (NOAA) encouraged nominations from coastal States and recommended appointments that maintained or better balanced representation on the eight Councils. A provision was included in the Administration's Magnuson-Stevens Fishery Conservation and Management Act (MSA) reauthorization proposal aimed at improving the balance of members on the regional fishery management councils. The Administration's proposal highlighted the importance of the broad representation on the Councils.

In reauthorizing the MSA in December 2006, Congress did not include the Administration's specific language on broadened Council membership, but did strengthen requirements for the

Scientific and Statistical Committees, significantly upgrading the role of scientific and technical experts. In addition, the reauthorized MSA called for more frequent training of Council members and further defined the rules on conflicts of interest. These legislative and administrative changes are expected to improve the operations and accountability of the Regional Fishery Management Councils. (http://www.nmfs.noaa.gov/councils/)

MOVING BEYOND THE OAP
NOAA will work with the Councils to implement the legislative changes affecting their operations. By the 2007 Council nominations season, NOAA will work to clarify the Council member nomination process and nominee qualifications, better define fishing sectors (commercial, recreational, and other), and explain the need for representatives of all sectors on a Council. Under the reauthorized MSA, the Secretary of Commerce has the responsibility to "ensure a fair and balanced apportionment of the active participants in the commercial and recreational fisheries" and review nominees submitted by Governors to "ascertain if the individuals on the list are qualified".

Harmonize Recreational Fishing Data Acquisition for Fishery Management Purposes
In response to the National Research Council (NRC) Review of Recreational Survey Methods, the National Oceanic and Atmospheric (NOAA) National Marine Fishery Service (NMFS) is developing strategies to improve recreational fishing data collection that addresses issues and recommendations contained in the report. The NRC identified over 200 findings and recommendations associated with the Marine Recreational Fishery Statistics Survey (MRFSS) and other state recreational surveys. These issues affect the use of recreational data in science and management decisions and present challenges for outreach to the recreational fishing community.

In September 2006, NOAA convened a workshop entitled "Recreational Fisheries Statistics Requirements Management Framework" with participants from the states, regional fishery management councils, interstate commissions, and recreational fisheries sectors. A workgroup will now formulate an implementation plan for upgrading the recreational fisheries survey based on the management and stock assessment information needs expressed during the workshop. (http://www.st.nmfs.gov/st1/recreational/Review_Recreational_Survey_Methods/workshop/2006/2006.html)

In October 2006, NOAA conducted an independent peer review of the recreational fisheries economics data program. The purpose of the review was to: (1) evaluate the NMFS expenditure, valuation, and conjoint surveys for strengths and weaknesses of the survey methods, potential biases, and recommendations for improvement; (2) evaluate the degree to which NMFS recreational economic data collections from 2000-2006 meet the recommendations included in "Chapter 5 Human Dimensions" of the NRC report, *"Review of Recreational Fisheries Survey Methods"* ; (3) assess whether the suite of economic models currently employed by NMFS address management information needs; and (4) evaluate, given budget constraints, whether the approach NMFS is currently using for recreational economic data collection is providing "best value," i.e., for a given level of investment in data collection and assessments, NMFS provides the most timely, accurate, and complete scientific advice on the economic value of recreational fishing and the economic effects of regulatory actions. The peer review report is available through the following link: http://www.st.nmfs.gov/st1/recreational/Review_Recreational_Survey_Methods/documents/CIE_recreational_fishery_economics_report.pdf

Establish Guidelines and Procedures for the Use of Science in Fisheries Management

Two major stakeholder meetings convened to hold discussions regarding the separation of science and management functions within the Fishery management Council process: (1) Managing Fisheries II Conference (March 2005, Washington, DC), and (2) Council Chairs and Executive Director's meeting (April 2005, Dana Point, CA). At these meetings, a series of proposals were developed toward formulating the administration's Magnuson-Stevens Fishery Conservation and Management Act (MSA) Reauthorization bill. Based on these efforts, language was included in the Administration's version of the reauthorization bill to create standardized processes for conducting peer reviews within the Council's Scientific and Statistical Committees to comply with the Information Quality Act. However, the version of the MSA reauthorization passed in the 109th Congress allows each Fishery Management Council the discretion to establish a peer review process for scientific information used by the Council. The National Oceanic and Atmospheric Administration National Marine Fisheries Service will work closely with the Councils as they evaluate and strengthen their peer review processes.

Foster Sustainable Harvests of Key Fish Species in the Caribbean and nearby Atlantic
The National Oceanic and Atmospheric Administration (NOAA) and the Department of State are supporting efforts of the Western Central Atlantic Fisheries Commission (WECAFC) to strengthen this body's ability to better manage fisheries in the Wider Caribbean region. A working group was convened in July and October 2005 to strengthen WECAFC's ability to better manage fisheries in the Wider Caribbean. The working group produced a set of recommendations and proposed revisions to the Commission statutes, which were subsequently adopted at the 12th meeting of the Commission in October 2005.

Specifically, the recommendations call for WECAFC to improve its research and data collection efforts, assist in building institutional capacity in the region, promote collaboration among its members and with other international institutions, promote ecosystem and precautionary approaches to adhere to the Food and Agriculture Organization (FAO) Code of Conduct and related instruments, and help fishery managers in the development of scientifically-based management systems for all living marine resources in the region. WECAFC also endorsed the recommendation that a full time Secretary be established to fulfill the requirements of the revised statutes. These recommendations were approved by the United Nations FAO Council, the parent organization for WECAFC, in November 2006. (http://www.fao.org/fi/body/rfb/wecafc/wecafc_home.htm)

Planned Next Steps: Next steps include the development of Rules of Procedure for WECAFC and strengthening WECAFC's Scientific Advisory Group and various ad hoc working groups, through which WECAFC members will better coordinate their management programs for such key species as queen conch, spiny lobster, and reef fish.

Establish an Implementation Plan for Combating International "Illegal, Unregulated and Unreported" Fishing
After a series of interagency meetings to review, prioritize, and develop an Implementation Plan for the U.S. National Plan of Action for Combating International "Illegal, Unregulated and Unreported" (IUU) Fishing, the interagency taskforce approved the Implementation Plan in February 2005. The Plan to combat IUU fishing was developed in the form of a matrix containing 47 recommended actions. This matrix constitutes the completion of this specific Action Item under the U.S. Ocean Action Plan and mirrors the U.S. National Plan of Action on combating IUU fishing.

MOVING BEYOND THE OAP

Since the completion of this item in February 2005, at least 30 of the 47 recommended actions under the U.S. National Plan of Action to combat IUU fishing that would not be characterized as ongoing have been completed. Those that are and will remain perpetually ongoing actions have been initiated and are moving ahead. A number of significant events have been supported and facilitated by the U.S. in accordance with this action item. In July of 2005, the National Oceanic and Atmospheric Administration (NOAA) and the Department of State partnered with the Government of Malaysia, the FAO Fish Code Program, and the International Monitoring Control and Surveillance (MCS) Network to host a Global Fisheries Enforcement Training Conference in Kuala Lumpur, Malaysia.

The next significant project is a partnership project to enhance the International MCS Network. The United Kingdom, Canada, New Zealand and Australia have stepped forward to partner with the U.S. in this project. The objective of the project is to formulate a small staff and resourced operation that will conduct IUU activity analysis and facilitate an increased level of training and partnership in IUU related operations, particularly to provide support to developing countries. (http://www.high-seas.org/)

The U.S. is also leading efforts at the United Nations (UN) to combat IUU fishing. At the Review Conference for the UN Fish Stock Agreement and the negotiations of the 2006 UN General Assembly's fisheries resolution, the U.S. effectively advocated for universal adoption of and strengthened measures to prevent, deter, and eliminate IUU fishing, including bolstering flag and port State measures and improving international cooperation and coordination.

Promote Coral Reef and Deep Coral Conservation and Education

Implement Coral Reef Local Action Strategies

The U.S. Coral Reef Task Force and the members of its seven jurisdictions (Florida, Hawaii, Guam, American Samoa, Puerto Rico, the U.S. Virgin Islands and the Commonwealth of the Northern Marianas Islands) have developed and begun implementing Coral Reef Local Action Strategies (LAS) to address key threats to coral reefs in each jurisdiction. The LAS provides a framework for Task Force member agencies to identify and collaboratively address these threats and additional local needs, connect local priorities to national goals, and coordinate federal agency actions with local management of reef resources. This effort is a significant step forward in advancing the goal of cooperative conservation between the Federal, State, Territorial, and Commonwealth governments.

The National Oceanic and Atmospheric Administration (NOAA), the Department of the Interior (DOI), the Department of Agriculture (USDA) and the U.S. Environmental Protection Agency (EPA) have been key federal partners in implementing the LAS effort and building local capacity for coral reef conservation and management. Examples include: (1) Successful Coral Reef Grants and Funding Opportunities Workshops in the Caribbean (2005) and the Pacific (2006) to help state and local partners identify and pursue federal funding opportunities for LAS support; (2) Community workshops to increase tools, coordination and implementation of actions to improve watershed protection, reduce land-based pollution and downstream impacts on valuable coral reef resources in the region; and (3) A workshop on Coral Health and Disease in the Pacific to synthesize the state of knowledge, develop strategic research and action plans, and foster collaboration among agency partners and stakeholders. A working session to examine the current status and develop plans for the next phase of LAS development and implementation was held in

October 2006, and several jurisdictions have already taken initial steps to begin developing future Local Action Strategies. (http://www.coralreef.gov/taskforce/las.html)

Planned Next Steps: Local Action Strategy development and implementation is an on-going and adaptive process and is specific to each jurisdiction. Targeted next steps include: (1) Organize a Federal Coral Reef Grants and Funding Opportunities Workshop in American Samoa in 2007; (2) Identify priority watersheds in each jurisdiction and through greater agency (USDA, NOAA, DOI, EPA) collaboration of resources and expertise, better address the issue of land-based pollution and downstream impacts on coral reef ecosystems, and (3) Develop a Plan of Action for Coral Health and Disease in the Pacific that will increase the Pacific jurisdiction's capabilities to address the impacts of climate change, coral bleaching, and disease. A Local Action Strategy status report will be finalized in February 2007.

Protect the Northwestern Hawaiian Island Coral Reef Ecosystem Reserve
Following a multi-year development process involving a variety of stakeholders and interests, President George W. Bush created the world's largest marine conservation area off the coast of the northwestern Hawaiian Islands on June 15, 2006. In order to permanently protect the area's pristine coral reefs and unique wildlife, the President used his authority under the Antiquities Act to designate the area a national monument.

The Northwestern Hawaiian Islands (NWHI) Marine National Monument encompasses nearly 140,000 square miles of U.S. waters, including 4,500 square miles of relatively undisturbed coral reef habitat that is home to more than 7,000 species. A quarter of the species found in the NWHI are found nowhere else on earth. (http://www.hawaiireef.noaa.gov/)

MOVING BEYOND THE OAP
The Department of Commerce's National Oceanic and Atmospheric Administration, the Department of the Interior's U.S. Fish and Wildlife Service, and the State of Hawaii's Department of Land and Natural Resources are the Co-Trustees managing the Monument. To implement provisions for the national monument from the Presidential Proclamation, the three management agencies have signed a Memorandum of Agreement providing for the general terms and conditions for management and establishing relationships to effectively coordinate and implement management actions. The Co-Trustees are currently developing a joint permitting process for all activities that take place within the Monument.

Form New International Partnerships to Enhance Management of Coral Reefs
In December 2004, the National Oceanic and Atmospheric Administration (NOAA), the State of Florida, and Australia's Great Barrier Reef Marine Park Authority signed a Memorandum of Understanding (MOU) to improve coral reef resilience. An MOU between NOAA and the University of Queensland (Australia) has also been established to allow interaction of NOAA remote sensing tools with highly instrumented sites in the Great Barrier Reef to develop coral reef ecosystem models.

MOVING BEYOND THE OAP
The Department of the Interior, Department of State, the United States Agency for International Development (USAID), and NOAA are working together on the World Heritage Site nomination process for the Remote Pacific Islands National Wildlife Refuges. The nomination is for the

Central Pacific World Heritage Project (between four nations) and the NWHI Marine National Monument/State Marine Refuge. (http://www.fws.gov/pacificislands/wnwr/nwrindex.html)

Re-establish Interagency Marine Debris Coordinating Committee
In May 2005, the National Oceanic and Atmospheric Administration (NOAA) and the U.S. Environmental Protection Agency (EPA) hosted an informal meeting of the Interagency Marine Debris Committee (IMDCC). Representatives from eight federal agencies attended the meeting to discuss past, current, and future marine debris initiatives and to discuss purpose and scope of committee. The final charter was completed and approved in March 2006.

MOVING BEYOND THE OAP
Although the IMDCC will look at a variety of marine debris issues, its initial focus is on derelict fishing gear. An ad hoc working group has been formed to discuss and recommend a committee wide classification for marine debris and a second group is addressing the issue of derelict fishing gear.

Foster Coral Reef Protection and Conservation by Recreational and Agricultural Interests
In October 2004 the Department of the Interior signed a MOU with the Boat Owners Association of the United States (BoatUS) aimed primarily at increasing public understanding of coral reef issues, both among the boating community and the general public. BoatUS has run several articles on coral reef issues in their publications, aimed both at educating boaters on the importance of coral reefs and associated habitats, and of how best to avoid damaging reefs while boating. Several items are pending for likely implementation in early 2007, including use of BoatUS volunteers to assist in a number of boating-related activities at Biscayne National Park in Miami, such as placing mooring buoys in sensitive areas to avoid anchor damage, and cooperative NPS-BoatUS development of park-specific charts for recreational boaters.

Develop "Biocriteria" for Coral Reefs
The U.S. Environmental Protection Agency (EPA) is developing coral bioassessment methods and tools to assist states, tribes and territories in the development of biological criteria (biocriteria) for coral reefs. Biocriteria establish performance thresholds for the condition of valued aquatic resources, such as reef-building stony corals. EPA's "Stony Coral Rapid Bioassessment Protocol" introduces the use of biocriteria under the Clean Water Act and identifies the stony coral measurements that could be used to generate metrics (bioindicators responsive to human disturbances). These methods and tools will allow resource managers to identify reefs at risk and to assess the effectiveness of restoration techniques. Further, it will provide the process for developing a defensible long-term monitoring program essential to implementation of biocriteria. (http://www.epa.gov/bioindicators/coral/coral_biocriteria.html)

Planned Next Steps: A draft bioassessment protocol is scheduled to be available in FY 2007.

Research, Survey, and Protect Deep-Sea Coral Communities

Encourage Protection of Deep-Sea Corals when Developing and Implementing Regional Fishery Management Plans
Amendment 2 to the Monkfish Fishery Management Plan (FMP) was developed to address essential fish habitat (EFH) and bycatch issues, and became effective in May 2005**.** This

amendment included closures to Lydonia and Oceanographer Canyons which are known to contain deep coral communities. In July 2005, The National Oceanic and Atmospheric Administration (NOAA) published a response to the Rulemaking Petition to Protect Deep-Sea Coral and Sponge Habitat. The response articulates NOAA's strategy of working with the Regional Councils to achieve increased protection for these resources. (http://www.nmfs.noaa.gov/habitat/habitatconservation/DSC_petition/)

MOVING BEYOND THE OAP

Working with Fishery Management Councils, significant steps have been taken to protect deep-sea coral communities in the Pacific. In Alaska, working with the North Pacific Fishery Management Council, NOAA formally established the Aleutian Islands Habitat Conservation Area, which covers 369,000 square miles, approximately the size of Texas and Colorado combined. Additionally, more than 7,000 mi^2 of Alaskan seamount habitat was closed to all bottom-tending fishing gear, and trawl nets were banned from more than 2,700 mi^2 along the continental slope in the central Gulf of Alaska. The final rule implementing EFH amendments in Alaska required an operable vessel monitoring system (VMS) on all Federally permitted groundfish or crab fishing vessels operating in the Aleutian Islands and on all Federally permitted groundfish or crab fishing vessels with mobile bottom contact gear operating in the Gulf of Alaska (July 2006). The North Pacific Council is beginning an analysis of potential new habitat conservation measures for Bering Sea fisheries, which may include fishery area closures and/or fishing gear modifications to minimize the effects of trawling on bottom habitats there.

In June 2006, new regulations implementing the Pacific Fishery Management Council's Pacific Groundfish Amendment 19 went into effect. This amendment protects over 130,000 square miles of essential fish habitat from bottom-trawling in a number of regions along the Pacific Coast. This represents over 42 percent of the Exclusive Economic Zone (EEZ) off Washington, Oregon, and California. Much of the impetus to the trawl closures was to protect sensitive biogenic habitats including deep corals and sponges.

<u>Complete Survey of Deep-sea Coral in the Gulf of Mexico</u>

In 2006, the Department of the Interior (DOI) completed a 3-year study of deep-sea corals in the Gulf of Mexico (GOM) involving two years of field sampling (2004 and 2005) and a third year (2006) dedicated to data analysis, synthesis of results, and completion of all reports. This project was designed to determine the environmental conditions in the GOM that result in the observed distribution of high density communities, particularly extensive areas of the coral *Lophelia pertusa*, which could be considered important and sensitive to impacts from oil and gas development activities. A manned submersible was employed for the fine scale observations and sample collections required to describe newly discovered, high-diversity biological communities.

MOVING BEYOND THE OAP

A groundbreaking research project is currently underway using the deep diving submersible ALVIN to investigate newly discovered deep-sea communities in the Gulf of Mexico in water depths between 3,400 and 10,000 feet. The project is jointly sponsored under the National Oceanographic Partnership Program, DOI's Mineral Management Service (MMS), and the NOAA Office of Ocean Exploration. The first year of field sampling was completed in June 2006 using the manned submersible ALVIN. Although the emphasis of

this study is on chemosynthetic communities, a secondary objective is to study other types of hard bottoms observed, especially aggregations of *Lophelia pertusa.* A Remotely Operated Vehicle (ROV) will be employed in 2007 during the second year of field sampling. (http://www.oceanexplorer.noaa.gov/explorations/06mexico/)

Complete Two International Deep-Sea Coral Exploration Missions to locate and describe deep coral communities

Phoenix and Line Islands Expedition: The National Oceanic and Atmospheric Administration (NOAA) supported several expeditions in July 2005 to investigate deep coral and chemosynthetic communities found in the vicinity of the Vailulu'u Seamount, an actively venting volcano near American Samoa. Scientists from the University of Sydney Australia worked with U.S. scientists to examine the area's geology, biology, and ecology. (http://www.nurp.noaa.gov/)

Vailulu'u Seamount Expedition: This NOAA supported expedition in early July 2005 involved a team of scientists that investigated fish and invertebrate communities found in conjunction with deep coral and sponge communities found in the vicinity of the Phoenix and Line Islands, part of the islands comprising Kiribati. The information complements other efforts to understand the distribution and connections between deep coral habitats in the Pacific, and is critical to support efforts to manage activities that could harm these fragile systems.

MOVING BEYOND THE OAP

Life on the Edge Expedition: This NOAA supported expedition in November 2005 included a representative from the Scottish Association for Marine Science, and investigated deep coral habitats found on the shelf edge and slope in the South Atlantic Bight. The expedition focused on mapping, assessing habitat and habitat function, describing community genetics, and collecting information on coral age required for paleoclimate analysis models.

Florida Coast Deep Corals Expedition: This NOAA supported expedition, also in November 2005, investigated deep coral and sponge communities off the southeast coast of Florida. Researchers from the Norwegian University of Science and Technology took part in this cruise, comparing these systems to those found off the coasts of Norway and Sweden.

Develop and Complete a Status Report on Deep-Sea Corals in the U.S. EEZ

In March 2005, the National Oceanic and Atmospheric Administration (NOAA) hosted an Authors' workshop that reviewed existing information and approaches for the Report on the Status of Deep-Coral Communities of the United States. The report will include a National Overview and regional chapters from the northeast, southeast, Gulf of Mexico, Caribbean, west coast, Alaska and the Pacific Islands. Each of the chapters is in the final stages of revision and once returned to NOAA will be submitted for peer review as required under the Information Quality Act.

A number of new and significant management actions have taken place in the last year as well as pivotal scientific findings published. The management actions have made enormous strides in deep coral conservation in the U.S. and set the U.S. up as a world leader in this emergent issue. The new scientific findings have given us a better understanding of critical new threats to deep coral resources. It was important that these new actions and findings be

included in the report, therefore extending the publication date of the report. The Peer Review Plan for the Report may be found on the Department of Commerce (DOC) website (http://www.osec.doc.gov/cio/oipr/pr_plans.htm). The full Report on the Status of Deep-Coral Communities will be published as a NOAA Technical Memorandum.

Planned Next Steps: Compete the Peer Review Process, incorporate recommended revisions and publish the Technical Memorandum in the second quarter of FY2007. The NOAA Deep Coral Team is also developing a Deep-Sea Coral and Sponge Research, Conservation, and Management Strategy.

Enhance Conservation of Marine Mammals, Sharks, and Sea Turtles

ICCAT Adoption of U.S. Proposal for International Shark Conservation

In November 2004, the 63-nation International Commission for the Conservation of Atlantic Tunas (ICCAT) agreed to prohibit the destructive fishing practice of "shark finning" in the Atlantic, Mediterranean, and Gulf of Mexico to reduce bycatch of sharks, and to increase research into shark populations and distributions. At its 2005 annual meeting, ICCAT adopted a new requirement for members to report annually on their implementation of the shark finning ban and the other elements of the 2004 measure. The first such reports are due this year. In addition, ICCAT will conduct a new stock assessment of blue and mako sharks in 2007; the United States will lead any necessary efforts at that time to strengthen ICCAT's shark conservation measures.

Promote International Marine Turtle Conservation

In July 2004, the President signed into law the Marine Turtle Conservation Act of 2004, which aims to support the international conservation of sea turtles and their nesting habitats. The Department of the Interior (DOI) is implementing this legislation through the U.S. Fish and Wildlife Service (FWS). In FY 2005, FWS awarded seven grants to assist in international sea turtle conservation efforts in Gabon, Liberia, Mexico, Nicaragua, Oman, Sri Lanka, and Tanzania. In FY 2006, a total of 77 proposals, representing projects in over 40 countries, were received for funding consideration, and over 20 proposals were selected for funding.
(http://international.fws.gov/animals/marineturtleprogram.htm)

Propose Legislation to Reauthorize the Marine Mammal Protection Act

The National Oceanic and Atmospheric Administration (NOAA), the Department of the Interior (DOI), the Department of Defense (DOD) and the Marine Mammal Commission have worked since 1999 to develop reauthorization bills and propose the updated legislation to Congress to reauthorize the Marine Mammal Protection Act (MMPA). The third MMPA Reauthorization Bill the Administration proposed to Congress was transmitted in June 2005.

Central to the proposed bill are amendments to: 1) revise the definition of harassment to create a clear threshold for when an activity constitutes harassment and to clarify that harmful activities directed at marine mammals in the wild are considered harassment; 2) expand Section 118, a regime to reduce incidental take of marine mammals by commercial fisheries, to include recreational fisheries with frequent or occasional incidental takes of marine mammals in the take reduction plan development process; 3) allow the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (FWS) to enter into co-management agreements with Native Alaskans prior to a depletion finding; 4) prohibit the release of captive marine mammals into the wild; 5) enhance the

MMPA's enforcement capabilities by increasing allowable fines and penalties for violations under the Act; and 6) encourage the use of authorities to reduce ship strikes of whales. (http://thomas.loc.gov/cgi-bin/cpquery/?&sid=cp109O4coM&refer=&r_n=hr180.109&db_id=109&item=&sel=TOC_3964&)

Implement New National Bycatch Strategy

In October 2004, the National Oceanic and Atmospheric Administration (NOAA) published the Technical Memorandum entitled "Evaluating Bycatch: A National Approach to Standardized Bycatch Monitoring Programs," which included a protocol for standardizing bycatch reporting methodologies to guide Fishery Management Councils in meeting the Magnuson-Stevens Act requirements for bycatch accounting and reduction. Also in October 2004, NOAA conducted a series of workshops on techniques to reduce sea turtle bycatch in longline fisheries and has promoted these bycatch reduction techniques in international forums.

MOVING BEYOND THE OAP

NOAA's bycatch feature web page, which is accessible from the NOAA National Marine Fisheries Service home web page, was redesigned and improved in September 2005 (http://www.nmfs.noaa.gov/bycatch.htm). Each NOAA Fisheries Service Region and the Atlantic Highly Migratory Species (HMS) Division created detailed and action-oriented bycatch reduction plans in 2003. In 2004 and 2005, each plan was updated, and a progress report submitted to NOAA Fisheries Service leadership. Region-specific and Atlantic HMS-specific bycatch reduction action items will be reported on and updated annually, and used to guide NOAA's strategic bycatch reduction activities.

Propose New Limits on Atlantic Gill Net Fishing to Protect Dolphins and Sea Turtles

In November 2004, the Administration proposed limits on gill net fishing in waters off the Atlantic coast to reduce the accidental catch of bottlenose dolphins and threatened sea turtle species.

MOVING BEYOND THE OAP

In April 2006, the National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service (NMFS) published the final rule to implement the Bottlenose Dolphin Take Reduction Plan (http://www.nmfs.noaa.gov/pr/interactions/trt/bdtrp.htm), offering conservation measures that will reduce serious injury and mortality to coastal bottlenose dolphins incidental to commercial fishing gear and amending sea turtle regulations currently in place in the Exclusive Economic Zone off of North Carolina and Virginia.

Following publication of the final rule, NMFS staff and fishery liaisons launched an educational campaign in May 2006 to help inform commercial fishermen of their requirements under these new regulations. This campaign included a series of 11 educational workshops from New Jersey through Florida that provided a presentation on the requirements of the regulations, why the regulations were required, and how to comply; presentations on local research; and an informational packet with pertinent materials designed to help commercial fishermen comply.

Planned Next Steps: Monitor the success of the final Bottlenose Dolphin Take Reduction Plan at reducing serious injury and mortality below the Potential Biological Removal level by increasing observer coverage in the mid-Atlantic and continuing development of an alternative platform observer program. Hold a Bottlenose Dolphin Take Reduction Team meeting around May 2007 to

evaluate the success of the plan at reducing serious injury and mortality. Continue to offer grants and contracts to researchers working with commercial fishermen to test gear that will reduce bottlenose dolphin fishery interactions while allowing fishermen to maintain their catch levels. Continue to work with the states to evaluate their large mesh gillnet management measures for sea turtle conservation and ensure the measures are effective.

Create a National Strategy for Fisheries Enforcement
The United States Coast Guard's (USCG) Fisheries Enforcement Strategic Plan, together with the National Oceanic and Atmospheric Administration (NOAA) Enforcement Strategic Plan and the U.S. Department of State Strategic Plan, form the National Strategy for Fisheries Enforcement. Enforcement results are closely monitored by the USCG Headquarters, which works closely with the Coast Guard Atlantic and Pacific Area Commanders to determine the proper assets and resources required to execute the plan's missions. NOAA regularly coordinates with the USCG, providing quarterly reviews of regional enforcement plans and weekly reports on operational law enforcement. NOAA hosted a meeting of all U.S. coastal states in May 2006 in Houston, Texas, representing a pivotal step in the effort to initiate partnerships that will close the gaps in federal and state marine enforcement missions.

MOVING BEYOND THE OAP
In the coming years, combined federal agencies will work with the coastal state agencies to further refine strategies and implement cooperative enforcement plans, which will facilitate the mission to conserve and protect our marine resources.

Advance Offshore Aquaculture

Propose National Offshore Aquaculture Legislation
The Administration transmitted the National Offshore Aquaculture Act of 2005 to Congress in June 2005. Senators Stevens and Inouye immediately introduced the Administration's bill as S.1195. The bill was referred to the Senate Commerce Committee, and its subcommittee, the National Ocean Policy Study, held hearings on the bill in April and June 2006. Additional information on the bill may be found on the National Oceanic and Atmospheric Administration (NOAA) Aquaculture Program web site (http://www.aquaculture.noaa.gov).

Established Aquaculture Effluent Guidelines
The Joint Subcommittee on Aquaculture (JSA) established its Aquaculture Effluents Task Force in September 1999. The interagency JSA participated in development of the Aquaculture Effluent Guidelines by advising the U.S. Environmental Protection Agency (EPA) throughout the rulemaking process. EPA issued the final Effluent Limitation Guidelines in June 2004. The EPA guidelines are available on the web (http://www.epa.gov/guide/aquaculture/).

Support Aquaculture in the Americas
The U.S. supported and led an Asia-Pacific Economic Cooperation (APEC) project that resulted in a workshop in Mazatlan, Mexico in April 2005 on development of an "Aquaculture Network of the Americas" (ANA). The workshop concluded that the region needs a network of aquaculture expertise to foster development of sustainable aquaculture operations throughout the Americas. Thus, it was recommended that APEC Economies fund a second phase of the ANA project designed to initiate this work.

APEC officially approved the second phase of the ANA project at the APEC Ministerial Meeting in Busan, Korea in November 2005. Funding was committed for a small project in 2006 designed to produce a proposal for funding a two or three year network start-up. This funding proposal was received and accepted by APEC in September 2006 and work is underway to bring participants into the Network. The United States, Canada, Mexico, Ecuador, Peru, Chile, and Brazil are expected to be the first network participants. Eventually, the network may be expanded outside of APEC to become a form of inter-governmental organization that would include all aquaculture producers in the Americas. (http://www.apecsec.org.sg/apec/apec_groups/working_groups/fisheries.html)

Improve Marine Managed Areas

Coordinate and Better Integrate the Existing Network of Marine Managed Areas

In August 2005, the National Oceanic and Atmospheric Administration (NOAA) and the Department of the Interior (DOI) signed an Enforcement Memorandum of Understanding (MOU). The MOU will create greater efficiencies between NOAA and DOI, intended to increase marine conservation efforts in marine managed areas. Specifically, where a number of protected areas are located in the same area or region, there are not only economies of scale in enforcement partnerships, but coordinated activities that may include cross-deputization and sharing of vessel and aircraft resources that allow more effective and efficient enforcement of the laws and regulations affecting that area. To date, implementation has involved jointly-sponsored training on enforcement of maritime heritage resource laws and informal discussions of other collaborations.

To complement the enforcement MOU, in August 2005, DOI's Fish and Wildlife Service and National Park Service, NOAA's National Marine Sanctuary Program and National Estuarine Research Reserve System, and the Marine Protected Areas (MPA) Center created the framework for the General Agreement under the Ocean Action Plan that will implement a more seamless network of Marine Managed Areas. The new Interagency General Agreement on comprehensive coordination among parks, sanctuaries, estuarine reserves, and refuges was signed on August 21, 2006 during the National Interagency Summit in Washington, D.C. The General Interagency Agreement will provide a mechanism to foster greater collaboration among the four federal protected area programs. In addition, regional workshops conducted in FY 07 will generate specific local and regional collaborative activities. (http://www.mpa.gov/)

A partnership among DOI, the state of Florida, and NOAA's Florida Keys National Marine Sanctuary focused on the management of the Dry Tortugas in the Florida Keys and created a unique management plan that balances conservation, research, and recreational use. The Dry Tortugas National Park has established a no-take marine reserve in the park while leaving more than half the park open to recreational fishing. The reserve, called a Research Natural Area, is 46 square nautical miles set aside to protect a pristine area, provide a sanctuary for species that have been affected by harvest or habitat degradation, and foster scientific research. It also will offer outstanding opportunities for non-consumptive recreation and education. (http://www.nps.gov/drto/ and http://floridakeys.noaa.gov/welcome.html)

Planned Next Steps: Completion of the Joint Federal Marine Protected Areas (MPA) Action Plan for FY07-FY10 is planned for fall 2006. The complementary Draft Framework for the National System of MPAs will be available for public and agency comment until February 2007.

Adopt an Ocean Parks Strategy

The Department of the Interior's National Park Service Ocean Park Stewardship Action Plan will focus the organizational and scientific capacities of the Park Service on conserving over three million acres and 5,000 miles of coast in the National Park System, working closely with the National Oceanic and Atmospheric Administration (NOAA), the U.S. Geological Survey (USGS), states and park stakeholders. Under the plan, the Park Service is advancing scientific understanding of ocean resources and addressing threats to resource health. Key elements of the Strategy include: characterizing marine species and habitats; evaluating and monitoring their condition; increasing the understanding of how marine ecosystems function; and developing cooperative science based fishery management plans between parks and State agencies, such as the Florida Fish and Wildlife Conservation Commission/Biscayne National Park Fisheries Management plan. The Ocean Park Stewardship Action Plan, developed in accordance with the U.S. Ocean Action Plan, was announced on December 1, 2006. (http://www.nps.gov/pub_aff/oceans/conserve.htm)

Manage Energy Development on the Outer Continental Shelf

Support Offshore Energy Development

The Energy Policy Act of 2005 amended the Outer Continental Shelf (OCS) Lands Act to grant the Department of the Interior (DOI) regulatory authority for renewable energy projects on the OCS and the alternative use of OCS facilities. (http://www.mms.gov/aboutmms/ocs.htm)

MOVING BEYOND THE OAP

DOI's Mineral Management Service (MMS) has assumed responsibility for projects already under federal review, including preparation of environmental impact statements for two wind energy projects. In addition, federal agencies are coordinating with the Coast Guard and Maritime Administration under an interagency Memorandum of Understanding to facilitate the review of proposed Liquefied Natural Gas (LNG) terminals in federal waters under the Deepwater Port Act. MMS will develop a new regulatory regime to manage access, balancing multiple uses while ensuring appropriate environmental and operation safeguards.

MOVING BEYOND THE OAP

Coastal Zone Management Act Regulations

In January 2006, the National Oceanic and Atmospheric Administration (NOAA) published a Final Rule amending regulations that implement the federal consistency provisions of the Coastal Zone Management Act (CZMA). NOAA's Final Rule responds to a recommendation in the National Energy Policy Development Group's Report (May 2001) that the Department of Commerce (DOC) and the Department of the Interior (DOI) determine if changes are needed to their programs to address procedural time frames, information needs, and whether other procedural efficiencies can be achieved through regulation. The Final Rule also responds to comments on the proposed rule, issued in June 2003, and the requirements of the Energy Policy Act of 2005 (Pub. L. No. 109-58).

The Final Rule contains a strong package of improvements to the CZMA federal consistency regulations. As amended, the regulations provide for more efficient approval of both energy and non-energy projects by providing greater clarity, transparency and predictability in the regulatory process. Additionally, coastal states maintain their authority to review proposed federal actions that have reasonably foreseeable effects on a state's coastal uses or resources. (http://coastalmanagement.noaa.gov/consistency/final_rule_010506.html)

Preserving the Nation's Maritime Heritage

Implement the International Agreement Concerning the *RMS Titanic*
The Department of Justice proposed, and the Department of State transmitted to Congress, legislation to implement the "International Agreement Concerning the Shipwrecked vessel R.M.S. Titanic" in June 2006. If enacted, this legislation will implement the agreement called for by Congress in the RMS Titanic Maritime Memorial Act of 1986 (Titanic Memorial Act), and signed into law by President Ronald Reagan. Consistent with the Titanic Memorial Act and with the Ocean Action Plan, the agreement and legislation will designate the RMS Titanic wreck site as an international maritime memorial to those who lost their lives in its tragic sinking and whose grave should be given appropriate respect. They will put in place several other important measures to protect the scientific, cultural and historical significance of the wreck site. (http://thomas.loc.gov/cgi-bin/bdquery/D?d099:20:./temp/~bdR2mq::)

Protect Sunken Military Craft
The Ronald W. Reagan National Defense Authorization Act for FY 2005 included a provision to protect any U.S. sunken military craft from removal, disturbance, or injury except where authorization is given for archeological, historical, or educational purposes. The Act also encourages the Secretary of State, in consultation with the Secretary of Defense, to negotiate and conclude international agreements to protect sunken military craft. (http://thomas.loc.gov/cgi-bin/cpquery/?&sid=cp109nTDWp&refer=&r_n=sr052.109&db_id=109&item=&sel=TOC_254841&)

MOVING BEYOND THE OAP
An interagency process is working on identifying terms for inclusion in an agreement and seeking to informally discuss possible terms with like-minded international interlocutors. The National Oceanic and Atmospheric Administration (NOAA) and the Department of State (DOS) discussed Underwater Cultural Heritage (UCH), including sunken military craft, with representatives from China in February 2006. DOS and NOAA are planning to follow up on the meeting to explore China's interest in cooperation on UCH matters.

Interpreting Great Lakes Maritime Heritage
In October 2004, the National Oceanic and Atmospheric Administration's (NOAA) Thunder Bay National Marine Sanctuary and Underwater Preserve broke ground for a 20,000 square-foot Great Lakes Maritime Heritage Center in Alpena, Michigan. The facility has been completed, and the grand opening and gala event was held in September 2005. (http://thunderbay.noaa.gov/)

CHAPTER 4: MANAGING COASTS AND THEIR WATERSHEDS

Coastal and Watershed Management

Conduct Community Workshops to Improve Watershed Protection
An interagency federal workgroup in partnership with the Coastal States Organization (CSO) has worked with state coastal program partners at National Estuary Programs (NEPs) and National Estuarine Research Reserves (NERRs) to select two sites ready to capitalize on community watershed workshops. Planning is underway in both coastal Alabama and the Puget Sound estuary

for workshops expected to be held in December 2006. CSO is participating in the planning for both workshops and will also work with federal agencies, state programs, and site-specific partners to document lessons learned and recommend ways to conduct results-oriented workshops in the future.

In addition, the Interagency Coral Reef Task Force, co-chaired by the National Oceanic Atmospheric Administration (NOAA) and Department of the Interior (DOI), is conducting three community workshops in coral reef regions (US Virgin Islands, Puerto Rico and American Samoa) to increase tools, coordination and implementation of actions to improve watershed protection and reduce downstream impacts on valuable coral reef resources. These workshops build on efforts in each jurisdiction to implement Local Action Strategies to reduce land-based pollution and other key threats to coral reefs in the region. The coral workshops will address the key needs identified in the Subcommittee on Integrated Management of Ocean Resources (SIMOR) Work Plan, including identifying sources of pollution, identifying possible solutions to pollution issues, and providing the tools and examples needed to implement solutions. (http://www.coralreef.gov/)

Planned Next Steps: Coastal stakeholders in New Jersey have also expressed interest in developing 2-3 local workshops consistent with this Ocean Action Plan action item.

Complete State Participation in Coastal Zone Management System

The Illinois Coastal Management Plan is in the initial drafting process. National Oceanic and Atmospheric Administration (NOAA) staff is working with the Illinois Department of Natural Resources (IDNR), the lead agency, the Lieutenant Governor's Office and Illinois Environmental Protection Agency to identify coastal boundaries and issues of concern, as well as to develop a process for implementing a coastal projects grants program. The main components (framework, network, implementation and management plans) of the program are in preliminary draft form. An Advisory Council is being convened to provide input and direction during the development process, and is continuing to review and revise the scoping document. The development process has not been finalized, but will include opportunities for stakeholder involvement and public comment. (http://dnr.state.il.us/owr/includes/CMP/OWR_CMP-Home.htm)

Support the Reauthorization of Coastal Zone Management Act

A Coastal Zone Management Act (CZMA) reauthorization bill sponsored by Senator Snowe (S.360) has been reported out of the Senate Commerce Committee. On behalf of the Administration, the National Oceanic and Atmospheric Administration (NOAA) testified in support of the bill and has been working with the 109th Congress on reauthorization of the CZMA. NOAA and the Coastal States Organization (CSO) have also developed a 3-phase process to identify core principles and specific options to be considered for improvements to the CZMA. The first phase, developing a discussion paper and initial scoping, has been completed, and the second phase, discussions with state coastal zone managers, was kicked off in September 2006 with a meeting of resource managers in LaConnor, WA. The third phase will solicit input from the broader coastal community, including state, local, national, industry, academic, recreational and non-governmental interests. (http://rs9.loc.gov/cgi-bin/cpquery/?&dbname=cp109&sid=cp109y827t&refer=&r_n=sr137.109&item=&sel=TOC_17371&)

Planned Next Steps: Based on the discussions and their outcomes, NOAA and CSO will develop and evaluate the core principles, options for stronger management and partnerships, and potential legislative scenarios for moving coastal management forward under the Coastal Zone Management

Act. Specific actions will depend, in part, on the scope of the issues identified and the ideas that emerge through the process.

Award Targeted Watershed Grants
The Targeted Watershed Grant Program is designed to encourage successful community-based watershed approaches and management techniques to protect and restore the nation's waters. The U.S. Environmental Protection Agency (EPA) is in the final phase of awarding over $9 million to 12 of the nation's most outstanding watershed coalitions as part of the Agency's third round of Targeted Watershed Grants. These 12 organizations have been selected to help protect and restore some of the nation's most highly valued watersheds. After four rounds, EPA has awarded over $37 million to a total of 46 exemplary watershed organizations across the country. Up to an additional $16 million is expected to be available for FY 2006/2007 awards. (http://www.epa.gov/twg/)

Implement California Water Supply Reliability and Environmental Improvement Act
The Water Supply Reliability and Environmental Improvement Act provided a framework for federal implementation of all CALFED activities and authorized $389 million for new federal activities including Conveyance Program activities designed to improve water conveyance and quality, implementation of the Environmental Water Account, and implementation of levee reconstruction activities in the Delta. (http://calwater.ca.gov/AboutCalfed/CALFEDProgram.shtml)

MOVING BEYOND THE OAP
The CALFED Bay-Delta Program has just completed its sixth year of implementation. Through its 25 participating state and federal agencies, more than 500,000 acre feet of new water has been added to California's annual water supply, primarily through investments in new groundwater storage, water recycling and conservation. Investments in ecosystem restoration efforts have led to improved abundance of some fish species such as salmon, and enabled the delisting of the Sacramento split tail. In addition, through CALFED, science has been better integrated into coordinated regulatory and operational decision-making.

Planned Next Steps: In the next few years, feasibility and environmental studies that are currently underway should facilitate the decisions to add strategically located surface storage and Delta conveyance improvements that will significantly contribute to the water supply needs of the Bay-Delta system.

Establish Forecasting System for Harmful Algal Blooms
To assist state resource managers, the Harmful Algal Blooms (HAB) Forecast System became operational in 2004 for the eastern Gulf of Mexico, and will demonstrate a forecast capability in the western Gulf in 2006 through a partnership of federal, state and academic organizations. The HAB Forecast System has the goal of developing and maintaining the data management system, analysis capability, and the regional communication infrastructure required to provide critical information to managers in the form of early alerts of HAB events, timely forecasts of HAB movement, and predictions of when and where HABs are most likely to occur.

The Forecast System draws on operational, research, and transition capabilities in the National Oceanic and Atmospheric Administration (NOAA) for integration with a Gulf-wide network of HAB experts, data providers, and data managers. The program organizes relevant data into forms applicable to forecasting, integrates multiple data types from multiple data sources, and provides to

the public an online system for visualizing conditions during HAB events (http://www.ncddc.noaa.gov/habsos).

MOVING BEYOND THE OAP
The project will evaluate the quality and usability of the forecasts and related data, recommend solutions to technical and institutional obstacles, and estimate resources required for implementation of the operational HAB forecasting system Gulf-wide and nation-wide. New operational modeling capabilities and new observing systems are being evaluated for incorporation into the Forecast System for improved forecasts and assessments.

Advancing Watershed Conservation through the USDA Farm Bill

Include Selected Watersheds in Conservation Security Program

The Conservation Security Program (CSP) is a voluntary conservation program that rewards private landowners for their ongoing stewardship of natural resources. CSP touches all agricultural production sectors and encourages them to further conserve and improve soil, water, air, energy, plant and animal life, and other conservation purposes on their operations, while, at the same time, creating incentives for other producers to meet those same standards of conservation performance.

As outlined in the Ocean Action Plan, the Fiscal Year (FY) 2005 Conservation Security Program (CSP) encompassed a total of 220 watersheds nation-wide. This included 202 new watersheds in FY 2005 plus the initial 18 watersheds selected in FY 2004. In June 2006, the U.S. Department of Agriculture (USDA) announced the funding of 4,404 CSP contracts across the United States, Puerto Rico and Guam. The FY 2006 CSP contracts offered cover more than 3.7 million acres of private land in 60 watersheds nationwide. (http://www.nrcs.usda.gov/Programs/csp/)

Award Conservation Innovation Grants

Conservation Innovation Grants (CIG) projects address traditional natural resource issues concerning agriculture, such as water quantity, water quality improvement, livestock nutrient management, grazing lands and forest health, and soil resource management. Projects also address emerging natural resource issues including agricultural air emissions, energy conservation and market-based approaches to conservation.

In June 2006, the U.S. Department of Agriculture (USDA) awarded nearly $20 million in CIG to 38 states to fund 66 projects designed to develop and refine cutting-edge technologies and approaches that can help producers maintain viable agricultural operations. These grants are matched by state, local, tribal and private partners, and support research to improve air and water quality, while conserving land.

USDA Natural Resources Conservation Services selected the Chesapeake Bay watershed as a separate category to target water quality and nutrient technologies and innovations through the CIG. Five million dollars was awarded in FY-06 and will be repeated again in FY-07. Proposals have been awarded through a competitive process through the CIG program. (http://www.nrcs.usda.gov/programs/cig/)

Protect Ohio River Basin

The Ohio River Conservation Reserve Enhancement Program (CREP) in Pennsylvania, signed in August 2005, seeks to enroll 65,000 acres of eligible cropland or marginal pastureland within

Pennsylvania's Ohio River drainage basin to assist eligible producers in the reduction of nutrient loading to the Ohio River waters, restoration of wildlife habitat, and improvement of water quality to help alleviate hypoxia related issues in the Gulf of Mexico. The primary purposes of the project, when enrollment goals are achieved, are to restore wetlands on eroding cropland, reduce edge-of-stream sediments into the Ohio River, reduce edge-of-stream nitrogen and phosphorous into the Ohio River and Gulf of Mexico, and assist wildlife and wildlife habitat in streams by planting grass and trees adjacent to streams and on highly erodible cropland. (http://www.creppa.org/)

Conserve and Restore Coastal Habitat

Implement the Administration's Wetlands Initiative

In April 2006, the Administration released the report *Conserving America's Wetlands 2006: Two Years of Progress Implementing the President's Goal.* It highlights two years of progress toward the President's five-year goal to move beyond a policy of "no net loss" of wetlands to achieve an overall increase in America's wetlands each year. The report indicates that two years after implementation, 1,797,000 acres of wetlands have been restored, created, protected or improved. Federal agencies have sponsored a variety of habitat restoration projects that contribute to the environmental health of our coasts and provide important opportunities for hands-on community participation, which builds environmental awareness. At the current pace, the President's commitment to "create, improve, and protect at least 3 million wetland acres" in five years will be met ahead of schedule. (http://www.whitehouse.gov/news/releases/2004/04/20040422-1.html)

Planned Next Steps: Agencies will continue to report on progress towards achieving the President's wetland restoration goals each Earth Day for the next three years.

Implement Next Stage of Everglades Restoration Plan

In the first five years since Congressional authorization of the Comprehensive Everglades Restoration Plan (CERP) in the 2000 Water Resources Development Act, work was focused on building critical foundation projects and adopting regulations and policies constituting the legal and process framework for ensuring restoration success. Concurrent with the completion of these foundation projects, the Department of the Interior (DOI), the U.S. Army Corps of Engineers (USACE), and their partners are now proceeding with the detailed design and implementation of multiple CERP projects as identified in the Master Implementation Sequencing Plan (MISP). The MISP details the progressive order that projects will be put in place for the natural and human environments in order to fully realize the benefits of CERP.

Some of the projects listed in the MISP are projects in the State of Florida's Acceler8 initiative, all of which are expected to be consistent with CERP objectives. Acceler8 is a State initiative closely coordinated with the DOI and USACE to implement CERP projects, or portions thereof, and these actions are expected to advance delivery of benefits to the ecosystem. Initial efforts, such as surveying and design, are underway for all Acceler8 projects, while construction is scheduled during 2006-2007. For current status of individual CERP projects, progress reports can be accessed on the CERP website at (http://www.evergladesplan.org).

Planned Next Steps: The DOI, USACE, and their partners, will continue to aggressively advance Everglades Restoration using established collaborative processes. By building upon the processes developed and activities initiated during the first five year period, major strides will occur in project implementation and construction over the next few years.

Complete Near-Term Coastal Louisiana Restoration Plan

The Louisiana Coastal Area (LCA) Ecosystem Restoration Study encompassed 20 Louisiana Parishes and resulted in the creation of a plan that (1) Identified the most critical ecological needs in Louisiana's coastal zone; (2) Highlighted scientific uncertainty; (3) Proposed a near-term program of highly cost-effective projects; and (4) Developed studies of potentially promising, long-term ecosystem restoration concepts. Due to the impacts of the 2005 hurricane season, the importance of the connection between protection and restoration projects has been emphasized. Therefore, the synergy of protection and restoration strategies already developed and proposed for implementation in coastal Louisiana will be investigated and are likely to be incorporated into the State of Louisiana's Master Plan for hurricane risk reduction and coastal ecosystem restoration.

Foster Local Restoration Projects

Bolsa Chica Wetlands Restoration Project Breaks Ground

Construction of the Bolsa Chica wetland restoration project began in October 2004 and was completed in November 2006. The project was undertaken by the Bolsa Chica Steering Committee, a partnership of eight federal and state agencies. In July 2006, a 40-acre muted tidal area known as "The Pocket" was opened to tidal influence for the first time in nearly 100 years. The last major step in restoration removed the temporary sand dam across the new inlet, which allowed the full range of ocean tides to ebb and flow over approximately 360 acres of the salt marsh ecosystem. Fish and wildlife benefits have already been observed, as thousands of migrating shorebirds and waterfowl arrive and hundreds of threatened or endangered birds nested on newly completed nest sites.

Implement Gulf of Maine Habitat Restoration Strategy

The Gulf of Maine Council on the Marine Environment officially released the Gulf of Maine Habitat Restoration Strategy in October 2004. This document, which represents a consensus of agencies and non-governmental organizations in both the U.S. and Canada, identifies high priority habitats in the region, methods to restore these habitats, and provides recommendations for increasing restoration throughout the Gulf. These recommendations, which focus on capacity building, restoration site identification and prioritization, research and monitoring, and outreach, are being aggressively implemented by the Council's Habitat Restoration Committee.

Three salt marsh restoration projects were completed or had significant construction progress in 2005, including the Mill Creek project in Chelsea, MA, the Game Farm project in Sandwich, MA and the Quivett Creek project located in Dennis, MA. Two notable projects that were completed in spring 2006 include the Cheverie Creek salt marsh restoration project located in Cheverie, Nova Scotia and the Belle Isle Fish Company salt marsh restoration project in Boston, Massachusetts. The Cheverie Creek project represents the ongoing international cooperation between the National Oceanic and Atmospheric Administration (NOAA) and partners across the Canadian border and consisted of the installation of a new large culvert that restored tidal flow to approximately 74 acres of degraded salt marsh. The Belle Isle Fish Company project included about 1 acre of salt marsh restoration as part of a significantly complex toxic waste cleanup effort. In addition, a study initiated by the Habitat Restoration Strategy in the summer of 2005 is assessing the effectiveness of 10 salt marsh restoration projects in the Gulf of Maine.

(http://www.gulfofmaine.org/habitatrestoration/documents/HabitatRestorationStrategyFinal.pdf)

Planned Next Steps: NOAA will continue to work with its partners in the Gulf of Maine region to implement the many recommendations from the Gulf of Maine Habitat Restoration Strategy as part of the NOAA/Gulf of Maine Habitat Restoration Partnership. The salt marsh restoration effectiveness study will continue with data collected through summer 2006.

National Coastal Wetlands Conservation Grants Announced

The Department of the Interior's U.S. Fish and Wildlife Service has awarded more than $165 million in grants to states and insular areas through the National Coastal Wetlands Conservation Grant Program to help conserve, restore and protect coastal wetlands. The grants for FY 2006 provide funding for 19 projects and will be supplemented with more than $12 million from state and private partners. The grants are used to acquire, restore or enhance coastal wetlands for long-term conservation benefits to wildlife and habitat. Partners in this year's projects include state and local governments, private landowners and conservation groups such as The Nature Conservancy, Ducks Unlimited, Scenic Galveston, Inc., Wildlife Forever Foundation, and many others. When the 2006 projects are complete, they will have protected, restored or enhanced about 14,000 acres. A total of more than 200,000 acres will have been protected or restored since the grant program began. (http://www.fws.gov/coastal/CoastalGrants/)

Preventing the Spread of Invasive Species

Establish Mandatory Ballast Water Management Program

The U.S. Coast Guard (USCG) published regulations in July 2004 that established a national mandatory ballast water management program and increased the Coast Guard's ability to prevent the introduction of aquatic invasive species into our oceans, Great Lakes, coasts and waterways. (http://www.uscg.mil/hq/g-m/mso/bwm.htm)

MOVING BEYOND THE OAP

From July 2004 through October 2006, over 14,000 ballast water management examinations have been conducted on commercial vessels at U.S. ports under the mandatory program, and all indications show a high rate of compliance. The USCG is currently developing refinements to the ballast water standards that will strengthen protection from invasive species. In a partnership with the U.S. Environmental Protection Agency (EPA) and the Naval Research Laboratory, in Key West, Florida, the first U.S. land-based testing facility for ballast water management systems has also been established.

Planned Next Steps: The Coast Guard will continue to develop and review the effects of improved ballast water standards, and is working toward publication of revised regulations in the future.

Public-Private Partnership Launches Habitattitude™

Habitattitude is the second national Aquatic Nuisance Species Task Force campaign that builds upon the successes of Stop Aquatic Hitchhikers! Launched in September 2004, Habitattitude involves over 65 partners to promote environmentally responsible behaviors. Habitattitude brings a variety of interests together to target aquarium hobbyists, backyard pond owners, and water

gardeners to raise awareness about the growing aquatic invasive species issue and empower them with responsible consumer behavior when disposing of unwanted ornamental fish or plants. The campaign principals (The U.S. Fish and Wildlife Service (USFWS), Pet Industry Joint Advisory Committee, and the National Oceanic and Atmospheric Administration (NOAA)) support Habitattitude with an interactive web site (www.habitattitude.net), a variety of in-store communication media and promotions, and governmental outreach activities. To date, over 20 millions aquarium hobbyists have received outreach materials, and over 700 pet stores have posted information urging people not to dump aquaria.

New Campaign against Aquatic Invasions

The Smithsonian Environmental Research Center and Portland State University joined forces to advance a multi-disciplinary approach to understanding and managing aquatic invasions. The Aquatic BioInvasion Research and Policy Institute, established in October 2004, blends a wide range of disciplines, including biology, environmental sciences, economics, engineering and social sciences, to develop novel approaches to research, management and policy for biological invasions. The Institute includes a diverse group of national and international participants from academic institutions, government agencies, and industry. Recent activities have focused on (a) strategies to prevent invasions associated with ships' ballast water and hulls, which are leading sources of non-native species invasions, (b) establishing an observation network and information system for coastal invasions, (c) predicting the spread and risk of invasions, (d) assessing feasibility of eradication for invasive marine species, and (e) developing an international consortium for education, training, and research that now includes foci in Australia, New Zealand, Panama, and Vietnam.

Inaugurate New Invasive Species Advisory Committee

Selections for the Federal Advisory Committee Act chartered Invasive Species Advisory Committee (ISAC) were made in October 2004. The role of this independent Invasive Species Advisory Committee is to make recommendations to agencies on how to approach various invasive species issues. To date, the Committee has developed an initial set of criteria for early detection of and rapid response to invasive species; established criteria for control actions associated with invasive species; produced a white paper of definitions for use in identifying invasive species issues; and released a document that establishes the criteria for ranking various pathways through which invasive species are transferred. (http://www.invasivespeciesinfo.gov/council/advisory.shtml)

Complete Construction of Great Lakes Barrier to Asian Carp

Asian carp have been found in the Illinois River, which connects the Mississippi River to Lake Michigan. Due to their large size and rapid rate of reproduction, these fish could pose a significant risk to the Great Lakes Ecosystem. To prevent the carp from entering the Great Lakes, the U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, the State of Illinois, the International Joint Commission, the Great Lakes Fishery Commission, and the U.S. Fish and Wildlife Service worked together to install and maintain a permanent electric barrier between the fish and Lake Michigan. In October 2004, the Army Corps of Engineers began constructing the permanent barrier in the Chicago Sanitary and Ship Canal, which became fully functional in April 2006.

Reduce Coastal Water Pollution

Set New Bacteria Standards for Beaches

In November 2004, as part of the Administration's Clean Beaches Plan, the U.S. Environmental Protection Agency (EPA) set new health-based Federal bacteria standards for those States and Territories bordering Great Lakes or ocean waters that had not yet adopted standards in accordance with the Beaches Environmental Assessment and Coastal Health (BEACH) Act of 2000.

MOVING BEYOND THE OAP
Implementation of the BEACH Act continues to be an EPA priority. Over the past six years, President Bush and EPA have provided nearly $52 million under the BEACH Act to states with shorelines along the nation's coasts or around the Great Lakes. Because of EPA's commitment to clean water, the number of beaches monitored has more than tripled nationwide in the past decade. Beach water monitoring helps identify what needs to be done — such as warnings and more importantly, actions to prevent closings — when bacteria concentrations reach unsafe levels. EPA is also developing new technologies to yield faster test results. With the new tests, local health agencies will be able to act more quickly if a beach has to be closed for swimming. Additionally, as part of its public-awareness efforts, EPA has created an interactive Web site for kids that includes games, information on how to protect beaches and beach safety.
(http://www.epa.gov/waterscience/beaches/)

Fund the Great Lakes Legacy Act
The Great Lakes Legacy Act has received appropriations for FY 04 ($9.9 million), FY 05 ($22.3 million) and FY 06 ($29.6 million). All projects require a non-federal sponsor to provide a minimum of 35% of the total project cost. As of August 2006, three sediment cleanup projects in Great Lakes Areas of Concern were completed using Legacy Act authority and funding. Another two remediation projects are underway and are scheduled for completion in 2006 and 2008, respectively. (http://www.epa.gov/glnpo/sediment/legacy/index.html)

Enhance EPA's Storm Water Management Program
The U.S. Environmental Protection Agency (EPA) is assessing how best to establish a national storm water program evaluation system. One of the key pieces of this tool will be a municipal storm water program evaluation guide that is to be used by EPA and States to assess local storm water program performance and compliance with applicable regulatory and permitting requirements. EPA expects this tool will also be a useful resource to better gauge program expectations and direct program resources accordingly.

EPA continues to develop and enhance training, including train-the-trainer sessions and webcasts, for municipalities that promotes better storm water management systems. Additionally, the Agency is funding a number of grants and coordinating ongoing research initiatives to improve the understanding of storm water controls and defining ways to improve, measure, and demonstrate the effectiveness of these controls.

Of note, EPA recently funded a three-year study by the National Academy of Sciences, National Research Council (NRC), to assess the extent to which water quality standards are impacted by storm water, the effectiveness of the storm water controls on protecting water quality, and the usefulness of conventional permitting approaches (e.g., effluent limits and monitoring) for controlling these discharges. While the primary focus is on industrial storm water, EPA expects the study will also benefit municipal and construction storm water controls.

The Agency is also working on tools to educate state and local governments on ways to more efficiently implement and oversee erosion and sediment control programs (implementation commenced in spring 2006). For industrial storm water, EPA proposed its multi-sector general permit in December 2005 and expects to finalize the permit in Spring 2007. This draft permit reissuance enhances accountability of industrial storm water controls needed to protect local water quality. (http://cfpub.epa.gov/npdes/home.cfm?program_id=6)

Planned Next Steps: EPA has piloted the municipal storm water program evaluation guide in several municipalities and expects the guidance to be completed in Spring 2007, with Agency efforts ongoing to establish a more comprehensive system that also includes storm water impacts from industrial and construction activities. The results of the NRC study are expected to be available in late 2009. For the construction industry, EPA is developing guidance, which is scheduled for issuance in the first half of FY2007, on designing and implementing high quality storm water pollution prevention plans.

Publish Water Quality Trading Assessment Handbook

In November 2004, the U.S. Environmental Protection Agency (EPA) released its "Water Quality Trading Assessment Handbook." In 2005 and 2006, EPA transformed the Handbook into a workshop and has provided live training to about 200 participants since its inception. Participants have included stakeholders from local, state, and federal government; agriculture; wastewater utilities; National Pollutant Discharge Elimination System (NPDES) permit writers; environmental organizations; and other nongovernmental organizations.
(http://www.epa.gov/owow/watershed/trading/handbook/)

Healthy Forests Initiative

The Healthy Forests Initiative (HFI) was launched in August 2002 by President Bush with the intent to reduce the risks severe wildfires pose to people, communities, and the environment. By protecting forests, woodlands, shrublands, and grasslands from unnaturally intensive and destructive fires, HFI helps improve the condition of our public lands, increases firefighter safety, and conserves landscape attributes valued by society.

HFI accomplishes its goals through administrative reforms and legislative action such as the Healthy Forest Restoration Act of 2003 (HFRA). HFRA focuses attention on the collaborative development of community wildfire protection plans and emphasizes the protection of municipal watersheds. Under the HFI, the federal land management agencies have treated over 15 million acres of federal land since 2000. These treatments have contributed to the reduced threat of catastrophic wildland fire, including reducing sediment runoff into coastal areas.
(http://www.healthyforests.gov/)

Reduce Airborne Pollution of Coastal Waters through New Legislation and Regulations

Seek Passage of Clear Skies Legislation

In March 2005, the U.S. Environmental Protection Agency (EPA) issued two regulations to control emissions from electric power plants. The Clean Air Interstate Rule (CAIR) controls SO_2 and NOx emissions through a regional cap and trade program and as an added benefit, reduces mercury emissions. The Clean Air Mercury Rule (CAMR) reduces mercury emissions from power plants through a national cap and trade program. Emissions are expected to decrease through the next

decade and beyond. Under these rules, caps on these three pollutants (SO_2, NOx, and mercury) will be imposed beginning in 2010. The State Implementation Plans detailing how the states will meet their emission budgets were provided for EPA review in September 2006 for the CAIR, and in November 2006 for the CAMR. EPA continues to support enactment of the Clear Skies Act, which would establish national trading programs for all three of these pollutants. (http://www.epa.gov/clearskies/)

Clean Air Interstate Rule

On March 10, 2005, EPA issued the Clean Air Interstate Rule (CAIR), a rule that will achieve the largest reduction in air pollution in more than a decade. CAIR will permanently cap emissions of sulfur dioxide (SO2) and nitrogen oxides (NOx) in the eastern United States. When fully implemented, CAIR will reduce SO2 emissions in these states by over 70 percent and NOx emssions by over 60 percent from 2003 levels.

Clean Air Mercury Rule

On March 15, 2005, EPA issued the Clean Air Mercury Rule to permanently cap and reduce mercury emissions from coal-fired power plants for the first time ever. The Clean Air Mercury Rule will build on EPA's Clean Air Interstate Rule (CAIR) to significantly reduce emissions from coal-fired power plants -- the largest remaining sources of mercury emissions in the country. When fully implemented, these rules will reduce utility emissions of mercury from 48 tons a year to 15 tons, a reduction of nearly 70 percent. Mercury is a toxic, persistent pollutant that can, through atmospheric deposition, enter lakes, streams and estuaries where it accumulates in fish and animal tissues. (http://www.epa.gov/air/mercuryrule/)

Implement Clean Air Nonroad Diesel Rule

The U.S. Environmental Protection Agency (EPA) issued a rule addressing nonroad diesel engine emissions in May 2004. The new emission standards apply to diesel engines used in most construction, agricultural, industrial, and airport equipment. The standards will take effect for new engines beginning in 2008 and be fully phased in for most engines by 2014. Larger mobile engines (greater than 750 horsepower) have one year of additional flexibility to meet their emission standards.

These emission standards do not apply to diesel engines used in locomotives and marine vessels. However, fuel requirements for these categories are covered in this rule, and EPA intends to propose standards for the locomotive and marine vessels in 2007. (http://www.epa.gov/nonroad-diesel/2004fr.htm)

Planned Next Steps: This rule will reduce nonroad diesel fuel sulfur levels in two steps. First, starting in 2007, fuel sulfur levels in nonroad diesel fuel will be limited to a maximum of 500 parts per million (ppm), the same as for current highway diesel fuel. This limit also covers fuels used in locomotive and marine applications (though not to the marine residual fuel used by very large engines on ocean-going vessels). Second, starting in 2010, fuel sulfur levels in most nonroad diesel fuel will be reduced to 15 ppm. This ultra-low sulfur fuel will create immediate public health benefits and will make it possible for engine manufacturers to use advanced emission-control systems that will dramatically reduce both PM and NOx emissions. In the case of locomotive and marine diesel fuel, this second step will occur in 2012.

CHAPTER 5: SUPPORTING MARINE TRANSPORTATION

Improve the U.S. Marine Transportation System

Elevate the Interagency Committee on the Marine Transportation System

A Cabinet-level Committee on the Marine Transportation System (CMTS) has been created to improve federal coordination, budget requests, and regulatory activities and policies that impact the Marine Transportation Systems. The Committee held its first meeting in July 2005. The leadership for the CMTS is in place, and the committee is undertaking interagency work on development of the MTS National Strategy, assessment of the MTS; maritime data collection and information management; maritime recovery communications; response to the Ocean Action Plan (OAP) and maritime oceanographic observation integration. (http://www.cmts.gov)

MOVING BEYOND THE OAP

The CMTS Executive Secretariat has identified items in the President's OAP that are related to the goals and objectives of the CMTS, and will seek to collaborate with OAP committees and work groups where mutually beneficial. The Executive Secretariat will seek to establish effective working relationships with the Interagency Committee on Science and Resource Management Integration (ICOSRMI) and the Subcommittee on Integrated Management of Ocean Resources (SIMOR) to promote awareness of CMTS work and involve the CMTS in appropriate OAP activities.

Implement the Administration's National Freight Action Agenda

The Department of Transportation (DOT), in cooperation with the U.S. Army Corps of Engineers, the National Oceanic and Atmospheric Administration (NOAA) and other agencies, is implementing the National Freight Action Agenda. DOT's Intermodal Project Facilitation Teams in Anchorage, Chicago, Los Angeles and Seattle continue to coordinate within the government and with the freight communities and industry. DOT has launched a pilot program to improve information for managing logistics, developed courses for state, local and regional transportation professionals to address freight data, logistics, and transportation planning, and conducted a series of discussions for senior public and private sector officials on environmental issues in freight transportation. In addition, the Maritime Administration is working with partners to support pilot programs in New Bedford, MA, Tampa, FL, and Bellingham WA, and in April 2005, the Federal Highway Administration issued a report on assessing the effects of freight movement on air quality.

DOT's January 2006 National Freight Policy Framework represents a refinement of the National Freight Action Agenda. DOT's May 2006 National Strategy to Reduce Congestion will also address these issues by targeting major freight bottlenecks and expanding freight policy outreach. (http://ostpxweb.dot.gov/freight_policy_framework.html)

Planned Next steps: DOT efforts on freight will focus on implementing the National Strategy to Reduce Congestion.

Assess Short Sea Shipping

The Department of Transportation (DOT) released a report in September 2006 that assessed the commercial feasibility of short sea shipping operations to determine if these services may be

economically feasible, and which short sea shipping corridors show most promise. Short Sea Shipping is a transportation strategy that potentially relieves congestion on the nation's transport infrastructure by moving goods in vessels along the nation's coasts and on inland waterways that might otherwise be carried by truck or rail. The U.S. Maritime Administration (MARAD) will continue to work with potential commercial operators and sponsors. (http://www.marad.dot.gov/sss/)

Reduce Taxes on MTS users

The American Jobs Creation Act of 2004, signed into law in October 2004, reduced the Federal tax on a range of Marine Transportation System (MTS) activities, thereby promoting U.S. businesses involved in foreign and domestic shipping. The excise tax on diesel fuel used by barges operating in inland waterway systems, previously set at 4.3 cents-per-gallon, is being phased out. The current tax is 1.3 cents per gallon, and on January 1, 2007, the tax will be eliminated. The Act allows corporations to elect a "tonnage tax" instead of the U.S. corporate income tax on taxable income from certain shipping activities; this option is expected to reduce the tax disadvantage for U.S. flag ships. The Act also eliminates tax on income from leasing vessels for foreign commerce. (http://thomas.loc.gov/cgi-bin/bdquery/z?d108:h.r.04520:)

Improve Navigation

As of November 2006, 108 National Water Level Observation Network (NWLON) stations have been updated to provide water level and any associated ancillary data (air/water temperature, wind speed/direction, barometric pressure) in real time. A key part of upgrading NWLON stations to real time capability is the replacement of the Data Collection Platform (DCP), the microprocessor based heart of a station, to the state of the art technology. As DCPs are replaced, those NWLON stations will go from hourly to 6 minute transmissions. (http://tidesandcurrents.noaa.gov/nwlon.html)

Planned Next Steps: Update 67 additional NWLON stations in FY 2007, for a total of 175 updated stations.

Reduce Vessel Pollution

Launch Federal Clean Marina Challenge

In March 2005, federal agencies that own/operate marinas and/or have advisory roles in the Clean Marina Challenge (CMC) Program met to discuss an approach for encouraging federal marinas to participate in the program. Because CMC is also a federal stewardship effort, the Office of the Federal Environmental Executive was part of the meeting, and tasked by the Council on Environmental Quality (CEQ) to develop the language of the challenge to agencies, and identify a proper venue for launch. Following this meeting, CEQ created an inventory of federal marinas in order to select candidate sites for the CMC Program. In that process it was determined that there are 83 federal marinas already in the program, many in the National Park Service (NPS). Since the meeting, NPS has been developing internal guidance for their facilities to become CMC compliant. As we go forward with the challenge, that guidance may serve as a foundation for a more federal-wide guidance on CMC.

Planned Next Steps: The Subcommittee on Integrated Management of Ocean Resources (SIMOR) has initiated an action in their Work Plan that will specifically address the Clean Marinas initiative to work towards achieving Clean Marina conformance, and possibly certification, for all federal marinas. That Work Plan will include coordinating with NPS on

identifying an appropriate venue to launch the challenge. Also, the Office of the Federal Environmental Executive (OFEE) will coordinate key offices to craft the language of the challenge to come from CEQ leadership.

Decrease Vessel Air Emissions

In May 2004, as part of the Clean Air Nonroad Diesel rule, EPA finalized new requirements for nonroad diesel fuel that will decrease the allowable levels of sulfur in fuel used in marine vessels by 99 percent. These fuel improvements will create immediate and significant environmental and public health benefits by reducing particulate matter from existing engines. EPA also took the first step toward proposing new emission standards for diesel engines used in locomotives and marine vessels by issuing an advance notice of proposed rulemaking. (http://www.epa.gov/OMS/marine.htm)

Planned Next Steps: In 2007, the Bush Administration, through EPA, will propose a rule that will require more stringent emission standards for most new commercial and recreational marine diesel engines, which would further reduce emissions of nitrogen oxide and particulate matter.

CHAPTER 6: ADVANCING INTERNATIONAL OCEAN POLICY AND SCIENCE

Advancing International Oceans Policy

Support Accession to the UN Convention on the Law of the Sea

The State Department is continuing to work with the Council on Environmental Quality (CEQ), the National Security Council (NSC) and other agencies on U.S. accession to the UN Convention on the Law of the Sea. (www.un.org)

Partnership Creation: White Water to Blue Water Initiative

The White Water to Blue Water (WW2BW) Partnership Initiative was launched in Miami, Florida in March 2004. Participants included over 700 Conference attendees from the Wider Caribbean Region and outside the region such as Africa, South Pacific, Spain, Sweden, Italy, Ukraine, Brazil and Argentina. Approximately 100 partnerships were formed or developed during the conference.

The WW2BW Steering Committee meets regularly and in December 2005, began developing a Strategy for 2006-2008. This Strategy modifies the WW2BW structure to reflect the shared leadership of the Initiative within the Caribbean. As such, an Executive Committee will focus on implementation and development of partnerships to achieve the four thematic WW2BW goals (integrated watershed management; marine ecosystem-based management; sustainable tourism; and shipping) with the help of a larger Council. In November 2006, members of the Executive Committee briefed Council members and regional WW2BW participants on progress made and ways to get involved. In addition, members of the Caribbean Environment Programme (the Regional Seas program) requested its Secretariat to continue support of this partnership. (http://www.ww2bw.org/)

Planned Next Steps: The State Department's Bureau of Oceans and International Environmental and Scientific Affairs initiative (OESi) and Third Border Initiative (TBI) will provide funding for a WW2BW small grants program that will allow ongoing partnerships to continue and for new partnerships to be developed.

Co-Host the International Coral Reef Initiative

The International Coral Reef Initiative (ICRI), established in 1994, is a partnership among governments, international, scientific, and civil society organizations seeking to stop and reverse the global degradation of coral reefs and related ecosystems. The ICRI approach is to mobilize governments and a wide range of other stakeholders in an effort to improve management practices, increase capacity and political support, and share information on the health of these fragile ecosystems. ICRI's successes include helping to establish marine protected areas in key coral reef regions and encouraging integrated coastal and watershed management.

The U.S. donates approximately $2 million per year to ICRI or ICRI-related coral programs, which include local workshops on reef protection and management, and the Global Coral Reef Monitoring Network, which publishes a biannual report on "Status of the World's Coral Reefs." At the International Coral Reef Intiative (ICRI) meeting in Cozumel, Mexico, October 21-23, 2006, representatives of the Governments of Mexico and the United States formally offered to host the 2007-2009 ICRI Secretariat. The offer was accepted by acclimation by the ICRI membership. The joint Mexico-U.S. secretariat will begin July 1, 2007 and extend until June 30, 2009. (http://www.icriforum.org/)

Increase Membership and Strengthen the Implementation of the London Convention

The Workshop on Marine Pollution Prevention and Environmental Management sponsored by the London Convention Secretariat of the International Maritime Organization (IMO), United Nations Environmental Program, and China's State Oceanographic Agency took place in May/June 2006 in Dailan, China. U.S. participants included the U.S. Environmental Protection Agency (EPA), the National Oceanic and Atmospheric Administration (NOAA), the US Army Corps of Engineers (USACE) and the Department of Energy (DOE). The objective of the workshop was to strengthen technical outreach programs to enhance implementation of the 1996 Protocol to the London Convention (LC) and the London Convention itself, as well as to invigorate membership in the Protocol. In June, China ratified the Protocol and is now a member. Additional workshops or seminars are being evaluated based upon requests from several countries such as Turkey, Argentina, Cambodia, Thailand, and the Philippines. Twenty-two Contracting Parties to the LC have currently ratified the 1996 Protocol. The Protocol will enter into force after 26 LC Contracting Parties have ratified the treaty. A U.S. interagency effort is also in place to consider issues relating to the possible submission of the 1996 Protocol to the Senate for advice and consent to ratification. (www.londonconvention.org)

Planned Next Steps: A subsequent workshop, following up on the Workshop on Marine Pollution Prevention and Environmental Management, is being planned. Draft implementing regulations must accompany a request to the Senate for advice and consent to the 1996 Protocol to the London Convention. Interested agencies are actively preparing appropriate draft regulations. The U.S. is also supporting IMO assistance to South Africa for London Convention enforcement, and developing other possibilities for assistance.

Support an Integrated Approach to Oceans Management and Reduction of Land-based Pollution

The U.S. Department of State (DOS) received interagency approval for the Land Based Sources (LBS) Protocol to the Cartagena Convention, a first step towards US ratification of the Protocol. When this protocol is ratified by nine countries, it will result in legally binding effluent discharge limitations in the wider Caribbean by the signatories-- a much needed action to protect our shared waters.

In addition, the National Oceanic and Atmospheric Administration (NOAA) was awarded grants from DOS's Bureau of Oceans and International Environmental and Scientific Affairs initiative (OESi) and Third Border Initiative (TBI) to continue funding the NOAA North American Global Programme of Action (GPA) node, primarily through the regional seas programs in the Caribbean and the Pacific. The Caribbean regional seas program is updating a technical report on water quality in the Caribbean, developing a regional action plan on marine litter, and sponsoring Caribbean participation in an International Maritime Organization (IMO) invasive species workshop. Additionally, NOAA has initiated communications about providing technical assistance to develop National Programmes of Action (NPAs) with the following countries: Mexico, Trinidad & Tobago, Panama, Barbados, Honduras, Dominican Republic, Grenada, Belize, and Dominica.

The U.S. also participated in the 2nd Intergovernmental Review (IGR-2) of the GPA in Beijing, China in October 2006. The IGR-2 confirmed national commitments to the GPA, discussed needs to develop a workplan for 2007-2011 to implement the GPA, and showcased lessons learned. The U.S. also provided information to the Caribbean Regional Seas program on U.S. domestic activities and legislation on marine debris to help the Caribbean develop its regional action plan to address the issue. (http://www.gpa.unep.org/)

Work with Congress to Approve Ratification of Amendments to MARPOL Convention Cutting Pollution from Marine Engines Worldwide as Early as Possible in the 109th Congress

The Senate gave its advice and consent for MARPOL Annex VI in April 2006. Legislation is contained in the engrossed bill HR 5681, which is likely to be conferenced with a Senate version (not introduced as of yet), to form a Coast Guard Authorization Act. A Department of Homeland Security (DHS) Views Letter to the House Committee on Transportation and Infrastructure from September 2006 highlighted some key provisions of the Administration's proposal not included in the House version.

Planned Next Steps: Continue to confer with Senate Fisheries and Coast Guard Subcommittee of the Commerce, Science and Technology Committee staff on the discrepancies between the Administration's proposal and HR 5681.

Trade and International Oceans Policy

The Administration continues its leadership role in pressing for stronger rules on harmful fisheries subsidies in the World Trade Organization (WTO) negotiations pursuant to the Doha Development Agenda (DDA). These negotiations offer an extraordinary opportunity to bring environmental and commercial interests together to curb fisheries subsidies that contribute to fishing fleet overcapacity and overfishing. Stronger disciplines on fisheries subsidies will make a direct contribution to addressing Illegal, Unreported and Unregulated (IUU) fishing operations and to destructive fishing practices such as bottom trawling that result, in part, from subsidies to fuel and other operating costs for trawlers that endure far beyond the point of a profitable fishery.

At the Hong Kong Ministerial meeting in December 2005, WTO Ministers recognized the need for stronger rules, including a prohibition of the most harmful subsidies. The Office of the United States Trade Representative, NOAA, the Department of State and other interested agencies, have developed U.S. proposals for an agreement. Although the DDA negotiations were suspended in July 2006, the Administration remains committed to the successful completion of the negotiations, including an ambitious outcome on fisheries subsidies.

In addition, the Administration continues to advance marine and environmental policy issues as part of free trade agreements (FTAs). Under the environmental cooperation mechanism associated with the U.S. – Central America – Dominican Republic Free Trade Agreement (CAFTA-DR), the U.S. Department of State is working on projects to support National Oceanic and Atmospheric Administration (NOAA) sea turtle bycatch reduction workshops in the CAFTA-DR countries. Marine conservation issues are also incorporated into environmental cooperation mechanisms associated with FTAs in the Middle East. Interagency plans for 2007 include a turtle nesting population conservation project in Oman and a vessel pollution prevention enforcement workshop in Bahrain.

MOVING BEYOND THE OAP

Protect Vulnerable Marine Ecosystems from Destructive Fishing Practices

The U.S. has taken significant steps to protect vulnerable marine ecosystems (VMEs) from destructive fishing practices, including seamounts, hydrothermal vents, and cold-water corals, within our domestic waters. For example, in July 2006, NOAA established the Aleutian Islands Habitat Conservation Area, more than 950,000 km^2 in size, protecting deep corals, sponges and other sensitive features slow to recover from disturbance. The U.S. is a leader in promoting the need for similar conservation and management measures internationally through various fora, including the United Nations (UN) and the Food and Agriculture Organization (FAO). In October 2006, President Bush issued a memorandum to Secretary of State Rice and Secretary of Commerce Gutierrez promoting the sustainable management of global fisheries resources and calling 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 Memo, specifically, urging nations to prohibit their vessels from engaging in destructive fishing practices on the high seas until applicable conservation and management measures, or a Regional Fisheries Management Organization (RFMO), are in place. The ultimate consensus-based language of the resolution includes management provisions for both RFMOs and States to prevent bottom fishing from causing harm to VMEs and calls upon the FAO for further management guidance. The language represents the initial stages of significant progress towards greater protection of VMEs on the high seas. (www.un.org)

Advancing International Oceans Science

Advance the Use of Large Marine Ecosystems

A partnership has been developed that links the United Nations Environmental Program Regional Seas Programs and the use of the Large Marine Ecosystems (LMEs). This partnership between the United Nations Environment Program (UNEP), the Global Environment Facility (GEF), and the National Oceanic and Atmospheric Administration (NOAA) will act as a tool for enabling ecosystem based management to provide a collaborative approach to management of resources

within ecologically bounded transitional areas.
(http://www.unep.org/regionalseas/Issues/Large_Marine_Ecosystems/default.asp)

NOAA and UNEP completed a report on ecological conditions in 64 LMEs of the world, entitled *The UNEP Large Marine Ecosystems Report: A perspective on changing conditions in LMEs of the world's Regional Seas*. A second report, *Accounting for Marine Economic Activities in Large Marine Ecosystems and Regional Seas*, has been completed in cooperation with the Marine Policy Center of the Woods Hole Oceanographic Institute. This report represents the first estimation of the economic level of marine activity in each of the world's 64 LMEs. The report was distributed to participants of the October 2006 UNEP meeting in Beijing, China on Land-based Sources of Pollution.

An annual consultative meeting of the parties engaged in LME Projects was held at the IOC-UNESCO headquarters in July 2006. The participants represented LME projects in Africa, Asia, Latin America and Eastern Europe. As a result of this meeting, three participating countries - Angola, Namibia, and South Africa - signed an agreement to establish the world's first Large Marine Ecosystem Based Management Commission.

Link the Global Marine Assessment and Global Earth Observation System of Systems
Initial discussion of linking the Global Marine Assessment (GMA) and the Global Earth Observation System of Systems (GEOSS) took place at the Second GMA International Workshop in June 2005 through bilateral meetings with international officials as well as the distribution of GEOSS handouts that describe GMA/GEOSS synergies.
(http://www.unep.org/regionalseas/Partners/Inter-Agency_Initiatives/GMA/default.asp)

Planned Next Steps: As the GMA and GEOSS continue to establish themselves, both fora will provide mutually supportive opportunities for more formal international linkages. Through international cooperation, the GEOSS will collect and disperse data and information from terrestrial, atmospheric, climate, and ocean observations. The GMA, under discussion since the World Summit on Sustainable Development, will seek to establish a regular, comprehensive process of reporting and assessment of the state of the global marine environment.

Leadership of the Integrated Ocean Drilling Program
The U.S. is continuing its co-lead of the Integrated Ocean Drilling Program (IODP) with Japan. IODP is an on-going marine research program that also involves European nations, China, and Korea. The U.S., through the National Science Foundation (NSF), currently provides a light drillship and science support services. Japan is providing a heavy drillship, the CHIKYU, for deep drilling objectives. The CHIKYU, currently undergoing testing, will be able to drill at levels deeper than any other research drilling vessel. The Europeans continue to provide and operate Mission Specific Platforms capable of drilling in environments unsuitable for either the U.S. or Japanese vessel. (http://www.iodp.org/)

Planned Next Steps: The NSF Scientific Ocean Drilling Vessel project will be supporting the contracting, conversion, outfitting, and acceptance trials of an upgraded light drillship for long-term use as the U.S. facility contribution to IODP. U.S.-funded conversion and upgrade activities are scheduled through 2007, with full operations anticipated in FY 2008.

APPENDIX

U.S. OCEAN ACTION PLAN UPDATE – SUMMARY TABLE

	Action	Product (if applicable)	Status	Date (if applicable)
CHAPTER 1 ENHANCING OCEAN LEADERSHIP AND COORDINATION				
Improving Federal Coordination and Governance				
1	Seek Passage of NOAA Organic Act Establishing NOAA within the Department of Commerce		Commitment Met per OAP	Activities Ongoing
2	Establish a New Cabinet-Level Committee on Ocean Policy	Cabinet-level Committee on Ocean Policy	Commitment Met per OAP	April 2005
	Establish New Interagency Committee on Ocean Science and Resource Management Integration	*Committeeon Ocean Science and Resource Management Integration*	Commitment Met per OAP	January 2005
	Establish New Subcommittee on Integrated Management of Ocean Resources	*Subcommittee on Integrated Management of Ocean Resources*	Commitment Met per OAP	March 2005
	NSTC Joint Subcommittee on Ocean Science and Technology	*Joint Subcommittee on Ocean Science and Technology*	Commitment Met per OAP	January 2005
	Ocean Research Advisory Panel	*Ocean Research and Resources Advisory Panel*	Commitment Met per OAP	January 2005
	National Security Council Policy Coordinating Committee	*Subcommittee on Oceans Policy of the National Security Council's Global Environment Policy Coordinating Committee*	Commitment Met per OAP	January 2005
Support Regional Collaboration on Oceans,Coasts, and Great Lakes Policy in Partnership with Leadership of States, Localities, and Tribes				
3	Support Great Lakes Interagency Task Force and Great Lakes Regional Collaboration		Commitment Met per OAP	Activities Ongoing
4	Support a Regional Partnership in the Gulf of Mexico		Commitment Met per OAP	Activities Ongoing
5	Advance Ocean Stewardship through Implementation of Cooperative Conservation Executive Order		Commitment Met per OAP	Activities Ongoing
6	Advance Regional Fisheries Management	Memorandum of Understanding formalizing the creation of the Southeast Aquatic Resources Partnership	Commitment Met per OAP	November 2004
	Northeast Regional Ocean Council (NROC)		Moving Beyond	Activities Ongoing

	Action	Product (if applicable)	Status	Date (if applicable)
CHAPTER 2 ADVANCING OUR UNDERSTANDING OF THE OCEANS, COASTS, AND GREAT LAKES				
Expanding Our Scientific Knowledge of Oceans, Coasts, and Great Lakes				
7	Develop an Ocean Research Priorities Plan and Implementation Strategy	Ocean Research Priorities Plan and Implementation Strategy	Commitment Met per OAP	December 2006
8	Build a Global Earth Observation Network, Including Integrated Oceans Observation			
	Integrate U.S. Ocean Observing Efforts into the Global Earth Observing System of System		Commitment Met per OAP	Activities Ongoing
	Lead Development of International Capacity Building Effort	*International workshop to train participants on tide-gauge installation and operation*	On Schedule	Early 2007
	NRC Study on International Capacity Building for the Protection and Sustainable Use of Oceans and Coasts	*Study by the National Academies' National Research Council, entitled International Capacity Building for the Protection and Sustainable Use of Oceans and Coasts*	Moving Beyond	Activities Ongoing
	Monitor and Share Data on Ocean Currents in the Gulf of Mexico through New MMS Program	*Web-published ocean current data from deepwater drilling and production sites*	Commitment Met per OAP	Activities Ongoing
	Share GIS Data Through New Corps of Engineers-NOAA Partnership		Commitment Met per OAP	Activities Ongoing
9	Develop and Deploy New State of the Art Research and Survey Platforms		Commitment Met per OAP	Activities Ongoing
	Ocean Salinity from Space	*Launch of the Aquarius satellite*	Schedule Adjusted	Current launch date in 2009 due to partnership delays
	Replacing Alvin	*Next generation human-occupied deepsea submersible to replace Alvin*	On Schedule	2008
	A New Ocean Exploration Vessel for NOAA	*Conversion of the* USNS Capable *for use as the Nation's first vessel solely dedicated to ocean exploration*	On Schedule	Summer 2007
	A New Ocean Survey Vessel for EPA	*Conversion of the USNS Bold for use as an ocean survey vessel for EPA*	Commitment Met per OAP	July 2005
	Expanding the NOAA Fleet	*Construction of the third NOAA Fisheries Survey Vessel and a newly designed hydrographic vessel*	On Schedule	Early 2008
10	Create a National Water Quality Monitoring Network		Commitment Met per OAP	Activities Ongoing
11	Coordinate Ocean and Coastal Mapping Activities		Commitment Met per OAP	Activities Ongoing
12	Implement New Legislation on Ocean and Human Health, Harmful Algal Blooms, and Hypoxia	A strategic research plan for oceans and human health, reconvene the Interagency Task Force, and assess and address harmful algal bloom threats in freshwater regions	On Schedule	End of 2007
13	Share U.S. Ocean Science Expertise Abroad	Form an interagency working group that will (1) determine the best means of consulting with private organizations such as academic institutions, industry, professional societies, and non-governmental advocacy groups; (2) seek input and support from the NS	Commitment Met per OAP	Re-directed effort towards alternative activities

Promote Lifelong Ocean Education				
14	Increase Ocean Education Coordination		Commitment Met per OAP	Activities Ongoing
15	Expand NOAA's Authority to Education and Outreach		Commitment Met per OAP	Activities Ongoing
16	Support the Ocean Science Initiative at the Smithsonian Institution	Ocean Science Initiative that includes a new 26,000 square foot state-ofthe-art Ocean Hall, an Ocean Web Portal, and the Center for Ocean Science	On Schedule	Opens in 2008
17	Expand the Coastal America Learning Center Network	Dedicate the North Carolina Aquarium Complex as the 18th Coastal Ecosystem Learning Center	Commitment Met per OAP	January 2005
18	Expand the Sea Grant Program Internationally	(1)Donors conference in Latin America, (2)workshop in Southeast Asia, and (3)technical assistance plan in North Africa to help introduce and adapt the U.S. Sea Grant system	On Schedule	(1)FY2007, (2)May 2005, (3)reassessed

CHAPTER 3 ENHANCING THE USE AND CONSERVATION OF OCEAN, COASTAL, AND GREAT LAKES RESOURCES

	Action	Product (if applicable)	Status	Date (if applicable)
Achieving Sustainable Marine Fisheries				
19	Work with Regional Fisheries Councils to Promote Greater use of Market-based System for Fisheries Management		Commitment Met per OAP	Activities Ongoing
20	Foster a Balanced Representation for Regional Fishery Management Councils	Proposal to amend the Magnuson-Stevens Fishery Conservation and Management Act	Commitment Met per OAP	September 2005
21	Harmonize Recreational Fishing Data Acquisition for Fishery Management Purposes		Commitment Met per OAP	Activities Ongoing
22	Establish Guidelines and Procedures for the Use of Science in Fisheries Management	Guidelines and procedures for the development and application of scientific advice for fisheries management decisions	On Schedule	September 2007
23	Foster Sustainable Harvests of Key Fish Species in the Caribbean and nearby Atlantic		Commitment Met per OAP	Activities Ongoing
24	Establish an Implementation Plan for Combating International "Illegal, Unregulated and Unreported" Fishing	Implementation plan for the U.S. National Plan of Action for Illegal, Unregulated, and Unreported fishing	Commitment Met per OAP	February 2005
Promote Coral Reef and Deep Coral Conservation and Education				
25	Implement Coral Reef Local Action Strategies		Commitment Met per OAP	Activities Ongoing
26	Protect the Northwestern Hawaiian Island Coral Reef Ecosystem Reserve	Presidential Proclamation of the Northwestern Hawaiian Islands as a marine national monument	Commitment Met per OAP	June 2006
27	Form New International Partnerships to Enhance Management of Coral Reefs	Memorandum of Understanding to improve coral reef resilience	Commitment Met per OAP	December 2004
28	Re-establish Interagency Marine Debris Coordinating Committee	Re-establish the Interagency Marine Debris Coordinating Committee	Commitment Met per OAP	December 2005
29	Foster Coral Reef Protection and Conservation by Recreational and Agricultural Interest		Commitment Met per OAP	Activities Ongoing
30	Develop "Biocriteria" for Coral Reefs	Biological assessment methods and biological criteria for evaluating the health of coral reefs and associated water quality	On Schedule	FY2007
31	Research, Survey, and Protect Deep-Sea Coral Communities			
	Encourage Protection of Deep-Sea Corals when Developing and Implementing Regional Fishery Management Plans	*Amendment to the monkfish management plan*	Commitment Met per OAP	July 2005
	Complete Survey of Deep-sea Coral in the Gulf of Mexico	*Survey of deep-sea corals in the Gulf of Mexico*	On Schedule	End of 2006
	Complete Two International Deep-Sea Coral Exploration Missions to locate and describe deep coral communities	*Two international deep-sea coral exploration missions*	Commitment Met per OAP	July 2005
	Develop and Complete a Status Report on Deep-Sea Corals in the U.S. EEZ	*Status Report on Deep-Sea Corals in the United States Exclusive Economic Zone*	Schedule Adjusted	Current publication expected March 2007 due to new scientific findings and management actions
Enhance Conservation of Marine Mammals, Sharks, and Sea Turtles				
32	ICCAT Adoption of U.S. Proposal for International Shark Conservation	International Commission for the Conservation of Atlantic Tunas agreement to prohibit the practice of "shark finning" in the Atlantic, Mediterranean, and Gulf of Mexico	Commitment Met per OAP	November 2004
33	Promote International Marine Turtle Conservation		Commitment Met per OAP	Activities Ongoing
34	Propose Legislation to Reauthorize the Marine Mammal Protection Act	Proposal to reauthorize the Marine Mammal Protection Act	Commitment Met per OAP	June 2005
35	Implement New National Bycatch Strategy	Protocol for standardizing bycatch reporting methodologies and on techniques to reduce sea turtle bycatch in longline fisheries	Commitment Met per OAP	October 2004
36	Propose New Limits on Atlantic Gill Net Fishing to Protect Dolphins and Sea Turtles	Proposal for limits on gill net fishing in waters off the Atlantic coast	Commitment Met per OAP	November 2004
37	Create a National Strategy for Fisheries Enforcement	National Strategy for Fisheries Enforcement	Commitment Met per OAP	September 2004

Advance Offshore Aquaculture				
38	Propose National Offshore Aquaculture Legislation	Proposal for a National Offshore Aquaculture Act	Commitment Met per OAP	June 2005
39	Established Aquaculture Effluent Guidelines	Guidelines for discharges from aquaculture facilities	Commitment Met per OAP	June 2004
40	Support Aquaculture in the Americas	Two workshops in South America to promote sustainable aquaculture and the development of an aquaculture network in the Americas	Commitment Met per OAP	November 2005
Improve Marine Managed Areas				
41	Coordinate and Better Integrate the Existing Network of Marine Managed Areas	Memorandum of Understanding (MOU) on cooperative enforcement, MOU on comprehensive coordination, and Regional Planning Workshops	On Schedule	FY2007
42	Adopt an Ocean Parks Strategy	Ocean Parks Strategy	Commitment Met per OAP	December 2006 per Adjusted Schedule
Manage Energy Development on the Outer Continental Shelf				
43	Support Offshore Energy Development	Proposed legislation granting authority to DOI to manage energy development on the Outer Continental Shelf	Commitment Met per OAP	August 2005
	Coastal Zone Management Act Regulations	Rule amending regulations that implement the federal consistency provisions of the Coastal Zone Management Act	Moving Beyond	Activities Ongoing
Preserving the Nation's Maritime Heritage				
44	Implement the International Agreement Concerning the RMS Titanic	Proposal for legislation to implement the International Agreement Concerning the Shipwrecked Vessel *RMS Titanic*	Commitment Met per OAP	June 2006
45	Protect Sunken Military Craft		Commitment Met per OAP	Activities Ongoing
46	Interpreting Great Lakes Maritime Heritage	Great Lakes Maritime Heritage Center	Commitment Met per OAP	September 2005

CHAPTER 4 - MANAGING COASTS AND THEIR WATERSHEDS				
	Action	**Product (if applicable)**	**Status**	**Date (if applicable)**
Coastal and Watershed Management				
47	Conduct Community Workshops to Improve Watershed Protection	Community workshops to improve integration and coordination of Coastal Zone Management Act, Clean Water Act, and other Federal programs	On Schedule	December 2006
48	Complete State Participation in Coastal Zone Management System		Commitment Met per OAP	Activities Ongoing
49	Support the Reauthorization of Coastal Zone Management Act		Commitment Met per OAP	Activities Ongoing
50	Award Targeted Watershed Grants		Commitment Met per OAP	Activities Ongoing
51	Implement California Water Supply Reliability and Environmental Improvement Act		Commitment Met per OAP	Activities Ongoing
52	Establish Forecasting System for Harmful Algal Blooms	Operational ecological forecast system for harmful algal blooms in the Gulf of Mexico	Commitment Met per OAP	September 2004
Advancing Watershed Conservation through the USDA Farm Bill				
53	Include Selected Watersheds in Conservation Security Program		Commitment Met per OAP	Activities Ongoing
54	Award Conservation Innovation Grants		Commitment Met per OAP	Activities Ongoing
55	Protect Ohio River Basin	CREP agreement with the Commonwealth of Pennsylvania	Commitment Met per OAP	August 2005
Conserve and Restore Coastal Habitat				
56	Implement the Administration's Wetlands Initiative	At least three million wetland acres created, improved, and protected over the next five years	On Schedule	FY2009
57	Implement Next Stage of Everglades Restoration Plan	Completion of eight major projects to expand water storage, improve water quality, and restore water flows in the Everglades by 2010	On Schedule	FY2010
58	Complete Near-Term Coastal Louisiana Restoration Plan	Louisiana Coastal Area Ecosystem Restoration Plan	Commitment Met per OAP	Re-directed as a result of the 2005 Hurricane Season
59	Foster Local Restoration Projects			
	Bolsa Chica Wetlands Restoration Project Breaks Ground	*Bolsa Chica Wetland Restoration Project*	Commitment Met per OAP	November 2006
	Implement Gulf of Maine Habitat Restoration Strategy		Commitment Met per OAP	Activities Ongoing
	National Coastal Wetlands Conservation Grants Announced		Commitment Met per OAP	Activities Ongoing
Preventing the Spread of Invasive Species				
60	Establish Mandatory Ballast Water Management Program	Regulations requiring a national ballast water management program	Commitment Met per OAP	July 2004
61	Public-Private Partnership Launches HabitattitudeTM	New public education and outreach effort	Commitment Met per OAP	September 2004
62	New Campaign against Aquatic Invasions	Aquatic BioInvasion Research and Policy Institute	Commitment Met per OAP	October 2004
63	Inaugurate New Invasive Species Advisory Committee	Invasive Species Advisory Committee	Commitment Met per OAP	October 2005
64	Complete Construction of Great Lakes Barrier to Asian Carp	Permanent electric barrier in the Chicago Sanitary and Ship Canal	Commitment Met per OAP	April 2006

Reduce Coastal Water Pollution				
65	Set New Bacteria Standards for Beaches	Health-based federal bacteria standards	Commitment Met per OAP	November 2004
66	Fund the Great Lakes Legacy Act		Commitment Met per OAP	Activities Ongoing
67	Enhance EPA's Storm Water Management Program	(1)National storm water program evaluation system, (2)tools for municipalities that promote better storm water management systems, (3)training for municipalities on storm water regulatory requirements, (4)guidance for the construction industry on designin	Schedule Adjusted	(1)spring 2007, (2)spring 2006, (3)Activities Ongoing, (4)FY2007, (5)Activities Ongoing
68	Publish Water Quality Trading Assessment Handbook	Water Quality Trading Assessment Handbook	Commitment Met per OAP	November 2004
69	Healthy Forests Initiative		Commitment Met per OAP	Activities Ongoing
Reduce Airborne Pollution of Coastal Waters through New Legislation and Regulations				
70	Seek Passage of Clear Skies Legislation		Commitment Met per OAP	Activities Ongoing
	Clean Air Interstate Rule		Commitment Met per OAP	Activities Ongoing
71	Clean Air Mercury Rule		Commitment Met per OAP	Activities Ongoing
72	Implement Clean Air Nonroad Diesel Rule		Commitment Met per OAP	Activities Ongoing

CHAPTER 5 - SUPPORTING MARINE TRANSPORTATION

	Action	Product (if applicable)	Status	Date (if applicable)
Improve the U.S. Marine Transportation System				
73	Elevate the Interagency Committee on the Marine Transportation System	Cabinet-level interagency Committee on the Marine Transportation System	Commitment Met per OAP	July 2005
74	Implement the Administration's National Freight Action Agenda		Commitment Met per OAP	Activities Ongoing
75	Assess Short Sea Shipping	Study to assess the commercial feasibility of short sea shipping operations	Commitment Met per OAP	September 2006
76	Reduce Taxes on MTS users	Reduced federal tax on MTS activities	Commitment Met per OAP	October 2004
77	Improve Navigation	Update the current 175-station National Water Level Observation Network	On Schedule	FY2007
78	Reduce Vessel Pollution			
	Launch Federal Clean Marina Challenge		Commitment Met per OAP	Activities Ongoing
	Decrease Vessel Air Emissions	*Rule that requires more stringent emissions standards for most new commercial and recreational marine diesel engines*	Schedule Adjusted	Early 2007

CHAPTER 6 - ADVANCING INTERNATIONAL OCEAN POLICY AND SCIENCE

	Action	Product (if applicable)	Status	Date (if applicable)
Advancing International Oceans Policy				
79	Support Accession to the UN Convention on the Law of the Sea		Commitment Met per OAP	Activities Ongoing
80	Partnership Creation: White Water to Blue Water (WW2BW) Initiative		Commitment Met per OAP	Activities Ongoing
81	Co-Host the International Coral Reef Initiative	Offer to co-host the International Coral Reef Initiative Secretariat for the July 2007-2009 term	Commitment Met per OAP	October 2006
82	Increase Membership and Strengthen the Implementation of the London Convention		Commitment Met per OAP	Activities Ongoing
83	Support an Integrated Approach to Oceans Management and Reduction of Land-based Pollution		Commitment Met per OAP	Activities Ongoing
84	Work with Congress to Approve Ratification of Amendments to MARPOL Convention Cutting Pollution from Marine Engines Worldwide as Early as Possible in the 109th Congress		Commitment Met per OAP	Activities Ongoing
85	Trade and International Oceans Policy		Commitment Met per OAP	Activities Ongoing
	Protect Vulnerable Marine Ecosystems from Destructive Fishing Practices		Moving Beyond	Activities Ongoing
Advancing International Oceans Science				
86	Advance the Use of Large Marine Ecosystems		Commitment Met per OAP	Activities Ongoing
87	Link the Global Marine Assessment and Global Earth Observation System of Systems		Commitment Met per OAP	Activities Ongoing
88	Leadership of the Integrated Ocean Drilling Program		Commitment Met per OAP	Activities Ongoing