

NOAA PROGRESS REPORT

Status of MPA Executive Order

13158 and National Marine

Protected Areas Center

Fiscal Year 2006



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or contact <u>mpainfo@noaa.gov</u> .

Message from the Director of the National Marine Protected Areas Center

This has been a year of progress, despite the unexpected reduction in the MPA Center's funding for this year to a level well below the President's request. We reconsidered our priorities and made some staff reductions. Our priorities for the year included: publishing the *Draft Framework for the National System of MPAs*; advancing the science and governmental coordination work of the West Coast MPA Pilot; supporting the MPA Federal Advisory Committee; and continuing to provide the public and agencies easy access to information through the MPA.gov website and publications. We have accomplished these tasks.

Our main focus in 2006 was to prepare and release the national system draft framework for a 145-day public comment period. We are pleased that Commerce Secretary Carlos M. Gutierrez and Interior Secretary Dirk Kempthorne signed a joint letter of support for the framework to coastal governors and tribal representatives. The framework is the result of many years of cooperation and consultation between and input from the MPA Federal Advisory Committee, federal and state/territory agencies, tribes, fishery management councils, scientists, coastal communities, anglers, commercial fishermen, industry representatives, environmental organizations, and other stakeholders. The document offers guidance on how government agencies might work collaboratively to begin creating the national system based on existing MPAs, and outlines how to build agency partnerships and engage stakeholders to enhance MPA stewardship.

The MPA Center has been called upon to take a leadership role in many international MPA activities. One of these has involved working closely with U.S. MPA programs and our counterparts in Mexico and Canada, via the Commission for Environmental Cooperation, to develop the North American MPA Network. A recent activity associated with this project has been to synthesize information about the three nations' MPA monitoring programs and develop a Pacific coast MPA monitoring network to be implemented through "sister" sites in each nation.

Before I close, I'd like to formally welcome David M. Kennedy, the new director of the Office of Ocean and Coastal Resource Management, the NOAA office where the MPA Center is located. David began his leadership position in May 2006. Many of you may know him from his previous role as director of NOAA's Office of Response and Restoration, in which capacity he served for eight years. We are excited about his enthusiasm for and dedication to our program.

Finally, please keep an eye out for changes to the MPA.gov website. We are working on a new design and navigation, and updating our content. We expect to re-launch the site in October 2006. Also, a fond farewell and well done to Dana Topousis, our communications manager since 2002, and editor/author of this report, who leaves us for the National Science Foundation. She's been the driving force behind MPA.gov and all of our outreach efforts. Many thanks and best wishes.

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 agencies and non-government organizations 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 September 2006, a draft framework—encompassing recommendations and input from a variety of stakeholders—was released for a 145-day public comment period. Once the comment period closes, the MPA Center will respond to comments and incorporate, as necessary, before releasing the final framework for the national system of MPAs in 2007.

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 science 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 2006, the MPA Center supported regional representatives in New England and the Pacific Coast. 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 Vision

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

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 Goals

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

Report Overview

This report highlights the accomplishments and milestones of the National Marine Protected Areas Center for the 2006 fiscal year (October 1, 2005-September 30, 2006). 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 2006 to support this goal. The draft framework is available for public comment for 145 days after its release in September 2006.

Release of Draft Framework for Developing the National System of MPAs for 145-Day Public Comment Period

In September 2006, the Department of Commerce's National Oceanic and Atmospheric Administration (NOAA) and the Department of the Interior jointly released the draft framework for the national system. It outlines guidance for cooperative efforts to develop the national system. The first effort of its kind in the nation, the framework describes a national system of MPAs built in partnership with federal, state, tribal, and local governments as well as other stakeholders. The national goal of the system is to increase efficient protection of U.S. marine resources by enhancing government agency cooperation, helping to sustain fisheries and maintain healthy marine ecosystems for tourism and recreation businesses, and improving public access to scientific information about the nation's marine resources. The draft framework is available for public comment for 145 days. The MPA Center expects to respond to and revise the draft document based on comments, and will release a final framework in 2007.

Collaborative Planning for the Framework for a National System of MPAs

In 2006, the National Marine Protected Areas Center continued its collaborative effort to engage and inform the nation on the development of the draft framework for the national system of marine protected areas (MPAs). The MPA Center held the final public workshops 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, which began in fiscal year 2005, served as a cornerstone to the draft framework. The MPA Center's collaborative efforts are described below.

Briefings on the Progress Toward Developing the National System Framework

Staff from the MPA Center provided separate internal and external briefings on developing the draft framework for 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 or presentations were given to the following leaders, agencies, and organizations:

- President's Council on Environmental Quality
- Department of the Interior Deputy Secretary
- Fishery Management Councils and Executive Directors
- Training for New Fishery Management Council Members
- Gulf States Marine Fisheries Commission
- Northwest Indian Fisheries Commission
- Department of the Interior's Bureau of Indian Affairs
- Native American Fish and Wildlife Society
- Historical and Underwater Archaeologists
- Chesapeake Bay Spatial Management Workshop
- NOAA Science Advisory Board
- 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
- Subcommittee on Integrated Management of Ocean Resources
- Coastal States Organization Annual Meeting
- Communication Partnership for Science and the Sea (COMPASS) Ecosystem-Based Ocean Management Conference
- Brazilian Institute for the Environment and Renewable Natural Resources
- Brazil Environmental Department of Parana State
- Sierra Club, National Marine Wildlife and Habitat Committee
- Commission for Environmental Cooperation in North America
- Trilateral Committee for Wildlife and Ecosystem Conservation and Management (Canada, Mexico, U.S. wildlife agencies)

Workshops on the Developing the Framework for a National System

The MPA Center completed final workshops, which began in 2005, for federal agencies, states, and other stakeholders to provide feedback on the goals of the national system and the development of the draft 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.

Regional Public Dialogues

The MPA Center held the final two of five nationwide public dialogue sessions to ensure that the national system will represent the nation's interests in the marine environment. Input collected from these dialogues was used to develop the national

system framework. The final two workshops were held in San Francisco and Seattle; previous dialogues in fiscal year 2005 were held for the regions surrounding Washington, D.C.; Portland, Maine; and New Orleans. Representatives from environmental, conservation, recreation, commercial, and industry organizations, as well as local government, coastal states, science, academia, the energy industry, anglers, 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.

Initial Analysis of Marine Managed Areas

Since 2001, a variety of federal, state, and territory agencies have been helping the MPA Center to collect comprehensive information about the nation's marine managed areas (MMAs). While some data are still being compiled, such as information on tribal MMAs, the federal and state/territory data collection are largely complete. The MPA Center has begun a thorough analysis of the existing data and has published some initial results that provide a sound picture of the nation's conservation areas. The data reveal that there are more than 1,500 MMAs established in the United States, managed by more than 100 federal, state or territorial government agencies. Most MMA sites (90 percent) permit multiple uses, such as fishing and boating. While federal sites are generally larger, the majority of MMAs are established and managed by state agencies, and most of the sites are permanent and provide year-round protection. Finally, the majority of existing MMAs were established after 1970.

Inventory of Federal Non-Conservation Closed Areas (De Facto MPAs)

The MPA Center, with support from the NOAA Coral Conservation Program, completed an unprecedented inventory of marine areas in which access is federally restricted for reasons other than conservation. Because this wide variety of safety and security zones directly controls where, how, and when people can use certain ocean areas, these de facto MPAs represent a critical component of comprehensive spatial management of marine ecosystems in U.S. waters. GIS boundary data are available for all but 25 of these 1,238 sites.

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 and the U.S. Fish and Wildlife Service co-hosted a federal agency workshop on identifying important data needs for cultural resource management. The results will help inform the development of data sets and management tools necessary for building a national system of MPAs. The workshop included representatives of the National Marine Sanctuary Program, National Park Service, U.S. Fish and Wildlife Service, and the MPA Center. The idea for the workshop came out of a conference on coordinating and better integrating the existing federal network of marine managed areas outlined in the President's Ocean Action Plan.

The MPA Center also collaborated with a variety of other partners throughout the year. During the Society for Historical Archaeology's annual Conference on Historical and Underwater Archaeology, the MPA Center chaired a session on understanding and management of submerged cultural resources and co-presented a paper, with the Massachusetts Board of Underwater Archaeological Resources, on closing the gap between cultural and ocean resource management.

Staff from the MPA Center also met with staff from the Hudson River National Estuarine Research Reserve to discuss how the MPA Center can help preserve numerous significant shipwrecks in the Hudson River. These shipwrecks were located during bathymetry mapping of the river. Over the last several years, a group of archaeologists and scientists from Lake Champlain Maritime Museum, University of New York at La Monte, and State University of New York at Stony Brook have recorded several of the vessels using high-resolution remote sensing tools and during archaeological dives.

Finally, the MPA Center took advantage of additional opportunities to meet with representatives from several organizations to discuss how the MPA Center might support their efforts to conserve and protect important cultural and historic resources: the National Conference of State Historic Preservation Officers, Maritime Archaeological and Historical Society, and Coastal Maritime Archaeology Resources.

Human Use Patterns and Impacts

The MPA Center convened an expert workshop in Monterey, California to gather perspectives for a methodology to document patterns of human use of ocean areas for MPA planning at regional and local scales. The workshop brought together more than 20 social scientists, geographers, and GIS specialists from government agencies, universities, and non-governmental organizations with expertise in characterizing human use patterns in the marine environment with the aid of GIS tools. The participants identified options for acquiring, storing, analyzing, and interpreting a variety of information about how, when, where, and why people use the ocean. These human use data, and the methods for acquiring them, will be fundamental to the effective and equitable design of MPA sites, networks, and systems, and will inform future ecosystem-based management planning.

GOAL: JMPROVE MPA STEWARDSHJP AND EFFECTIVENESS

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.

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 published two reports on social science workshops held in 2006. The first workshop report focused on mapping human activity in the marine environment using GIS tools and participatory methods. The other workshop report, focused on Pacific coast priorities for social science research on MPAs, is the fourth in a series of workshops held around the country to identify regional research and data needs related to the human dimensions of MPAs. Thirty-four representatives from federal and state agencies, academic institutions, regional governing bodies, and non-profit organizations in California, Oregon, Washington, and Alaska participated in the workshop.

Partnering with the NOAA Office of Coast Survey: Navigating the Nation's Marine Managed Areas

In order to promote safe navigation and enhance marine conservation, NOAA's Office of Coast Survey and the National Marine Protected Areas Center partnered to publish key information about the location, purpose, and allowable activities of existing marine managed areas off Alaska's southeastern coast in the United States *Coast Pilot* Volume 8. The U.S. *Coast Pilot* is used by the maritime industry, fishermen, the military, recreational boaters, and other coastal users of sensitive marine ecosystems.

The southeastern Alaska edition includes marine managed areas between Dixon Entrance and Cape Spencer. It's the first in a series of *Coast Pilot* publications being produced for all regions throughout the United States. The other eight books of the U.S. *Coast Pilot* series will be published over the next year, and contain similar information about marine managed areas. The maritime community relies heavily on the U.S. *Coast Pilot* and NOAA navigational charts for information about coastal issues relating to safe navigation, access to marine facilities, and environmental regulations.

Marine Managed Areas Boundary-Making Handbook

A handbook on best practices for marine managed areas boundary making is available after two years of planning across federal and state agencies and programs. This 66-page handbook provides a brief, useful "best practices" guide for writing boundary descriptions within a geographic information systems framework for federal, state, or local marine managed areas. Boundary experts across federal and state government contributed to the handbook under the auspices of the Federal Geographic Data Committee's marine boundary working group. NOAA offices that contributed include the Coastal Services Center, Office of Coast Survey, Office of the General Counsel, the National Marine Sanctuary Program, and the National Marine Protected Area Center.

Managing Recreational Fishing in MPAs through Vertical Zoning: The Importance of Understanding Benthic-Pelagic Linkages

The MPA Center, in partnership with NOAA Fisheries and the angling community, took a critical first step towards developing a science-based vision for the role of benthic-pelagic linkages in MPA design and management. In November 2005, the MPA Center convened an expert workshop of fisheries scientists, community ecologists, MPA practitioners, and key recreational fishing leaders in Monterey, California. The purpose of the diverse gathering was to synthesize what is currently known about benthic-pelagic linkages in different U.S. ecosystems, to identify significant gaps in our scientific understanding of benthic-pelagic linkages, and to lay the groundwork for practical guidelines and best practices on managing recreational fishing in MPAs for managers, fishermen, and policy-makers concerned with this issue.

Integrating MPA and Fisheries Science

The MPA Center and NOAA's Southwest Fisheries Science Center lab in Santa Cruz, California, jointly convened a group of fisheries and conservation biologists, sociologists, and economists to develop scientific information to integrate MPAs with conventional fisheries management strategies. Using in-depth analysis and synthesis, the working group is developing a rational approach for integrating today's dominant, yet divergent, scientific and management approaches that have their roots in single-species population dynamics of conventional fisheries and multispecies ecosystem dynamics of MPAs.

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. They represent a broad stakeholder community, including scientists, academia, educators, commercial fishermen, anglers, divers, state and tribal resource managers, the energy and tourism industries, mineral extraction, and environmentalists. 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 once in fiscal year 2005.

In March 2006, Commerce Secretary Carlos M. Gutierrez, in consultation with the Department of the Interior, appointed four new members to the Marine Protected Areas Federal Advisory Committee, and reappointed 23 members to two- and four-year terms.

In April 2006, the Federal Advisory Committee met in Corpus Christi, Texas, to form subcommittees to address their new charge from the Departments of Commerce and the Interior. These subcommittees are focusing on identifying regional priorities for conservation; incentives and implementation; and natural and social MPA science. The committee also heard from a series of panelists, with topics including MPAs and marine issues management in the Gulf of Mexico region; challenges of MPA cultural resources management; ecosystem approaches to management; and the designation of the Mission-Aransas National Estuarine Research Reserve in Texas.

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 Interagency Working Group

Throughout the year, MPA Center staff met with the Federal Interagency Working Group and individually with federal agencies to review and approve language for the national system framework. Other issues addressed by the Working Group included how the "seamless network" of federal MPA sites called for in the U.S. Ocean Action Plan will be coordinated with the national system, and general MPA Federal Advisory Committee support issues. Agreement was reached on a common format to be used by all agencies in compliance with the Executive Order's reporting requirement. 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 MPA Federal Advisory Committee.

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.

Regional Coordination

West Coast Pilot

The MPA Center is leading a collaborative initiative to pilot key methods and approaches for developing a regional system of MPAs on the west coast (California, Oregon, and Washington). This involves developing, testing, and applying analytical tools, and gathering the best information, including science-based data and traditional ecological knowledge, to better understand how to more effectively use MPAs to sustain healthy marine environments, processes which in future are intended to be applied in regions elsewhere across the nation. The West Coast Pilot is an unprecedented effort in scope that requires core partnerships among the region's federal, state, and tribal government agencies. Key NOAA partners include the National Marine Sanctuary Program, National Centers for Coastal Ocean Science, and Fisheries. In addition, the participation of the following regional partners is instrumental to the effort's success: the Department of the Interior's National Park Service and Fish and Wildlife Service; the National Estuarine Research Reserves System; the Pacific Fishery Management Council; academic institutions; tribes; state agencies; and non-governmental organizations.

• West Coast Government Partners Meeting: In June 2006, the MPA Center, in coordination with the NOAA's National Marine Sanctuary Program West Coast Regional Office, National Centers for Coastal and Ocean Science Biogeography Program, and the Southwest Fisheries Science Center, hosted a regional government partners workshop in Monterey, California to discuss priority needs for coordination of regional federal, state, and tribal MPA efforts. The representatives shared information about purposes and potential effects of place-based management, and identified strategies on how to enhance the effectiveness of regional MPA efforts. A workshop report and documents from the meeting are available on http://mpa.gov/national_system/west-coast-pilot.html. An action plan is being developed by a group of participants.

Western Pacific Regional Fishery Management Council Workshop on Ecosystem-Based Fisheries Management

The MPA Center was invited to present information about its social science research strategy to the Western Pacific Regional Fishery Management Council during a workshop on ecosystem-based fisheries management. Representatives from the council, federal agencies, non-governmental organizations, and academia attended the workshop.

California Resources Agency

The MPA Center director met with the secretary of the California Resources Agency to discuss MPA Center activities in California and the Pacific region. The executive director of the Coastal States Organization also attended the meeting, which included discussions about coordinated state implementation of the U.S. Commission on Ocean Policy and Pew Ocean Commission recommendations. They also discussed plans for the West Coast Pilot, a coordinated agency

approach to developing a regional system of MPAs, which includes California, Oregon, and Washington.

California Ocean Communicators Workshop

The MPA Center participated in an ocean communicators workshop at the California Academy of Sciences in San Francisco. The event was sponsored by the National Marine Sanctuary Program, in partnership with the California Resources Agency. Participants discussed how to implement common ocean messages and communications strategies, and made recommendations for a statewide California Public Ocean Awareness Campaign.

Gulf of Maine Council

In 2006, the National Marine Protected Areas Center's northeast regional coordinator was invited to serve as U.S. co-chair of the Gulf of Maine Council's Habitat Conservation Subcommittee. The coordinator participated in several meetings to focus on development of the Gulf of Maine Council's action plan for 2006-2011. In particular, the Habitat Conservation Subcommittee has been working on ensuring that the Gulf of Maine ecosystem is healthy.

Gulf of Maine Council Marine Habitats Workshop Report

The Gulf of Maine Council Habitat Conservation Subcommittee released the proceedings from a workshop on assessing human impacts and developing management strategies for marine habitats in the Gulf of Maine. The report includes participant work to define and prioritize human impacts to six habitat types and identify ecosystem-based management strategies to address human impacts on a regional scale. The MPA Center provided primary funding for this workshop, and contributed expertise to the planning and development of the proceedings.

State and Territory Coordination

Coastal States Organization and State Advisory Group Recommendations on Developing the National System

The Coastal States Organization and the MPA State Advisory Group formally submitted their report, *State and Territorial Recommendations for Developing and Implementing the National System of Marine Protected Areas*, to NOAA and the Department of the Interior. The report represents a collaborative effort over the past few years between state and territorial coastal, fisheries, and cultural resource agency representatives, the Coastal States Organization, the MPA Center, and other public and private stakeholders. It is intended to assist NOAA and the Department of the Interior in recognizing and promoting full state partnership in designating and managing the national system of MPAs by offering recommendations representing states' interests and concerns. The State Advisory Group will also prepare and submit comments on the MPA draft national system framework to the MPA Center in the coming months.

Inventory of U.S. Marine Managed Areas

As of September 2006, all data collected has been posted to the marine managed area (MMA) inventory database that is a part of www.MPA.gov. Several states and federal MMA programs, however, have either chosen not to have their data posted or are in the process of collecting and/or verifying their information. Data for 22 states and territories have been posted; information from five others is pending. Eight states have chosen not to participate in the MMA Inventory data collection process at this time, for various reasons. The MPA Center hopes that

these states will eventually submit data to the inventory to help complete the national MMA database, and aid in developing the science-based national system of MPAs.

The MMA Inventory is a collaborative effort to gather comprehensive information on place based marine resource management under federal, state, territorial or tribal jurisdiction in U.S. marine and Great Lakes waters. This information on more than 1,500 MMA sites will be used as baseline data for developing the national system of MPAs. It is an ongoing, evolving database that will be maintained as up to date as possible. MPA Center staff will continue to collect the best publicly available information to fill the remaining priority data gaps, correct inaccuracies, and provide opportunity for updates and improvements.

Tribal Coordination

Outreach to Indian Tribes and Native Alaskans

In an effort to better engage Indian Tribes and Native Alaskans in the process to develop the national system of MPAs, the MPA Center sent letters to coastal, Great Lakes, and Native Alaskan tribal governments to inform them about the development of the national system framework draft and encourage them to provide input. Tribes have been invited to participate in the marine managed areas inventory and the West Coast Pilot (California, Oregon, and Washington), which will create scientific and technical tools and approaches to assess the current protection provided by established MPAs, and identify potential gaps in protection for significant natural and cultural resources.

Meeting with Northwest Tribes

The MPA Center met with representatives of nine member tribes of the Northwest Indian Fisheries Commission to discuss tribal involvement in the development of the national system of MPAs. The meeting was organized by the MPA Center and the Northwest Indian Fisheries Commission, with assistance from past and current tribal members of the MPA Federal Advisory Committee, to initiate a dialogue between the tribes and the MPA Center on marine management issues. Tribes expressed a strong interest in reviewing the draft framework document that describes the goals, objectives, processes and structure of the national system. They also plan to be involved in the West Coast Pilot, which will develop tools and processes for regional MPA planning on the west coast (Washington, Oregon and California).

Native American Fish and Wildlife Society Meeting

Staff from the MPA Center addressed attendees of the Native American Fish and Wildlife Society annual meeting in Bar Harbor, Maine, on how tribes can be involved in developing the national system of MPAs. Tribal representatives from New England, the Pacific Northwest, and Alaska participated in an informal discussion after the presentation about tribal perspectives on MPAs, tribal participation on the MPA Federal Advisory Committee, and tribal review of the draft national system framework.

International Coordination

First International MPA Congress

The MPA Center participated in the first International MPA Congress (IMPAC 1) in Australia. MPA Center staff delivered a presentation on U.S. efforts to develop a national system of MPA

and possible linkages to regional and global initiatives. The MPA Center also chaired a panel on MPA partnerships involving indigenous people in Canada, South America, and Africa, and presented, in cooperation with Parks Canada and Mexico's National Commission of Natural Protected Areas, a poster describing the developing North American MPA Network under the Commission for Environmental Cooperation. More than 800 representatives from 80 countries attended the congress. The MPA Center later worked with Australia and NOAA's National Marine Sanctuary Program and National Ocean Service International Programs Office to discuss whether North America (the U.S. or Canada) could be the host of IMPAC 2 in 2009.

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 of Protected Areas, and the tri-national Commission for Environmental Cooperation. MPA Center staff, along with representatives from the National Estuarine Research Reserve System, National Marine Sanctuary Program, National Park Service, U.S. Fish and Wildlife Service, and counterparts in Mexico and Canada, participated in workshops to explore the feasibility of establishing a common resource monitoring program in MPAs across the three nations. Participants agreed that the feasibility of establishing such a system, which will be built into the NAMPAN work plan for the current operating year.

Later in the year, the MPA Center met with North American counterparts for a conference in Canada to develop a pilot MPA-based monitoring program that would include biophysical, social, and governance indicators from Baja, Mexico to the Bering Sea. The MPA Center agreed to work with the Department of the Interior to consult with federal government partners on using sister sites from among MPA clusters being formed under the U.S. Ocean Action Plan as part of the pilot.

Security and Prosperity Partnership of North America

Leaders of the United States, Canada, and Mexico agreed "to create an architecture which would further enhance the security of North America while at the same time promote the economic well-being" of its citizens. The agreement called for enhancing information sharing and developing appropriate, strategies for complementary marine protected areas, especially habitat for migratory species and ecologically sensitive habitat, a provision continuing to be met through the development of the NAMPAN Baja to Bering monitoring project.

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

In 2006, the MPA Center participated in the North American Trilateral Committee conference focused on determining if and how this primarily terrestrial species-focused committee might be expanded to include marine issues. The MPA Center provided reports to representatives of Canada, the U.S., and Mexico on the U.S. Integrated Ocean Observing System and its potential linkages with and utility for MPAs, the status of U.S. efforts to develop a national system of MPAs, and cooperative efforts to develop a North American MPA network under the Commission for Environmental Cooperation.

IUCN World Commission on Protected Areas

The MPA Center Director was invited to become a member of the World Conservation Union (IUCN) World Commission on Protected Areas. The World Commission's membership is

comprised of approximately 1,000 individuals from more than 140 countries. Members assist in a voluntary capacity with the commission's work.

Collaboration with International Experts on "High Seas" Issues

The MPA Center was invited by Canada's Department of Fisheries and Oceans to participate in the International Marine Ecological Experts Workshop in Ottawa in December 2005. The twenty-person workshop developed criteria to be used to identify significant ecological and biological marine areas beyond national jurisdiction that may be considered for marine protected area status or special management consideration. Twenty representatives from 11 countries, international organizations and academia participated.

Collaboration with Canadian Counterparts

In winter 2006, MPA Center was invited to address Parks Canada, Canada's Department of Fisheries and Oceans, and Environment Canada staff at a workshop in Ottawa to develop social science research priorities for Canada. MPA Center staff gave a presentation focused on the process to create the U.S. social science research strategy and the subsequent regional priority reports. About 30 Canadian government officials and academics attended the workshop.

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 2006 initiatives are listed below.

MPA.gov

In 2006, the MPA Center sent out a website evaluation form to various NOAA offices to obtain feedback on what improvements users would like to see made to the U.S. website on marine protected areas: http://mpa.gov. After the evaluations were tabulated, the MPA Center began to redesign, reorganize, and rewrite content for the website. A new section was added (Science & Analysis) and other sections were renamed and/or combined to serve a more thematic approach to the content (All About MPAs, Helpful Resources).

The revised site is centered and wider, at 940 pixels. It features a newspaper-style column layout, with three news headings for progress on developing the national system of MPAs, the West Coast Pilot, and general MPA Center news (including news from the MPA Federal Advisory Committee). The website also features simple icons designed to complement the U.S. MPA classification system. Last redesigned in 2004, it was re-launched at the end of the 2006 fiscal year. Site visitation throughout fiscal year 2006 averaged more than 400,000 hits per month.

MPA Virtual Library

The MPA Virtual Library grew considerably in 2006. More than 300 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 agencies, students, researchers, and the public to more than 1,800.

In 2006, the NOAA Central Library organized the MPA library resources from its keyword list into 17 theme bins to help enhance user browsing capability. The keyword list is comprised of Library of Congress Subject Heading (LCSH) terms, Aquatic Science and Fisheries Abstracts (ASFA) terms from the ASFA thesaurus, and uncontrolled keywords assigned by authors or the editors of the library. Choosing to search the database with terms from the Keyword List increases both precision of searching for the user, but also guarantees the user will always retrieve at least one relevant item from a search.

The NOAA Central Library and the MPA Center co-hosted a brownbag presentation by Dr. Tundi Agardy on MPA networks. Dr. Agardy presented her views on what constitutes a regional network of MPAs and why such large-scale networks are a crucial step in moving towards more effective, ecosystem-based management. She also discussed growing interest in ocean zoning and how MPA networks for a logical basis for zoning plans. Dr. Agardy is executive director of Sounds Seas, based in Bethesda, Maryland, and a member of the MPA Federal Advisory Committee.

New Outreach and Education Materials

Several MPA-themed education and outreach materials were produced in 2006. In an effort to improve awareness of the many types and purposes of marine protected areas, the MPA Center created a screen saver based on cartoons created for the MPA Center by Sherman's Lagoon artist

Jim Toomey. The screen saver, which uses live action for the cartoons, was designed by the MPA Center's web develop, with approval from Mr. Toomey. The screen saver is downloadable on the www.MPA.gov website, and is also available on a mini-CD-Rom.

The MPA Center's social science perspective and those of University of Washington faculty were featured in the May 2006 issue of *MPA News*, an international newsletter published monthly by Marine Affairs Research and Education, in association with the University of Washington. The article was an "MPA Perspective" piece, titled "Using Regional Workshops to Understand the Human Dimension of MPAs." The article highlighted outcomes from regional social science research strategy workshops. It also expressed the need for greater integration of social and natural science and the recognition that people are instrumental to successful MPA and ecosystem-based management.

Another perspectives article published in *MPA News* in March 2006 and written by MPA Center staff focused on the results of a workshop exploring the science of how best to manage recreational fishing for pelagic species within a marine protected area. The workshop participants included fisheries scientists, marine ecologists, MPA practitioners, and anglers. They identified priority gaps in scientific understanding of the impact of recreational fishing on benthic-pelagic linkages and discussed practical guidelines for MPA planners and managers faced with this issue.

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*, 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 3,300 recipients worldwide. In 2006, due to limited resources, the newsletter became a quarterly publication.

• MPA Cultural and Historic Resources Newsletter

The MPA Center distributes *MPA Cultural and Historic Resources*, which highlights marine cultural and historic news and updates from around the world. The newsletter goes out monthly to more than 200 primary subscribers, who then distribute to their constituents. The newsletters serve 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

NOAA's Office of Education and Sustainable Development funded the MPA Center's monthly e-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 1,000 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.

Conferences and Events

The MPA Center scaled back its sponsorship and participation in exhibit booths at conferences and events in 2006 due to limited resources. However, staff focused on key events where they could reach MPA managers and users, educators, and community members at the local, national, and international level. Examples of events where the MPA Center participated included:

- Annual Oceans and Coastal Program Managers Meeting
- California and the World Ocean Conference
- Coastal States Organization Annual Meeting
- Cooking for Solutions Information Fair, Monterey Bay Aquarium
- First International Marine Protected Areas Congress
- Maury Project Education Workshop
- Monterey Bay National Marine Sanctuary Currents Symposium
- Native American Fish and Wildlife Association
- Society for Historical Archaeology Conference on Historical and Underwater Archaeology
- The Coastal Society Annual Conference
- Trilateral Committee for Wildlife and Ecosystem Conservation and Management
- U.S. Coral Reef Task Force Exhibit Hall