

NOAA PROGRESS REPORT

Status of MPA Executive Order

13158 and National Marine

Protected Areas Center

Fiscal Year 2005



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Message from the Director of the National Marine Protected Areas Center

Fiscal year 2005 was a busy and productive one for the National Marine Protected Areas Center. We focused on an expanded series of scientific and outreach activities to engage the public and private sectors in the development of a national system of marine protected areas (MPAs) for the United States. As a result of our work, we are on schedule to publish the draft national system framework for public comment in 2006.

In addition to hosting federal, state, and public national system workshops, the MPA Center accomplished a variety of other major tasks. The MPA Federal Advisory Committee, which is supported by the MPA Center, delivered its first set of recommendations to the Departments of Commerce and the Interior. The MPA Center increased public access to information about federal and state MPA planning processes through our developing web-based Regional Information Centers. Hits on our MPA.gov website averaged more than 400,000 per month. We continued our partnership with the NOAA Office of Coast Survey and the Department of the Interior's Bureau of Land Management to provide information on the nation's marine managed areas to mariners through *Coast Pilot* publications. Our ongoing partnership with NOAA Fisheries allowed us to engage the scientific community and the public, bring recreational fishermen and scientists together for a workshop on benthic-pelagic linkages, and continue facilitating the dialogue between fisheries scientists and ecologists.

We are nearly finished with the inventory of the nation's marine managed areas, with most final federal information posted on MPA.gov and information about the majority of state and territorial sites scheduled to be posted in early 2006. To date, we estimate that there are nearly 2,000 marine managed areas around the nation.

In order to better support development of the national system, the MPA Center scaled down its training, technical assistance, and education projects in mid 2005. In June, the MPA Center's Training and Technical Assistance Institute was absorbed by the NOAA Coastal Services Center in Charleston, South Carolina. The MPA Center also decided to phase out its education program at the end of the fiscal year, although the NOAA Office of Education and Sustainable Development generously offered to support the *Information Exchange for Marine Educators* newsletter through fiscal year 2006. In addition to these changes, the MPA Center suspended support for a Pacific Islands coordinator in 2006, and wrapped up its projects in the Pacific Islands in 2005.

Internationally, and working through the Commission on Environmental Cooperation, we continued to lead U.S. participation in the partnership with Canada and Mexico to develop a North American MPA network. With worldwide interest in MPAs as an ecosystem-based management tool on the rise, the MPA Center remains an important information resource and a major mechanism for cooperation among MPA programs and agencies. We are pleased to be a part of the many partnerships to improve coordinated conservation of natural and cultural resources both nationally and internationally.

Sincerely,
Joseph A. Uravitch, A.I.C.P.
Director, National Marine Protected Areas Center

BACKGROUND

The MPA Initiative and National MPA Center

Presidential Executive Order 13158 on marine protected areas (MPAs), signed in May 2000, called for the establishment of the National Marine Protected Areas Center, a collaboration of federal agencies, led by the U.S. Department of Commerce's National Oceanic and Atmospheric Administration (NOAA) and the Department of the Interior. The MPA Center's main task is to consult with government and non-government agencies and the public to develop a scientifically-based, comprehensive national system of MPAs.

To carry out this task, the MPA Center continued a multi-year process to engage the nation in developing a framework for the national system of MPAs. The framework will serve as the set of guidelines for defining, developing, and implementing the national system. In order to develop the framework, the MPA Center is gathering stakeholder and partner input (from federal agencies, states, territories, commonwealths, the MPA Federal Advisory Committee, regional fishery management councils, tribes, local trustees, coastal communities, resource users, and other stakeholders). The MPA Center is also analyzing natural and social science related to marine resources and their use.

Once implemented, the national system of MPAs will represent diverse U.S. marine ecosystems and the nation's natural and cultural resources. It will address common goals, enhance existing systems, and further integrate the management of existing parks, refuges, sanctuaries, estuarine reserves, and fisheries management areas in marine and coastal areas.

National MPA Center Organizational Structure

The MPA Center is headquartered in Silver Spring, Maryland, and coordinates with federal agencies, states, territories, and tribes; supports the MPA Federal Advisory Committee; coordinates marine managed area inventory efforts; and conducts outreach and education. The MPA Center's staff in Santa Cruz and Monterey, California provide a bridge between the science and policy of MPAs by fostering targeted research, hosting workshops, assessing threats to vital habitats and resources, measuring the effectiveness of existing management approaches, and analyzing socioeconomic factors that may impact MPAs. In 2005, the MPA Center supported regional representatives in New England, the Pacific Coast, and the Pacific Islands. The representatives served as on-the-ground links between the MPA Center and regional entities involved in MPA-related activities.

Coordination with the Department of the Interior

To carry out the Executive Order tasks, the MPA Center coordinates with many federal offices including the Department of the Interior's National Park Service, Minerals Management Service, U.S. Geological Survey, U.S. Fish and Wildlife Service, and the Bureau of Land Management. Joint efforts include managing the MPA Federal Advisory Committee, collecting data for the marine managed areas inventory, and working together on the federal interagency working group, in addition to other projects.

National Marine Protected Areas Center Mission

To facilitate the effective use of science, technology, training, and information in the planning, management, and evaluation of the nation's system of marine protected areas.

National Marine Protected Areas Center Vision Statement

An effective, science-based, and collaborative national system of marine protected areas conserving marine ecosystems and cultural resources throughout the U.S.

National Marine Protected Areas Center Goals

- Develop the framework for a national system of MPAs
- Improve MPA stewardship and effectiveness
- Facilitate international, national, and regional coordination of MPA activities

National Marine Protected Areas Center Planning

In 2005, the National Marine Protected Areas Center focused on planning for the national system of MPAs. MPA Center staff and program partners gathered in Virginia for a meeting that provided attendees with an understanding of the national system of MPAs and the process for its development; identified ways in which staff can support the national system development through their roles; and ensured that staff has the basic knowledge and facilitation skills to effectively carry out their job responsibilities in support of the national system.

In addition, staff gathered to develop work plans for a science and analysis foundation for developing an effective national system of MPAs. The meeting focused on plans for characterizations of natural and cultural resources; analysis of patterns and impacts of human uses of U.S. waters; identification of gaps in place-based protection for key habitats; and initiation of a west coast regional pilot project as part of the overall national system planning effort.

Report Overview

This report highlights the accomplishments and milestones of the National Marine Protected Areas Center for the 2005 fiscal year (October 1, 2004-September 30, 2005). Accomplishments and milestones are organized by the goal they support. In addition, the MPA Center's outreach and education accomplishments, which support all MPA Center goals, are highlighted in a separate section.

GOAL: DEVELOP THE FRAMEWORK FOR THE NATJONAL SYSTEM OF MPAS

The past two decades have witnessed an increase in the use of marine protected areas (MPAs) as a conservation and management tool to protect the nation's vital natural and cultural marine resources and areas. MPAs in the United States are now created and managed by a myriad of agencies and programs at all levels of government with diverse conservation objectives. In response to this trend, Presidential Executive Order 13158 directs the MPA Center to work with the Department of the Interior and other agencies and stakeholders to develop a comprehensive plan for an effective, integrated national system of MPAs. Such a national system is needed to coordinate ecosystem-based management activities among the hundreds of federal, state, territory, and tribal MPA authorities with thousands of sites in U.S. waters and their countless MPA types, purposes, and terms.

A major step in this effort is to develop a framework for an effective, science-based national system of MPAs. The framework will describe the rationale, goals and components of the national system, and the processes for designing and implementing it with a strong science foundation and broad stakeholder input. Several efforts were completed in 2005 to support this goal. The draft framework will be available for public comment in April 2006.

Collaborative Planning for the Framework for a National System of MPAs

In 2005, the MPA Center began a collaborative process of engaging and informing the nation on the development of the framework for a national system. The MPA Center held a series of briefings, workshops, and participatory dialogues to gather recommendations and input from the MPA Federal Advisory Committee, government and non-government agencies and organizations, authorities, coastal communities, user groups, and other stakeholders. The feedback gathered at these sessions serve as a cornerstone to drafting the framework. The MPA Center's collaborative efforts are described below.

Briefings on the Framework for a National System

Staff from the MPA Center provided separate internal and external briefings on developing the national system of MPAs. These briefings included updates on efforts to implement Executive Order 13158, a description of efforts to gather input and recommendations from state agencies and public stakeholders, and an explanation of how the MPA Center is coordinating and collaborating with other NOAA programs. Briefings were given to the following leaders, agencies, and organizations:

- NOAA Ocean Council
- NOAA Ecosystem Goal Team
- NOAA National Ocean Service Assistant Administrator
- NOAA National Ocean Service Deputy Assistant Administrator
- NOAA Fisheries Deputy Assistant Administrator
- NOAA Office of Ocean and Coastal Resource Management
- NOAA National Marine Sanctuary Program
- NOAA National Centers for Coastal Ocean Science, Social Science Team

- U.S. Coast Guard's Marine Environmental Resources Coordination Group
- U.S. Navy
- D.C. Marine Community (meeting co-sponsored by International Union for the Conservation of Nature and Natural Resources)
- Various recreation, oil and gas, and industry non-governmental organizations, including the American Petroleum Institute, American Sportfishing Association, National Ocean Industries Association, and National Marine Manufacturers Association
- The Nature Conservancy
- Maryland Coastal Bays Program and Assateague Island National Seashore

Presentations on the Framework for a National System

The MPA Center presented information at several conferences and meetings to inform stakeholders on plans for developing the framework for the national system of MPAs. Presentations focused on educating stakeholders on the national system, increasing stakeholder involvement, building partnerships, and requesting feedback on MPA uses and values as they might relate to developing the national system.

Presentations were delivered at the following events:

- Oceans Policy Committee of the International Association of Fish and Wildlife Agencies Meeting
- Saltwater Sportfishing Partners Meeting
- NOAA Fisheries State Marine Fisheries Directors Biennial Meeting
- Atlantic States Marine Fisheries Commission meeting
- National Fishery Management Council Member Meeting
- New England Fishery Management Council MPA Education and Outreach Workshops
- Northeastern Association of Marine Laboratories Annual Meeting
- Pacific Interstate Fisheries Commission Meeting
- Gulf States Marine Fisheries Commission Meeting
- Managing Our Nation's Fisheries II Conference (sponsored by the Regional Fishery Management Councils and NOAA Fisheries)
- Annual Oceans and Coastal Program Managers Meeting
- National Marine Sanctuary Advisory Council Chairs and Staff Meeting
- National Marine Sanctuary Program's Leadership Team Meeting
- National Marine Sanctuary Program's Managers Meeting for the Maritime Heritage Program
- National Conference of State Historic Preservation Officers
- Seventh Maritime Heritage Conference
- Society for Historical Archaeology Conference
- George Wright Society Conference
- Advocacy Panel at American Zoo and Aquarium Association Annual Meeting
- Coastal Zone '05 Conference (via a panel titled *Developing Recommendations from U.S. States and Territories for a National System of MPAs*)
- White House Cooperative Conservation Conference
- Oceans 2005 Conference

- Meeting with State of Maryland Department of Natural Resources and Maryland Historic Trust representatives
- Meeting with various Delaware archaeology experts (including representatives of Lewes Maritime Archaeology Project, Delaware State Museums, Delaware State Historic Preservation Office, and the U.S. Army Corps of Engineers)
- Meeting with representatives from State of New Hampshire Coastal Program, Department of Fish and Game, and New Hampshire Estuary Project
- Meeting with representatives from State of Maine Coastal Program, Department of Marine Resources, Maine Historic Preservation Commission, Department of Conservation, and the Maine Sea Grant Program
- Alaska Ocean Policy Council Meeting
- Department of the Interior Meetings (including meetings with the Minerals Management Service)
- Department of the Interior's Minerals Management Service Alaska Region Meeting
- Workshop on Integration of Federal Marine Managed Area Programs (also known as the "Seamless Network Workshop")
- National Conference of Canada's Ocean Management Research Network
- Pacific Coast Regional MPA Social Science Workshop
- Coastal States Organization Annual Meeting
- California's Marine Life Protection Act Stakeholder Meeting
- National System of MPAs Article Published in MPA News

Workshops on the Framework for a National System

The MPA Center held a series of workshops in 2005 for federal agencies, states, and other stakeholders to provide feedback on the goals of the national system and the development of the framework. Participants provided information on:

- the process to develop the national system,
- input on the goals and objectives of the national system,
- feedback on their vision for a national system,
- specific considerations for working with their agency or stakeholder group and how a national system could serve various stakeholder interests,
- which natural and cultural resources should be conserved, and
- how NOAA and the Department of the Interior can work with stakeholders and agencies around the country to develop the system.

The following is a description of these workshops.

• Federal Agency Workshop

Held in January 2005 in Washington, D.C, the federal agency workshop included more than 70 field and headquarters participants from ten federal agencies. It was attended by staff from across NOAA programs and offices, Department of the Interior, Department of State, Department of Agriculture, Department of Defense, Department of Homeland Security/U.S. Coast Guard, U.S. Agency for International Development, Environmental Protection Agency, and Fishery Management Councils. Participants provided feedback on the needs of MPA managers, and how the national system can help address marine conservation goals. A

summary of this workshop can be found at http://mpa.gov/national_system/pdf/fed_mpa_wks_rpt032105.pdf.

• Regional State/Territory Workshops

The MPA Center and the Coastal States Organization sponsored three regional workshops titled *Developing the National/Regional System of MPAs from the State and Territorial Perspective*. These workshops were designed to educate, gather state information, and generate recommendations from state coastal, parks, wildlife, fisheries and cultural resource managers regarding their role, opportunities, concerns, and considerations. The first workshop, held in Tiburon, California in February 2005, included participants from the west coast and Pacific Islands region. The second, held in St. Petersburg, Florida in April 2005, included participants from the South Atlantic and Gulf Coast regions. The third, cosponsored by the National Marine Sanctuary Program and held in Chicago, Illinois in June 2005, included participants from the Great Lakes, Northeast, and Mid-Atlantic regions. The comments and recommendations resulting from these workshops can be found at http://mpa.gov/national_system/pdf/final-mpawhitepaper-071505.pdf.

• Regional Public Dialogues

The MPA Center held five public dialogue sessions around the country in 2005 to ensure that the national system will represent the nation's interests in the marine environment. Input collected from these dialogues will be used to develop the national system framework. Dialogues were held in Washington, D.C. in March 2005; Portland, Maine in May 2005; New Orleans, Louisiana (during the Coastal Zone '05 conference) in July 2005; and in San Francisco, California and Seattle, Washington in December 2005 (the latter two meetings were held in fiscal year 2006). On average, 30-50 participants attended these sessions, including representatives from environmental, conservation, recreation, commercial, and industry organizations, as well as local government, coastal states, science, academia, the energy industry, recreational and commercial fishing interests, state and federal agencies, and other public interests. Participant lists and a compilation of participant responses from each workshop are posted on http://mpa.gov/national_system/#workshop.

Marine Managed Areas Inventory

The marine managed areas (MMA) inventory is a multi-agency effort to gather information about the wide range of place-based marine management efforts in the U.S. Examples of marine managed areas include national parks, national wildlife refuges, national marine sanctuaries, national estuarine research reserves, fisheries management areas, state beaches, and state parks. The data collected in the inventory contains a general description and site characteristics such as location, purpose, and type of site, as well as detailed information on natural and cultural resources, legal authorities, site management, and regulations and restrictions.

The marine managed areas inventory:

 helps regional, local, state and federal managers, scientists, non-governmental organizations, and others to better analyze and understand what sites exist and the management capabilities of those sites:

- allows users to analyze and assess issues such as threats and effectiveness in protecting natural and cultural resources; and
- provides a comprehensive information base to assist in the development of a national system of MPAs.

The MPA Center plans to finalize the inventory in 2006. The majority of federal sites are complete and information from 32 of 35 coastal states and territories will be posted to the database in 2006. The MPA Center estimates that there are at least 2,000 marine managed areas in the United States.

A preliminary analysis of the inventory was begun in 2005. This analysis will determine the general trends and purposes of existing marine managed areas, and is the first step in a gap assessment that will enhance planning for the national MPA system.

In 2005, the inventory team continued to promote the inventory through a variety of outreach materials:

- Produced inventory updates for states and territories through a quarterly newsletter.
- Presented a poster entitled "Getting the Most out of the Marine Managed Areas Inventory" at the Coastal Zone 2005 Conference in New Orleans, Louisiana.
- Presented a poster entitled "U.S. Marine Managed Areas Inventory Atlas: A Tool for Visualizing Spatial Data" at the Coastal Geotools 2005 Conference in Myrtle Beach, South Carolina.

Coordination with the Coastal States Organization

The MPA Center and the Coastal States Organization (CSO) continued their close relationship in 2005. The two groups coordinated and/or presented at several workshops and seminars to discuss the development and implementation of the national system of MPAs. Three regional workshops were held to educate, gather state information, and generate recommendations from state coastal, fisheries, and cultural resource managers regarding their role, opportunities, concerns, and considerations related to the national system. A summary white paper report from these workshops entitled *Developing the National/Regional System of MPAs from the State and Territorial Perspective* was presented by CSO during a panel session at the Coastal Zone '05 Conference in New Orleans. The draft summary can be found at http://www.mpa.gov/national_system/pdf/final-mpawhitepaper-071505.pdf.

Other joint projects included presentations to the Interstate Fisheries Management Program Policy Board of the Atlantic States Marine Fisheries Commission and the Ocean Policy Committee of the International Association of Fish and Wildlife Agencies. In addition, CSO maintained their role as liaison between the marine managed areas inventory team and state/territory agencies in the effort to collect, review, and finalize state data for the inventory. The Executive Director of CSO presented testimony to the MPA Federal Advisory Committee on MPA State Advisory Group activities that are coordinated by CSO.

Finally, MPA Center staff traveled to Traverse City, Michigan to attend CSO's 34th annual meeting. While there, the MPA Center Director participated in a panel discussion to address the use of marine managed areas in historic preservation.

Cultural and Historical Resources

The MPA Center's maritime archaeologist serves as a liaison to cultural and historical programs within NOAA and other federal and state agencies.

As part of this work, the National Marine Protected Areas Center engaged in several planning meetings with the National Marine Sanctuary Program, the Department of the Interior, the Navy, and other cultural resource personnel to discuss development of the submerged cultural resource component of the national system of MPAs, strengthening cultural resource programs through collaboration, and increasing public awareness of the nation's maritime heritage, historic shipwrecks, and prehistoric submerged sites. Some examples of these planning meetings included the National Marine Sanctuary Program's Maritime Heritage Program Managers annual meeting, discussions with the Department of the Interior's cultural resource personnel, and visits to Delaware and Maryland to discuss the MPA Center's work with cultural and historic resources. In addition, the MPA Center provided travel funds for state cultural resource managers to participate in three regional workshops on the development of the national system of MPAs.

In summer 2005, the MPA Center hired an intern to work on developing a front-end database for analyzing the cultural resource information in the marine managed areas inventory. As part of this work, the MPA Center was able to standardize the cultural resource data and begin filling in data gaps by working closely with state and federal agencies.

In addition, the MPA Center maritime archaeologist presented papers at the seventh Maritime Heritage Conference in Norfolk, Virginia and the Society for Historical Archaeology thirty-eighth annual Conference on Underwater and Historical Archaeology in York, England. The MPA Center also participated in discussion panels at the National Conference of State Historic Preservation Officers in Washington, D.C.; the fourteenth annual Government Managers Forum in York, England; and the George Wright Society annual meeting in Philadelphia, Pennsylvania.

Social Science

The MPA Center hired a senior social scientist in 2005 to forge strategic partnerships and promote research on the human dimensions of MPAs. Social science is a key component in developing the national system of MPAs, as the success and failure of MPAs is often determined by the human dimensions of coastal and ocean management. The national system will depend on the integration of natural and social sciences and an understanding of the role of humans in ecosystem functioning.

In addition, the MPA Center participated in numerous initiatives to further develop partnerships and build social science capacity within the NOAA community, including the development of joint proposals for the funding of social science research on MPAs; work sponsored by NOAA

Fisheries to develop a model for social impact assessments; and the creation of the National Ocean Service social science plan. The social science plan aims to develop a better understanding of ecosystems and ocean science by acknowledging the role of humans and society and the need for sound research on these dimensions. It describes social science projects currently underway in NOAA, and a vision for a cohesive set of social science activities that support NOAA's mission.

GOAL: JMPROVE MPA STEWARDSHJP AND EFFECTJVENESS

The National Marine Protected Areas Center aims to improve MPA stewardship and effectiveness by strengthening capacity for planning, management, and evaluation within the MPA community. Creating and implementing effective management strategies requires the awareness, understanding, and application of best practices by management and affected stakeholder groups. The National Marine Protected Areas Center targets MPA management staff at the local, state, regional, tribal, and national levels, and reaches out to those affected by management decisions to provide opportunities for substantive involvement in decision-making.

Science and Analysis

Social Science Resources

As part of the MPA Center's ongoing effort to bring its national MPA social science research strategy to the regional level, the MPA Center hosted a workshop on the Pacific coast for representatives from universities, government agencies, and non-governmental organizations from Alaska to California. More than 30 participants at the workshop identified regional social science research priorities and projects pertaining to MPA planning, management, and evaluation for the Pacific coast. They also provided suggestions for building regional interest in and capacity to conduct research on the human dimensions of MPAs.

The MPA Center engaged in other social science projects to develop a work plan and process for mapping human uses in the marine environment to inform the development of the national system of MPAs. A project and literature review was conducted to guide project scoping and a suite of human uses were identified for further study. The MPA Center's human use patterns and impacts project was established to develop, test, and apply a method for documenting patterns of human uses, and their social, cultural and economic significance in marine ecosystems; and to develop, test, and apply models to predict the potential impact of specific human uses on important aspects of MPAs in the national system (i.e. ecosystem integrity, submerged cultural resources, and other users). This information will provide a critical layer in the analysis of priority areas as the MPA Center tests the national system on the west coast starting in 2006. The project will generate a methodological process and guidelines for documenting human use patterns in marine ecosystems; tools for storing, analyzing synthesizing and presenting the data; and tools to assess potential impacts of human uses in a variety of contexts.

Cultural and Historical Resources

To promote collaboration and information exchange among individuals and agencies involved with the preservation and management of cultural and historic resources for future generations, the MPA Center launched a monthly newsletter highlighting marine cultural and historic news and updates from around the world. The publication, *Cultural and Historic Resources*Newsletter, features short summaries and links to news sites or relevant agency websites, and provides contact information when available. The newsletter serves as a primary resource for government and non-governmental partners engaged in MPA cultural resources work, as well as those interested in the subject of maritime heritage. It's distributed to more than 200 primary

subscribers worldwide, and is redistributed to another 100 people through the Maritime Archaeology and Historical Society.

Integrating MPAs and Fisheries Science

Fisheries scientists and conservation biologists have some differing perspectives about how, when, and where MPAs should be used for the management of our nation's marine resources. There are uncertainties about how effective MPAs will be at meeting fisheries and conservation goals. Consequently, there is an urgent need for scientists from both disciplines to integrate their specialized knowledge and expertise into the development of guidelines and methods for the design, implementation, monitoring, and management of MPAs as tools for both fisheries and biodiversity conservation.

To help coordinate this integration, the MPA Center, in partnership with NOAA Fisheries in Santa Cruz, California, convened a working group for participants representing NOAA, academia, and industry to identify priority topics and develop work plans to address key information gaps in the use of MPAs in traditional fisheries management. One of the outcomes of the workshop was agreement on the major scientific challenges for designing and managing MPAs. The participants categorized these challenges as follows:

- connecting scientific topics and MPAs
- managing MPAs for natural heritage purposes
- balancing sustainable fishing, natural heritage, and fisheries objectives for MPAs
- identifying ecological indicators for evaluating sustainable fisheries and natural heritage benefits of MPAs

Benthic-Pelagic Linkage

The MPA Center held a two-day workshop with over forty scientists, research managers, and recreational fisherman to discuss the effects of recreational pelagic fishing on benthic communities and to determine if such fishing is compatible with MPAs. Vertical zoning was explored as an option for protecting benthic communities without eliminating recreational pelagic fishing. Participants developed general principles and guidelines that describe those cases in which vertical zoning is appropriate for MPAs. Several products are expected to result from this workshop, including a general summary of guidance, future research, and a scientific peer reviewed publication as it applies to specific species.

Natural Resource Characterization

The MPA Center designed methodology for characterizing natural resources within U.S. marine areas for national MPA system development purposes. Part of the effort includes gathering an inventory of existing data and databases on natural marine resources, with an initial focus on the west coast. Once a picture of existing data is drawn, the MPA Center plans to develop standard methodologies for data collection and integration.

Inventory of De-Facto MPA Sites

Not all closed areas are MPAs and some areas are closed for non-conservation purposes. To understand this critical part of the ocean governance picture, the MPA Center has created an inventory and associated GIS database of de facto MPAs throughout the United States. The de facto MPA inventory allows for a comprehensive and objective assessment of the nature and

extent of ocean areas closed because of security zones, safety areas, navigation lanes, etc. This comprehensive inventory will then be evaluated to determine the impacts of the de facto MPA on human users, and their potential contribution to conservation and management of the nation's marine ecosystems. The de facto MPA inventory includes over 1,200 classified sites throughout U.S. and territorial waters, each with digital boundaries.

Inventory Analysis

The MPA Center initiated an effort to consolidate and standardize information on existing MPAs into an analysis database. A critical component of the analysis database is the MPA classification system, which categorizes MPA sites based on conservation focus, level of protection, permanence of protection, constancy of protection, ecological scale of protection, and restrictions on extractions. The analysis database will provide the foundation for comparisons among existing and potential MPAs. Spatial boundaries for each MPA will be linked to the standardized information in the analysis database, thus allowing for comprehensive regional and place-based evaluations. This multi-faceted analysis tool will provide crucial information for developing the national system of MPAs.

Training

Managing Visitor Use in Coastal and Marine Protected Areas

The MPA Center, in cooperation with the NOAA Coastal Services Center, taught visitor use management workshops for coastal and marine protected area resource managers and associated environmental professionals at different locations around the United States in 2005, including the Hudson River National Estuarine Research Reserve in Tivoli, New York; Grand Bay National Estuarine Research Reserve in Biloxi, Mississippi; ACE Basin, North Inlet Winyah Bay, and Sapelo Island National Estuarine Research Reserves in Charleston, South Carolina; and Rookery Bay National Estuarine Research Reserve in Naples, Florida.

These workshops introduced participants to a detailed problem identification process, methods for identifying indicators and standards for monitoring visitor impacts, and a planning framework for balancing visitor use and resource protection in coastal and marine protected areas. The workshop also incorporated guest presentations of local visitor use management issues and a field exercise to illustrate methods for monitoring visitor impacts in a natural setting. Participants included representatives from local, state, and federal natural resource management agencies, local, regional, and national nonprofit conservation organizations, and academia.

MPA Management Effectiveness Initiative

In early 2005, the MPA Center piloted an MPA effectiveness training program for the Florida Aquatic Preserve Program in Tallahassee, Florida. This training was developed to address the needs of coastal managers to conduct informed program evaluations and monitor management effectiveness, which are integral to the success and appropriate application of MPAs. Working with officials in Florida, the training involved identifying long-term goals for the aquatic preserve system, drafting an outline for site management plans, examining possible indicators, and reviewing stakeholder participation strategies.

Based on feedback from the pilot and subsequent training, the training program was revised and handed over to the NOAA Coastal Services Center in Charleston, South Carolina, for any further revisions or training requests.

Workshop on "Understanding MPAs"

In 2005, the MPA Center once again partnered with Coastal America to bring the full-day workshop "Understanding Marine Protected Areas" to a number of aquariums designated as Coastal Ecosystem Learning Centers, including the Mystic Aquarium in Mystic, Connecticut; the New York Aquarium in Brooklyn, New York; the National Mississippi Museum and Aquarium in Dubuque, Iowa; and the North Carolina Aquarium in Fort Fisher, North Carolina. These workshops provided training to stakeholders, including the general public, on the basic principles and issues surrounding MPAs. Workshop topics included MPA types and uses, history, the role of science, and information on how to get involved.

Based on the success of the full-day "Understanding Marine Protected Areas" workshop, the MPA Center created a condensed, one-hour presentation on U.S. MPAs for use at conferences and other relevant venues. This one-hour version was presented to internal NOAA staff and featured during a panel session at the annual George Wright Society Conference in Philadelphia.

Course on Negotiating for Coastal Resources

This course, developed by the MPA Center and the NOAA Coastal Services Center, teaches when, what, and how to negotiate interagency relationships and coastal issues. It helps managers distinguish the roles of advocacy, negotiation, facilitation, education, and outreach. The MPA Center handed this training offering to the Coastal Services Center in mid 2005.

Technical Assistance

Training and Technical Assistance Database

The MPA Center, with support from the NOAA Coastal Services Center, developed a searchable database of MPA-related technical assistance and training programs from various organizations around the U.S. In order for this information to be easily accessible and helpful to the user, it is being converted to an external, publicly-accessible database located on MPA.gov.

Technical Assistance for Addressing Visitor Use at MPAs

The MPA Center offered the opportunity to MPA site staff to build capacity and foster increased application of systematic natural resource recreation monitoring, planning, and management strategies drawing from the "Managing Visitor Use" training that is offered by the NOAA Coastal Services Center. Serving as consultants, the MPA Center worked with site staff to gather visitor use and natural resource data in order to complete "rapid recreation assessments" for project sites. Workshops were held to present and discuss specific visitor use management issues and potential monitoring and management actions for long-term recreation management. The four sites that participated were Wells National Estuarine Research Reserve, Rachel Carson National Wildlife Refuge, Rookery Bay National Estuarine Research Reserve, and Ten Thousand Islands National Wildlife Refuge. The MPA Center handed this technical assistance offering to the Coastal Services Center in mid 2005.

Website on Social Science Methods for Marine Protected Areas

The NOAA Coastal Services Center, in collaboration with the MPA Center, launched a website on the human dimensions of marine and coastal resource management. The website focuses on a number of the themes identified and described in the MPA Center's national social science research strategy for MPAs, including use patterns; attitudes, perceptions and beliefs; governments, institutions and processes; communities; and, economics. It provides overviews of methodological tools, case studies, and reference materials.

Developing Digital Marine Boundaries

A draft of the Marine Boundaries Best Practices Handbook was completed and a final version is in progress. The handbook will provide best practices for crafting legal descriptions and digital boundaries for marine managed areas. The handbook was a joint project between the Federal Geographic Data Committee Marine Boundary Working Group, the MPA Center, and NOAA's Coastal Services Center.

Data Tool to Monterey Bay National Marine Sanctuary

MPA Center staff delivered final products for the Beach Data Volunteer Data Entry Tool to the Monterey Bay National Marine Sanctuary. The tool will help sanctuary staff and Beach Comber volunteers organize information on physical and biological conditions of the beaches on the sanctuary's edge. Using the tool via the web, volunteers will be able to enter the beach monitoring data directly into a database so that it can be easily accessed and analyzed. The Monterey Bay National Marine Sanctuary will begin incorporating the tool into their volunteer monitoring program in the near future.

Internet Mapping Website

The MPA Center developed an Internet mapping website in partnership with the South Carolina Department of Natural Resources to publish more than 30 years worth of fishery survey data that are available for online mapping and analysis. The Southeast Geographic Fishery-Independent Survey and Historical (SEA-GEOFISH) database is a web-based mapping application that allows stakeholders to visualize and analyze fishery monitoring and assessment data. The application provides access to data on species distribution, abundance, biomass, and spawning, as well as GIS-based statistical tools for better analysis of the data.

Inventory of Decision-Support Tools for MPAs

In an effort to document existing GIS decision-support tools to aid MPA managers, the MPA Center, in cooperation with the NOAA Coastal Services Center, compiled an "Inventory of GIS-Based Decision-Support Tools for MPAs." The report focuses on GIS tools with the highest utility for MPA processes. Each tool summary includes a description of what the tool does, the data and software needed to run it, and contact information. In addition, several tools are highlighted in greater detail, providing examples of how they have been used in MPA zoning and monitoring activities. The inventory is intended as a living document and will be updated to include new tools on a regular basis.

Enforcement Report

The MPA Center, in cooperation with the NOAA Coastal Services Center, published "Enforcing U.S. Marine Protected Areas: Synthesis Report," which details the challenges, needs, and

suggestions of coastal and marine resource managers, enforcement agencies, attorneys, education/outreach specialists, and numerous other public and private stakeholders. Using interviews and case studies, the authors summarize existing literature on MPA enforcement, examine a range of perspectives on the issue, and provide suggestions for effective enforcement of MPAs.

Navigating the Nation's Marine Managed Areas

The MPA Center is collaborating with the NOAA Office of Coast Survey to provide data from the marine managed areas inventory to mariners and other users about the location, purpose, and allowable activities in existing sites through the U.S. Coast Pilot® and other navigation products. A final project description was released to the public in August 2005. The project is now in production phase. Priority regions for data synthesis and publication in fiscal year 2006 include the west coast of the U.S. and the Florida Keys.

GOAL: FACILITATE INTERNATIONAL, NATIONAL, AND REGIONAL COORDINATION OF MPA ACTIVITIES

The National Marine Protected Areas Center facilitates collaboration among MPA sites and agencies, fosters meaningful stakeholder participation in regional activities, and improves national and international linkages across MPA programs.

Marine Protected Areas Federal Advisory Committee

The Marine Protected Areas Federal Advisory Committee provides expert advice to the Departments of Commerce and the Interior on the implementation of MPA Executive Order 13158. The 30 Committee members are appointed by the Secretary of Commerce and, with their diverse backgrounds and experience, represent parties interested in the use and impact of MPAs as a management tool. The members represent a broad stakeholder community, including scientists, commercial and recreational fishermen, state and tribal resource managers, environmentalists, and other resource users. In addition, nine federal agencies are represented by non-voting members of the Committee. The Committee, which is supported by the National Marine Protected Areas Center, met twice in 2005.

In February 2005, the Federal Advisory Committee met in Arlington, Virginia to review three subcommittee reports and begin developing a full Committee report. In addition, the Committee heard presentations from fishery management councils and tribal resource managers from different regions. James Connaughton, chairman of the President's Council on Environmental Quality, addressed the Committee on the role of MPAs within the U.S. Ocean Action Plan, and participated in a lively discussion with Committee members.

In May 2005, the Federal Advisory Committee met in Portland, Maine to finalize its recommendations, and, after much discussion, voted unanimously to approve them. The recommendations were delivered to the Departments of Commerce and the Interior in June 2005. Dr. Daniel Bromley, the chairman, met with Under Secretary of Commerce for Oceans and Atmosphere Conrad C. Lautenbacher and Department of the Interior Assistant Secretary for Lands and Minerals Management Rebecca Watson in August 2005 to brief them on the Committee's recommendations. In addition, the report was distributed to members of Congress, researchers, federal and state agencies, and other interested parties, and made available on the MPA.gov website.

Marine Protected Areas State Advisory Group

The Marine Protected Areas State Advisory Group (SAG) provides guidance to the MPA Center on matters relevant to state interests. Members of the SAG are state leaders in natural and cultural coastal resource management, and are in a unique position to both assure that the forthcoming national system of MPAs will accurately reflect the interests of their respective states and to improve the effectiveness of the system to protect and enhance cultural and living marine resources. To accomplish these goals, the SAG participates in monthly conference calls and assists the Coastal States Organization with determining how states and territories should be integrated into the development of the framework for the national system of MPAs. In 2005, the SAG expanded their membership to be more inclusive of broad state interests by including state

fisheries management representatives, revised their mission statement to reflect this change, and completed a contact directory that includes state and territorial coastal zone managers, fishery managers, and other relevant state contacts.

International Coordination

The National Marine Protected Areas Center coordinated with various international parties in 2005 on global MPA issues.

North American MPA Network

The MPA Center continued to lead U.S. participation in the development of the North American MPA Network (NAMPAN) alongside Parks Canada, Mexico's National Commission on Protected Areas, and the tri-national Commission for Environmental Cooperation. In early 2005, the country leads for NAMPAN organized a workshop held in Loreto, Mexico. The focus of the conference was to develop a pilot project for NAMPAN, based on the migration route of Gray whales along the Pacific coast. Three sessions – "Measuring the Effectiveness of MPAs," "Socioeconomic and Ecological Benefits of MPAs," and "Creative Financing of MPAs" – showcased 30 presentations made by scientists, government officials, and NGO representatives from across North America.

Based on the presentations made in Loreto, the country leads met in Silver Spring, Maryland, to further develop the scope of the pilot project, strategize on the operating plan, and discuss coordination with other tri-national agreements. The principal representatives agreed to convene a tri-national MPA monitoring workshop in Ventura, California in February 2006. The workshop will begin the establishment of a NAMPAN-related monitoring network in the Baja-to-Bering region and develop relationships among the three nations' MPA programs.

The representatives also assessed the commonality of missions for the Commission on Environment Cooperation, Security and Prosperity Partnership, and Trilateral Committee for Wildlife and Ecosystem Conservation and Management, as well as other bi-national, tri-national, and multi-national agreements with MPAs responsibilities. The representatives identified a considerable number of common participants and tasks that could result in plans for streamlining and improved effectiveness.

A major product of this tri-national effort was publication of *Marine Priority Conservation Areas: Baja California to the Bering Sea* and supporting poster, which were prepared by the Marine Conservation Biology Institute and the Commission for Environmental Cooperation. These documents provide a model for doing conservation at a continental scale and a first framework for cooperative conservation across the nations.

Canada/Mexico/U.S. Trilateral Committee for Wildlife and Ecosystem Conservation and Management

In 2005, the MPA Center, in collaboration with NOAA Fisheries, initiated participation in the Canada/Mexico/U.S. Trilateral Committee for Wildlife and Ecosystem Conservation and Management. After 10 years of focusing its efforts on terrestrial environments, the Trilateral adopted marine issues into its component tables at its 10th annual meeting in May 2005. The Trilateral is composed of six working tables: the executive table, CITES, law enforcement,

migratory birds and wetlands, species of common concern, and ecosystem conservation. The MPA Center participates at the ecosystem conservation table.

In order to prepare for a follow-up meeting scheduled for 2006, the MPA Center met with colleagues from the U.S. Fish and Wildlife Service, the Canadian Wildlife Service, and Mexico's Semarnat and CONANP in Ensenada, Mexico. The follow-up meeting, to be held in San Diego from May 15-26, 2006, will formerly incorporate marine issues into the Trilateral forum.

International MPA Congress

The MPA Center partnered with the National Ocean Service International Program Office and National Marine Sanctuary Program to coordinate NOAA participation in the first International MPA Congress (IMPAC), held in October 2005 in Geelong, Australia. The MPA Center directed the development and organization for the NOAA exhibit, resulting in participation from six offices: Office of Response and Restoration Corals Program, National Marine Sanctuary Program, National Centers for Coastal Ocean Science, MPA Center, NOS Public Affairs, and NOAA Fisheries Office of Constituent Affairs. The MPA Center participated in a panel discussion focused on national MPA system efforts, and presented a poster that highlighted North American MPA partnerships under the Commission for Environmental Cooperation. More than 800 policy makers, government officials, non-governmental representatives, scientists, and educators from around the world attended IMPAC.

Information Exchanges with Delegates

In an effort to share ideas and strengthen collaboration, the National Marine Protected Areas Center participated in separate information exchanges with delegates from Mexico, Chile, Brazil, and the IUCN, including with:

- Flavio Chazaro, Mexico's MPA program manager, about Executive Order 13158 and its implementation by the MPA Center and federal agencies. This information will be used as source material to prepare transition and option papers for the next Mexican Administration.
- A delegation of representatives from Chilean ministries to present the U.S. MPA initiative (the MPA Executive Order). The meeting was part of a study tour developed by the Environmental Law Institute.
- Dr. Alexandre Cordeiro from the Republic of Brazil Special Secretariat for Aquaculture and Fisheries to present the development of a national system of MPAs.
- Dr. Peter Shadie of the World Conservation Union's (IUCN) World Commission on Protected Areas (WCPA) to assess mutual priorities and identify potential areas of collaboration.

Gulf of Maine

The National Marine Protected Areas Center's northeast regional coordinator continued to work closely with the Gulf of Maine Council as a member of the Gulf of Maine Council working group and as co-chair of the habitat conservation subcommittee. The Council consists of representatives from U.S. state and Canadian provincial and federal governmental agencies that seek to maintain and enhance environmental quality in the Gulf of Maine for sustainable resource use by existing and future generations.

In October 2004, the MPA Center assisted with the Gulf of Maine Summit held in St. Andrews, New Brunswick. The theme of the summit was "Committing to Change," and the centerpiece of the Summit was a report entitled *Tides of Change Across the Gulf: An Environmental report on the Gulf of Maine and Bay of Fundy*. About 250 delegates were in attendance from around the region. It was during the summit that the premiers from Nova Scotia and New Brunswick and the governors from Maine, Massachusetts, and New Hampshire released their "Committing to Change" proclamation.

The MPA Center continued to support the Gulf of Maine Council through co-chairing its habitat conservation subcommittee on a two-year project on Gulf of Maine marine habitats. In 2005, the Gulf of Maine Council distributed the *Gulf of Maine Marine Habitat Primer*, which provides an overview of marine habitats in the Gulf of Maine. Following from the *Primer*, the Gulf of Maine Council organized a workshop titled "Impacts to Marine Habitats" in cooperation with the Nature Conservancy. The workshop focused on primary human impacts for four marine habitats. The MPA Center's New England regional coordinator will become the U.S. co-chair of the Gulf of Maine Council's habitat conservation subcommittee in 2006.

National Coordination

The National Marine Protected Areas Center's key responsibilities include consulting with stakeholders on the design of a national system of MPAs and working with federal agencies and programs to enhance cooperation among federal agencies, site managers, and other partners. The MPA Center engages in several methods to continue communication among agencies.

Federal Coordination

In 2005, the National Marine Protected Areas Center briefed several federal agencies on the status of MPA Center activities, focused on developing the framework for the national system of MPAs and supported the MPA Federal Advisory Committee.

In addition to federal briefings, the MPA Center moderated a panel on marine protected areas and cold water corals at the "Managing the Nation's Fisheries" conference sponsored by the Regional Fishery Management Councils and NOAA Fisheries. The session included discussion on the multiple goals of MPAs, the need to consider the social and economic impacts of closures, and the importance of including all stakeholders in decision making.

The MPA Center director attended the White House Conference on Cooperative Conservation, where he participated in sessions on improving coordination across federal-state-tribal and private sector lines. He also discussed the status of the MPA Executive Order with representatives of the Department of the Interior and non-governmental organizations.

The MPA Center and NOAA Coastal Services Center met with Rick Lemon, director of the Department of Interior's National Conservation Training Center, to discuss how NOAA and the Department of the Interior can work together to improve training opportunities for coastal resource managers. The meeting began with an assessment of each agency's program strengths, limitations, and similarities in audiences. Discussions then focused on next steps that would be mutually beneficial.

Federal Interagency Working Group

The MPA Center launched the Federal Inter-Agency MPA Working Group in 2004 to coordinate implementation of the Executive Order and support federal agency involvement in the Federal Advisory Committee. The Working Group met four times in 2005. They helped plan a workshop for federal agencies to provide input on the development of the national MPA system framework. The two-day workshop was held in January 2005, and more than 80 representatives attended.

Throughout the year, MPA Center staff met with the Working Group and individually with federal agencies to develop language for the section of the framework that will address the requirement to "avoid harm" to the resources protected by an MPA. This language will be included in the draft framework that will be published for public comment in 2006. Other issues addressed by the Working Group included reviewing and responding to the MPA Federal Advisory Committee recommendations, and providing input on the process for admitting federal sites into the national system.

The Working Group includes representatives of NOAA (National Marine Sanctuaries, National Estuarine Research Reserves, MPA Center, NOAA Fisheries), Department of the Interior (National Park Service, US Fish and Wildlife Service, and Minerals Management Service), Department of Defense (Navy and Army Corps of Engineers), Environmental Protection Agency, Homeland Security (Coast Guard), Department of Agriculture, Department of State, and the U.S. Agency for International Development.

Stakeholder Coordination

Among other outreach activities in 2005, the National Marine Protected Areas Center engaged stakeholders around the nation to gather feedback on the framework for the national MPA system. Five public dialogue sessions were held (the last two in fiscal year 2006) to record stakeholder comments on MPA values and issues related to the development of the national system. These public dialogue meetings were held in strategic regions around the nation to gain as much insight as possible from the American public. The meetings were held in Washington, D.C.; Portland, Maine; New Orleans, Louisiana; San Francisco, California; and Seattle, Washington, and attracted more than 200 members of the public. Other national system outreach included coordinating the D.C. Marine Community Brownbag (co-sponsored by International Union for the Conservation of Nature and Natural Resources), and meetings with various recreational fisheries, oil and gas, and industry non-governmental organizations (co-hosted by the American Petroleum Institute). The MPA Center has published a comprehensive list of stakeholder participants and their comments regarding the national system on the MPA.gov website.

Regional Coordination

Regional coordination offers an opportunity to link management efforts at individual sites into larger, more effective networks, and to address issues of regional importance. The National Marine Protected Areas Center supported regional coordination in several ways, including the

placement of regionally-located staff members and the implementation of regionally-focused projects.

Regional Coordination Team

In 2005, the MPA Center continued to build regional coordination capacity through the regional coordination team. This team helped to link MPAs at the regional level, identify opportunities for collaboration, strengthen natural and social science to support regional MPA natural and cultural resource management efforts, and support the development of the national system of MPAs.

They focused on implementing three core functions:

- 1) Monitoring regional landscapes
- 2) Building and coordinating partnerships
- 3) Supporting and informing MPA science and technical training and assistance

The MPA Center formalized cooperative efforts between Great Lakes regional staff of the National Marine Sanctuary Program and the MPA Center's New England regional coordinator to accomplish these functions. Members of the regional team actively provided support for key activities of regional partners, such as the New England Fishery Management Council, Northwest Straits Commission, Gulf of Maine Council, and states of Washington and Massachusetts.

Regional Staff Members

The National Marine Protected Areas Center continued regional coordination in 2005 through its regionally-focused staff members. The MPA Center's New England coordinator based in Boston, Massachusetts, was hosted by the National Park Service Northeast regional office. The Pacific coordinator for the coast and the U.S. Pacific Islands resided in the MPA Center's offices in Monterey, California. And the Pacific Islands local liaison (co-funded with the NOAA Coral Conservation Program) served the MPA Center part-time from Hawaii at the NOAA Pacific Services Center. These regional staff members served as on-the-ground links between the MPA Center and regional entities, states, and organizations involved in MPA-related activities.

Regional Projects

Many projects and activities were supported through the National Marine Protected Areas Center's regional presence.

- MPA Center joins with California Marine Life Protection Act and Monterey Bay National Marine Sanctuary to Create Decision Support Tool
 - The MPA Center collaborated with the Monterey Bay National Marine Sanctuary and the California Marine Life Protection Act team to produce a web-based, spatial decision support tool to support central California MPA processes. The tool was designed by a working group of members from each agency. The goals of the tool are to allow equal access to the tool by multiple users in various settings; provide spatial datasets relevant to MPA processes; encourage users to evaluate the datasets using a simple web interface; and capture and present MPA ideas generated by stakeholders and working groups.
- MPA Educational Newspaper Insert Published in Hawaii

With the support of the MPA Center, the Hawaii Department of Land and Natural Resources, Division of Aquatic Resources, published an insert on marine protected areas in the *Honolulu Advertiser*, a major Hawaii newspaper. The 16-page, color newspaper insert appeared in March 2005 and described the historical and cultural context of MPAs in Hawaii, MPAs and ecosystems, stressors to and conditions of Hawaii's marine ecosystems, current MPAs in the main Hawaiian Islands and the status of MPAs in Hawaii and other parts of the Pacific, benefits and drawbacks of MPAs, what Hawaii is doing regarding MPAs, and examples of how the community could get involved in MPA activities.

• Pacific Islands Marine Protected Areas Community Workshop

In 2005, the MPA Center facilitated a meeting in Guam of more than 50 MPA leaders from around the Pacific Islands. During the four-day meeting, the leaders discussed their common strengths, challenges, and commitments to work together to build effective MPAs in the region. The workshop was a joint effort by the National Marine Protected Areas Center and the Office of Ocean and Coastal Resource Management's Coastal Programs Division. Workshop representatives, including governmental and non-governmental representatives from the U.S. Pacific Islands, Freely Associated States of the Pacific, and Fiji developed a shared vision and regional plan of action for strengthening their individual and collective MPA efforts. The group reached agreement that MPAs are vital tools for ensuring a sustainable future for the region's island cultures and economies, and committed to work together in an evolving, regional Pacific Islands MPA community. Other organizers included NOAA Fisheries Pacific Islands regional office, the Nature Conservancy, and the Community Conservation Network. The University of Guam Marine Lab co-hosted the workshop and funding was provided by the NOAA Coral Reef Conservation Program and Pacific Services Center.

• Global Socioeconomic Monitoring Initiative for Coastal Management

Recognizing the need for clear, concise guidance on how to monitor socioeconomic conditions for the benefit of coastal management, NOAA, in partnership with several global and regional organizations, began coordinating the Global Socioeconomic Monitoring Initiative for Coastal Management. The goal is to increase coastal managers' capacity to understand and incorporate socioeconomics into coastal management programs by establishing monitoring programs at sites around the world.

The MPA Center assisted with an organizational meeting in February 2005 with regional partners to discuss current socioeconomic monitoring activities and future needs in the Pacific Islands. This meeting was attended by representatives from NOAA, South Pacific Regional Environmental Programme, Locally Managed Marine Area Network, University of the South Pacific, Global Coral Reef Monitoring Network, University of Guam, Foundation of the Peoples of the South Pacific International, World Wildlife Fund, Wildlife Conservation Society, Secretariat of the Pacific Community, World Fish Centre, and the Pacific Islands Forum Secretariat. A workshop to draft relevant guidelines for the region and fundraising to hire a regional coordinator are planned for 2006.

• MPA Specialist Hired in Commonwealth of the Northern Mariana Islands

The MPA Center provided technical assistance to the Commonwealth of the Northern Mariana Islands to hire an MPA specialist, who will assist the Commonwealth with the establishment of an MPA program and serve as an MPA activities liaison between the MPA Center and the Commonwealth.

• New England Fishery Management Council

The National Marine Protected Areas Center supported the New England Fishery Management Council with two outreach and education workshops in Rhode Island and Maine in May 2005. The workshops served to educate stakeholders on the use of MPAs as a tool in fisheries management and gather input on developing a formal MPA policy. The MPA Center's New England regional coordinator participated in the steering committee and gave the introductory presentation at the workshops. At their September 2005 meeting, the New England Fishery Management Council adopted an official MPA policy, which was largely based on the discussion from the workshops.

• Gulf of Maine

The MPA Center continued to host quarterly NOAA Gulf of Maine coordination meetings, with discussion focused on updates on MPA- or ecosystem-based management activities in the region.

• Online Regional Information Centers Launched

In an effort to help stakeholders stay informed about ongoing MPA planning processes across the nation, the MPA Center launched web-based MPA Regional Information Centers in 2005. The Information Centers, housed on www.MPA.gov, provide "one-stop-shopping" for comprehensive information on ongoing federal, state, and tribal MPA planning processes. Stakeholders can search for MPA planning processes by region of the U.S. (including the Pacific Coast, Pacific Islands, Gulf of Mexico, Mid Atlantic, New England, Great Lakes, and Caribbean regions), or by state.

The Regional Information Centers database was designed with the assistance of the NOAA Special Project Office. They were adapted based on a pilot project in 2002 that tracked Pacific Coast MPA planning process.

OUTREACH AND EDUCATION

The MPA Center's outreach and education activities increase understanding and awareness of MPAs among government agencies, coastal and marine educators, managers, and stakeholders. They support the development of programming and materials that incorporate MPA themes and messages. Several of these 2005 initiatives are listed below.

MPA.gov

The U.S. website on marine protected areas, http://mpa.gov, continued to provide stakeholders with MPA information, tools, and MPA programs. In 2005, the site averaged more than 400,000 hits per month (an 8 percent increase from 2004), 43,000 pages viewed per month (a 7 percent increase from 2004), and nearly 15,000 downloads per month (a 5 percent increase from 2004). New information was added to the website, including:

- Minutes, transcript, and presentations from MPA Federal Advisory Committee meetings in Arlington, Virginia and Portland, Maine in 2005.
- A section on developing the national system of MPAs, including background information on MPAs and the Executive Order on MPAs, reasons for and benefits of the national system, and agendas, notes, and presentations from each of the federal, state, and public dialogue meetings held.
- Regional Information Centers database, allowing stakeholders to track MPA planning processes across the U.S.
- Issues of the MPA Center's 2005 newsletters: MPA Connections, Information Exchange for Marine Educators, and Marine Cultural and Historic Resources
- Several new documents and publications, including Regional Priorities for Social Science Research on Marine Protected Areas, Inventory of GIS-Based Decision-Support Tools for MPAs, and Enforcing U.S. Marine Protected Areas: Synthesis Report.

MPA Virtual Library

The MPA Virtual Library grew considerably in 2005. Nearly 400 items (including books, reports, conference proceedings, journal articles, conferences, and website) were added to its MPA collection, bringing the total number of resources available to more than 1,500.

In 2005, the NOAA Central Library created an online MPA Center History Collection, which documents the formation, organization, statutory authority, management, and operations of the MPA Center. The physical collection is stored in the Rare Book Room in the NOAA Central Library.

Community Events/Booths

The National Marine Protected Areas Center participated in a number of outreach and education events aimed at reaching students, teachers, and community members at the local and national level. Examples of events where the MPA Center participated included:

- *Make a Splash with Project WET*, Washington, D.C.
- Maury Project Education Workshop, Silver Spring, Maryland
- University of Delaware's 29th Annual Coast Day, Lewes, Delaware
- National Fishing and Boating Week, Washington, D.C.

• Coastal Zone 05, New Orleans, Louisiana

Special Presentations

The MPA Center hosted two special presentations for NOAA staff. The first session was a brownbag on the topic "Stakeholder Involvement in Recent Marine Protected Area Processes: Identifying Lessons Learned," which focused on the findings from a lessons learned project released by the MPA Center in 2004. The presentation highlighted strengths and weaknesses of six MPA processes studied for the project and provided overall recommendations for future and ongoing MPA planning efforts. The second presentation was entitled, "Understanding Marine Protected Areas," and was adapted from a full-day workshop. This one-hour presentation covered basic information about MPAs, including the many types and purposes of MPAs, the MPA Executive Order, the MPA classification system, authorities and legislation, natural and social science, enforcement, effectiveness, stakeholder involvement, and coordination.

The MPA Center invited Sherman's Lagoon cartoonist Jim Toomey to speak at the annual National Marine Educators Association (NMEA) conference in July 2005. Toomey designed an MPA poster for the MPA Center's use in 2001, and contributed several original cartoons for the Center's education program. At the NMEA conference, his presentation was part of the Marine Science Symposium, under the theme, "Multidimensional Marine Science: Culture and the Arts."

Outreach and Education Materials

Several MPA-themed education and outreach materials were produced in 2005. As part of the *Discovery Classroom* program, NOAA's National Ocean Service worked with the MPA Center to develop lesson plans for teachers of grades nine through twelve to use when addressing the topic of MPAs. The MPA Center created a fact sheet focusing on MPA cultural and historic resources, and began drafting a middle school lesson plan that focuses on marine protected areas topics. The draft lesson plan was piloted at the Tennessee Educators of Aquatic and Marine Sciences' spring conference.

The MPA Center's efforts to develop the national system of MPAs were featured in the July 2005 issue of *MPA News*, an international newsletter published monthly by Marine Affairs Research and Education, in association with the University of Washington. The article examined the MPA Center's progress and its plans to continue working with government agencies, communities, and other stakeholders to develop the framework for the system through a series of public dialogues and other workshops. The article also included a question and answer feature with the MPA Center's national system coordinator and the communications director.

MPA Center Newsletters

The MPA Center made progress toward informing and updating stakeholders on activities, plans, and accomplishments via three newsletters, all of which are archived on the www.MPA.gov website:

• MPA Connections

The National Marine Protected Areas Center's primary newsletter, *MPA Connections*, celebrated its three-year anniversary in November 2005. The newsletter provides updates on the MPA Center's resources, training, research, management tools, publications, websites,

public meetings, and the work of the MPA Federal Advisory Committee. *MPA Connections* is distributed via listserv to more than 3,000 recipients worldwide. Some regular features include the "Clarifying Misconceptions about MPAs" series and profiles of MPA volunteers and Federal Advisory Committee members.

• MPA Cultural and Historic Resources Newsletter

In 2005, the MPA Center launched a monthly newsletter, *MPA Cultural and Historic Resources*, which highlights marine cultural and historic news and updates from around the world. The newsletter serves as a prime resource for government and non-governmental partners engaged in MPA cultural resources work, as well as those interested in the subject of maritime heritage.

• Information Exchange for Marine Educators

In 2005, the MPA Center continued distributing the monthly email newsletter for coastal and marine educators, titled *Information Exchange for Marine Educators*. The newsletter features a list of MPA educational programs, new opportunities, calls for abstracts, funding and professional development opportunities, and websites of general interest to marine educators. It is distributed to more than 900 recipients, posted on the MPA.gov website, and made available through the Department of the Interior's National Park Service's Research Learning Centers Clearinghouse educational website. At the end of fiscal year 2005, the *Information Exchange for Marine Educators* transitioned to support by the NOAA Office of Education and Sustainable Development.

CONFERENCES AND WORKSHOPS

As part of its mission, the National Marine Protected Areas Center participated in and/or sponsored several conferences and workshops in 2005. In some cases, National Marine Protected Areas Center staff members were presenters and facilitators. Many of the following conferences and workshops allowed the National Marine Protected Areas Center to display its latest educational exhibits, outreach materials, and updates on developing the national system of MPAs. Such conferences included:

- Coastal GeoTools '05 Conference
- Tennessee Educators of Aquatic and Marine Sciences' Spring Conference
- National Marine Educators Association Annual Conference
- American Fisheries Society Annual Conference
- George Wright Society Conference
- North American Association of Environmental Educators Conference
- National Interpreters Association Conference
- National Conference of Canada's Ocean Management Research Network
- Northeastern Association of Marine Laboratories Annual Meeting
- Managing Our Nation's Fisheries II Conference
- Annual Oceans and Coastal Program Managers Meeting
- National Conference of State Historic Preservation Officers
- Seventh Maritime Heritage Conference
- Society for Historical Archaeology Conference
- American Zoo and Aquarium Association Annual Meeting
- Coastal Zone '05 Conference
- White House Cooperative Conservation Conference
- Oceans 2005 Conference
- Coastal States Organization Annual Meeting