Marine protected areas (MPAs) are an important conservation tool used around the world to conserve vital marine ecosystems and sustain the human uses they support. While MPAs can help to balance sustainable use with long-term conservation of the ocean, the effective use of MPAs faces challenges. These include the general lack of accurate information on the location, purpose or potential impacts for many of the nation’s MPAs. There is also a widely acknowledged need for a common language, vision and set of guiding principles for how we wish to use this tool to achieve diverse marine conservation and management goals at local, regional, and national scales.

Presidential Executive Order 13158 on MPAs was a direct response to widespread demands for a more coordinated approach to using MPAs to conserve and manage marine habitats. Signed in May 2000, it directs federal agencies to work with diverse partners in the public and private sectors to develop an effective national system of MPAs that fulfills broad conservation and management goals at local, regional, and national levels. Sites in this national system are to be designated and managed by existing authorities. To coordinate its implementation, the Executive Order directed the National Oceanic and Atmospheric Administration (NOAA) to create the National MPA Center in collaboration with the Department of the Interior. This special edition of MPA Connections is a summary of key actions taken by the MPA Center in support of the Executive Order, organized according to the Center’s three strategic planning goals.

**Definition**

Marine protected areas are defined by the Executive Order as “any area of the marine environment that has been reserved by federal, state, territorial, tribal or local laws or regulations to provide lasting protection for part or all of the natural and cultural resources located therein.”
One primary focus of the Executive Order is the creation of an effective, scientifically based, comprehensive national system of MPAs representing diverse U.S. marine ecosystems and conserving important aspects of the nation’s natural and cultural resources. Several major efforts are currently underway to achieve this goal.

**Marine Managed Areas Inventory**

The first step in designing an effective national system of MPAs is to understand what we have now. To that end, NOAA, in cooperation with the Department of the Interior and coastal states, territories, and commonwealths, has undertaken an ambitious and unprecedented inventory of marine managed areas (MMAs). These are areas of the marine and Great Lakes environment that provide some degree of protection for natural or cultural/historic resources. This broad definition is intended to ensure that we fully document and understand the full range of place-based marine management in the U.S., even if some of these areas do not ultimately meet the criteria that will be established to define and create the official List of U.S. MPAs called for in the Executive Order. This is the first such inventory for the United States, incorporating information about federal, state, commonwealth, territorial, and tribal sites.

This publicly accessible and comprehensive MMA inventory provides an initial understanding of where and why marine areas are managed in the U.S. It also provides a standard database across MPA programs, government agencies, and government levels; supports analyses of effectiveness, gaps, and spatial coverage for management and policy decisions; and provides a foundation for building both regional networks and the national system.

Public comment on draft MMA definitions and inventory data fields was first solicited in December 2000. In July 2003, a notice was published in the Federal Register seeking further public comment on criteria, definitions, and data fields used in the inventory. Comments were received from Members of Congress, states, tribes, members of the MPA Federal Advisory Committee, non-governmental organizations and associations, Fishery Management Councils, and private citizens.

Data from federal sites are nearly complete, with about 300 sites included in the inventory. In addition, data were collected from 20 states, commonwealths, and territories in 2003. Efforts are underway to complete state data collection and to initiate data collection about tribal MMAs, in cooperation with tribal officials. The National MPA Center estimates that when the inventory is complete, there will be between 1,000 and 1,500 sites in the MMA database.

**Using Common Terminology**

A significant issue in the on-going dialogue about MPAs is the lack of clarity of terms. The MPA Center has developed an MPA classification system to better define and understand the various types and purposes of MPAs used in the U.S. The new classification system can be used to objectively describe any MPA by six fundamental characteristics of its design and management. These are: primary conservation goal, level of protection, permanence of protection, constancy of protection, scale of protection, and allowed extractive activities. This approach gives anyone, from MPA experts to MPA stakeholders, a common language with which to understand, evaluate and discuss MPAs being managed or proposed around the U.S. Sites on the MMA inventory will be classified using this system in 2004 to improve our understanding of the types of MMAs the United States currently possesses.

**The MPA List**

The MMA Inventory and classification system are analytical tools that will allow us to understand the purpose, location and nature of protection provided by the nation's existing collection of MMAs and MPAs. These tools also will be used in the development of the MPA List called for in the Executive Order. The Executive Order directs federal agencies to avoid harm, to the extent permitted by law and the maximum extent practicable, to the natural and cultural resources protected by the MPAs on the List.

**The National System of MPAs**

With the MMA Inventory nearing completion, the MPA Center has initiated a process to develop a framework for a national system of MPAs. This process includes participation by the MPA Federal Advisory Committee as well as extensive outreach to agencies and other stakeholders on the goals and design of a national system. Key scientific and analytical steps in the process to develop the national system framework include:

- the inventory of MMAs;
- assessing current levels of effectiveness of existing MPAs;
- inventory of ‘de facto MPAs’ (areas set aside for reasons other than conservation);
- biogeographic characterization of vital U.S. marine ecosystems;
- identification of key cultural resources;
- assessment of the patterns and potential impacts of human uses in marine habitats; and
Framework (Continued)

- assessment of gaps in protection among ecologically or economically important habitats, resources, and cultural sites.

Ultimately, the national system framework will help guide and inform the actions of existing MPA programs, such as national marine sanctuaries, national parks, and state MPAs, as they consider using their independent authorities to add new MPAs or to improve the effectiveness of existing sites. The framework will also use science and stakeholder input to develop a national system of MPAs that will enhance our ability to achieve the nation's broad and complex marine stewardship mandates, while minimizing duplications, overlaps and gaps in protection for important areas.

Central to the development of an effective national system of MPAs are existing sites that are meeting their programs’ conservation and management objectives. To this end, the MPA Center is working with existing MPA sites and programs to help them improve their effectiveness. Major steps along this path include:

MPA Needs Assessments

In 2002, the MPA Center’s Training and Technical Assistance Institute conducted and published an MPA Needs Assessment, based on input from practitioners around the U.S. It includes recommendations for clarifying MPA-related policy and legal issues and responsibilities, providing MPA-related science and technology, and working with communities impacted by or interested in MPAs. Based on a priority issue identified by managers during this initial needs assessment, a second assessment focusing on MPA technology needs was completed in 2003.

Training

The MPA Center has developed a workshop called Understanding MPAs, which was piloted in September 2003 at the Aquarium of the Pacific in Long Beach, California. This year the Training and Technical Assistance Institute is partnering with Coastal America to bring the workshop to a number of aquariums designated as Coastal Ecosystem Learning Centers. The workshop will be offered at other locations and in conjunction with marine management related events.

The Training and Technical Assistance Institute also offers a variety of technology and process-related trainings to MPA managers. Courses include Introductory and Intermediate Geographic Information Systems (GIS), Public Issues and Conflict Management, Negotiating for the Resource, and Managing Visitor Impacts. Currently the GIS courses are offered on-site in Charleston, but the other workshops are offered around the country on a request basis. The Institute conducted joint training with the U.S. Fish and Wildlife Service’s National Conservation Training Center in 2003 and intends to pursue further collaboration.

Technical Assistance

The MPA Center’s Training and Technical Assistance Institute offers technical assistance on a variety of management issues. One area of focus is marine boundaries. The Institute has helped individual MPAs create digital boundaries, and is currently contributing to the development of a boundaries handbook covering both legal and technical requirements. GIS-based tools also are being created to support MPA sites and management entities. Recently, tools have been developed for several national marine sanctuaries and a Fishery Management Council.

In addition to providing direct assistance, the Training and Technical Assistance Institute aims to serve as a referral service for managers seeking assistance, information, and training on MPA-related topics. The Institute is building a database of existing training and technical assistance resources to identify capacity in a range of governmental agencies, academic institutions, nongovernmental organizations, and private entities.

Looking to the future, the MPA Center will continue to develop and offer training and assistance that responds to identified management needs. The Center also will pursue partnerships that increase the amount and diversity of assistance available to managers.

Natural and Social Science Strategies

Sound science is fundamental to the design and management of an effective national system of MPAs. In 2003, the MPA Center’s Science Institute published a Marine Protected Areas Social Science Research Strategy, based on a national workshop. The Science Institute initiated a series of regional invitational workshops in 2003 to help develop regional MPA social science research strategies. The Science Institute also is completing an MPA Natural Science Research Strategy in 2004, and will develop regional MPA research priorities for natural science in 2005. These strategies will help inform the design of the national system and will help MPA managers improve the effectiveness of current MPA sites.

Lessons Learned

The MPA Center is conducting a “lessons learned” project that investigates recent MPA establishment or modification procedures. 

See Stewardship on page 4
MPA Federal Advisory Committee

The Marine Protected Areas Federal Advisory Committee was established in 2003 to advise the Departments of Commerce and the Interior on implementing Section 4 of MPA Executive Order 13158. The Committee is comprised of 30 members from around the nation who represent a broad stakeholder community including scientists, academia, commercial and recreational fishermen, state and tribal resource managers, environmentalists, and other resource users. The Committee met twice in 2003 and is organized into three subcommittees: National System of MPAs, MPA Stewardship and Effectiveness, and National and Regional Coordination of MPA Efforts.

Interagency MPA Working Group

The MPA Center has formed a working group to coordinate federal activities related to the Executive Order and to provide staff support to the federal agencies serving as ex officio members of the Federal Advisory Committee. Agencies represented include Defense (Navy, Army Corps of Engineers), Interior, Commerce, Homeland Security (Coast Guard), Agency for International Development, State, Environmental Protection Agency, and the National Science Foundation.

On the Web

A website on U.S. MPAs details progress on the work begun under the Executive Order. It includes the inventory of marine managed area (MMA) sites, a comprehensive library of MPA resources, updates on the MPA Federal Advisory Committee, and other endeavors. The MPA website was redesigned in 2004 to make it more useful and informative to a broader range of interests. New additions are posted regularly. The web address is http://mpa.gov.

Regional Coordination

Using its Science Institute in California and regional staff in New England as pilots, the MPA Center has begun reaching out to agencies, scientists, and stakeholders in regions around the U.S. in order to improve the information flow and coordination about MPAs at all levels of government. In support of this effort, the Science Institute has developed a demonstration website, www.PacificMPA.org, which provides “one-stop shopping” for comprehensive information on on-going federal and state MPA planning processes on the west coast. The MPA Center will establish similar regional web-based clearinghouses throughout the United States in late 2004.

Other Outreach Activities

The MPA Center has begun publishing a monthly electronic newsletter called MPA Connections. The newsletter features MPA Center activities and resources, as well as activities by partners and MPA sites. One regular series in the newsletter is designed to clarify misconceptions about MPAs. For example, one misconception is that all MPAs are no-take marine reserves. The newsletter is distributed via email to more than 2,400 subscribers and is archived on www.mpa.gov.

The MPA Center also has developed a set of fact sheets, exhibits, brochures, and other materials to better inform interested audiences about issues surrounding MPAs. In addition, the MPA Center has been invited to participate in numerous conferences and exhibits, including Fishery Management Council meetings, fishermen’s forums, education workshops, scientific symposia, and other MPA-related events.

Stewardship (Continued)

The first phase of this project was an objective documentation of five recent MPA processes with specific elements outlined for each of the case studies. The project will inform MPA efforts by providing a factual foundation about the structure and events of recent MPA activities. The second phase of the project is a series of interviews with involved stakeholders to get their subjective perceptions of what worked and what did not for each case study. This second phase will be completed in 2004.