MPA CONNECTIONS

Newsletter of the National Marine Protected Areas Center

February 2005

The mission of the National Marine Protected Areas Center is 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. *MPA Connections* was launched to meet continuing calls by agency and external stakeholders for information about MPA Center activities and to feature other actions that address Executive Order 13158 goals.

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Marine Protected Areas Federal Advisory Committee to Meet in Arlington, Virginia Chairman of President's Council on Environmental Quality to Address Committee

The Marine Protected Areas Federal Advisory Committee, managed jointly by the U.S. Department of Commerce in cooperation with the U.S. Department of the Interior, will hold its next meeting from February 15-17, 2005, in Arlington, Virginia. The three-day meeting will include panel discussions with representatives from two Fishery Management Councils, tribes, and MPA science. James L. Connaughton, chairman of the President's Council on Environmental Quality, will address the Committee about the Administration's U.S. Ocean Action Plan.

Public comment periods are scheduled for Tuesday, February 15, and Thursday, February 17. The meeting will be held at the Crystal City Hilton Hotel, 2399 Jefferson Davis Highway, Arlington, Virginia.

The MPA Federal Advisory Committee is comprised of 30 members who represent a broad stakeholder community, including scientists, academia, commercial and recreational fishermen, other resource users, state and tribal resource managers, and environmentalists. In addition, nine ex-officio representatives of other federal agencies serve as non-voting members.

For additional information, visit http://mpa.gov/fac/fac_meetings.html, or contact Lauren.Wenzel@noaa.gov.

MPA Center Releases Final Criteria for Marine Managed Areas Inventory

On January 25, 2005, NOAA and the Department of the Interior released the final criteria and data fields that will be used to develop and complete the U.S. Marine Managed Areas (MMA) Inventory. The National Marine Protected Areas Center requested comments on existing criteria in July 2003, and the finalized criteria are based on that feedback.

Data from the MMA Inventory will provide information that will lead to the fulfillment of requirements of Executive Order 13158 on marine protected areas (MPAs). This will allow the completion of this first phase—the collection of sites for the MMA Inventory—and will be followed by the second phase, which will be the development of criteria for MPAs and the List of MPAs called for in Executive Order 13158. Currently, most data for federal marine managed area sites has been entered into the inventory database. The MPA Center, partnering with programs within NOAA and the Department of the Interior, is working with U.S. coastal and Great Lakes states, territories, and commonwealths to collect data on sites managed by their agencies.

The MMA Inventory will be used to inform federal, state, commonwealth, territorial, local, and tribal agencies of the locations and characteristics of existing MMAs. Resource managers and others can use this information to better manage these areas and determine the effectiveness of individual sites, as well as regional and national assemblages.

The core purposes of the MMA Inventory are to provide:

- Centralized, easily accessed information on and maps of existing federal, state, commonwealth, territorial, local, and tribal MMAs in the United States;
- Information and tools for environmental assessments and effectiveness monitoring (supporting independent analyses and studies of a wide variety of marine issues by governmental and non-governmental users);
- Important site-specific information for developing and maintaining the official nationwide List of MPAs required by section 4(d) of Executive Order 13158; and
- Information to fulfill other requirements of Executive Order 13158.

These criteria are final and incorporate public comment, as appropriate, but may be changed at some future date if required by experience gained by using the MMA Inventory and implementing Executive Order 13158. Any changes to the criteria will be announced through the Federal Register and the U.S. website on MPAs, http://www.mpa.gov.

To read the final criteria, go to http://mpa.gov/inventory/criteria.html#table. To access the data currently collected for the MMA Inventory, go to http://mpa.gov/inventory/inventory.html.

Recent Additions to the U.S. Marine Protected Areas Virtual Library

- The U.S. marine protected areas virtual library continues to add new reports, publications, proceedings, and other materials to its online collections on a monthly basis. Below is a list of the most notable additions for February 2005.
- A recent report on the national marine sanctuary system describes significant
 accomplishments for 2003, planned activities for 2004, strides in submerged cultural
 resource management, and new standards for marine education and community
 involvement with sanctuaries: NOAA National Marine Sanctuary Program, "National
 Marine Sanctuaries: State of the Sanctuary Report, 2003-2004". Silver Spring, Md:
 NOAA National Marine Sanctuary Program, 2004.
 http://sanctuaries.nos.noaa.gov/library/national/sots04.pdf
- A WWF report on the status of sea life in the United Kingdom identifies actions needed to improve prospects for healthy, diverse and productive seas, and promotes a UK Marine Act which would include designation of a nationally representative network of Nationally Important Marine Sites: Hiscock, Keith, Jack Sewell and Judith Oakley, "Marine Health Check 2005: A Report to Gauge the Health of the UK's Sea-Life". Godalming, United Kingdom: WWF-UK, 2005.
- http://image.guardian.co.uk/sys-files/Guardian/documents/2005/01/18/heathcheck2005.pdf
- An annual report on threats to coral reefs and conservation initiatives worldwide emphasizes the need for more, larger, and better managed MPAs as larval reseeding grounds, and representative MPA networks for conservation and management of coral reef habitats: Wilkinson, Clive, ed., "Status of Coral Reefs of the World: 2004 Vol. 1 and 2". Townsville, North Queensland, Australia: Australian Institute of Marine Science, 2004. http://www.aims.gov.au/pages/research/coral-bleaching/scr2004/index.html
- An article on development of high seas MPAs for ocean stewardship discusses the economic rationale for high seas marine protected areas, including a foundation in the U.N. Convention on Law of the Sea, as well as recent high seas MPA initiatives, costs, and finance mechanisms and sources: Morling, Paul, "The economics of marine

protected areas in the high seas," George Wright Forum 21, 4 (December 2004): 49-61. http://www.georgewright.org/214morling.pdf

MPA Volunteer Profile: Joe Apicella, Waquoit Bay National Estuarine Research Reserve

The power of advertising can lure us to do many things: consume more goods despite sufficiently cluttered homes, change our diets to pursue unachievable perfection, or disregard the advice of medical professionals for the temptation of health-impairing habits. Advertising rarely leads us to fulfill our childhood interests. But in Joe Apicella's case, a sign touting the mysterious "Waquoit Bay National Estuarine Research Reserve" did exactly that, and eventually, the salesman with a knack for science transformed into an amateur scientist with the keen ability to sell environmental conservation.

As the owner of a tire and auto business, Joe spent his vacations boating and fishing with his wife and three children at his summer home along the southern shores of Cape Cod. The sign bearing that peculiar name, posted outside of Joe's neighborhood, caught his eye each time he entered or exited his community complex. Eventually, Joe's mounting curiosity led him to follow the road towards the "Waquoit Bay National Estuarine Research Reserve," where he discovered a new perspective on a familiar world.

Over a lifetime spent fishing, boating, and clamming, Joe has cultivated a kinship with the rivers, bays, and oceans that feed his passion for outdoor recreation. But after seeing this estuarine haven protected for research and education, Joe's kinship quickly extended beyond nature to those who dedicated their lives to understanding and conserving this vulnerable system. Unfortunately, Joe would have to wait until after retirement to assist the efforts of the Waquoit Bay National Estuarine Research Reserve staff. But as soon as he did, staff at the reserve assigned him to "Baywatch."

As a Baywatcher, Joe helps monitor Waquoit Bay's water quality. While floating on a boat amongst the salt marsh reeds, Joe takes readings on salinity, dissolved oxygen, turbidity, and other key factors that indicate the bay's health. He also collects water samples that get sent to the lab for chlorophyll and nutrient analyses. For many people, the amount of phosphorus or nitrogen that flushes into the Bay may not seem important, but for Joe, who knows how drastically these nutrients affect bay health, measuring the components are the necessary steps needed in determining how to remedy lifetimes of misuse.

Joe tells a story of his neighbor who has lived in the area for decades and watched the clarity and flow of the Child's River slowly decay as it cut its course alongside the neighborhood and into the bay. Where the river bottom once housed sandy shoals of eel- and turtlegrass, now only mud exists – mud so deep it will drag waders down to their knees.

As the number of people settling into the area grew, so, too, did the demand on the environment. The resulting increases in nutrient run-off formed an environment ripe for devastating algae blooms. When these dense aggregations of algae suddenly appear, they block out light essential to seagrasses; after dying, the mounds of decomposing matter suck out oxygen necessary for the animals. Ultimately, successive generations of decaying algae bury the sand and seagrasses that once provided precious sanctuary for scallops, fishes, and clams. With persistent monitoring and

education, Joe hopes to finally see waving beds of seagrasses, revitalized shellfish stocks, and lively schools of fish inhabiting the clean, sandy beds of the Child's River.

Joe has not limited his interests to just life science, however. Accepting a second volunteer opportunity in the Waquoit Bay National Estuarine Research Reserve Coastwatch program has helped Joe develop his geology skills. Surveyors for this shoreline monitoring program assess the physical movement in the coastline by measuring the profile and width of the beach. Far from Joe's familiar world of biology and chemistry, this was a new world of physical oceanography dealing with wave action, longshore currents, and sediment transport. So to prepare for his introduction into shoreline change, Joe pored through numerous books reviewing the phenomenon, particularly the geologic formation of Cape Cod. Now, the former business owner leads a team of coast surveyors and easily discusses linear measurements, erosion, vertical profiles, and beach renourishment with professional scientists.

Beyond collecting water samples for Baywatch and surveying shoreline change for Coastwatch, reserve employees tout Joe for his talents as a self-appointed volunteer recruiter. With his passion for conserving coastal waters and his knowledge of its ecology, Joe has helped fill the reserve with many more equally enthusiastic, conservation-minded volunteers.

"Joe is willing to help on all kinds of things, but more important than that, he's a doorway to a larger social network of retirees, fishermen, and civic associations," said Chris Weidman, long-time supervisor to Joe and Waquoit Bay National Estuarine Research Reserve's research coordinator. "As a volunteer who brings in other volunteers, he's worth his weight in gold to us."

Just as Joe delights in enlisting new volunteers, he also enjoys reaching out to the community when off reserve-duty. As a regular citizen, Joe uses any opportunity to educate people on the environmental effects of their behavior, including impromptu occasions, like catching his neighbors loading their lawns with nutrient-rich fertilizers.

But Joe certainly does not allow for just chance to educate his neighbors. He also makes the opportunity to discuss water quality with his fellow coastal residents when chairing the neighborhood homeowners' association. For the community, as a whole, lawn fertilizers are not as much of a concern as human nutrients. With most home plumbing flushing directly into septic systems, untreated wastewater leakages can frequently occur.

And with surrounding communities on similar septic systems, Joe reaches those living beyond the boundaries of his neighborhood as the director of the Falmouth Association Concerned with Estuaries and Salt Ponds. This local organization focuses on understanding the effects of wastewater leeching from septic systems into surrounding waters and works to educate community members on these effects. Joe will supplement this effort as a recently appointed member to the Town of Falmouth's Coastal Pond Management Committee. Under this committee's auspices, Joe will help direct Falmouth's overall management of coastal ponds, particularly with regards to nutrients, docks, shellfishing and zoning.

Unsurprisingly then, Joe's passion for conservation has led him to the role of clean water guinea pig. Giving up his yard to a project funded by NOAA's Cooperative Institute for Coastal and Estuarine Environmental Technology, Joe has allowed engineers to turn his beach property into an experimental wastewater treatment plant. Although still in the permitting stage, engineers

plan to install a permeable, reactive barrier under Joe's beach – with the hope that this filter will reduce the nutrient levels flowing from Joe's septic system to the estuary. While this barrier has been shown to clean wastewater better than some sewage treatment plants, little is known as to how it will work in saltwater environments.

For the Waquoit Bay National Estuarine Research Reserve, this experiment is vital to the management of the bay. Managers can only do so much to protect the estuarine waters inside the reserve boundary when a densely populated community abutting the reserve quietly leeches unknown amounts of nutrients into the bay. So they hope to minimize pollution from this neighborhood to enhance the health of the reserve and its surrounding waters. Starting with Joe.

Yet, despite all Joe does to help conserve the vulnerable habitat around him, his modesty leads him to downplay the value of his work. "There are hundreds of volunteer opportunities in Falmouth. This is just what I do," he said. "If it weren't good for me—if it wasn't fun and interesting—I wouldn't do it."

Commonly Asked Questions about the Marine Managed Areas Inventory Answered

One new aspect of our recently revised "Explore the Inventory" section on the MPA.gov website is a quick and easy resource on common questions asked about the data contained in the marine managed areas inventory.

By choosing the "Key Questions" feature, you can access immediate information for a myriad of questions. Some common questions include:

- --How many sites are included in the inventory?
- --How many sites restrict extractive activities, such as recreational and commercial fishing?
- --How many sites have important sea turtle nesting or feeding areas?
- --What is the distribution of habitats among sites in the inventory?
- --How many sites have temporary regulations applied to them?

The data contained in the reports is based on the current information gathered and approved for posting on the website. While data for most federal sites are complete, data for state, territory and tribal sites are undergoing review. In some cases, collection of the data is in-process and will be posted once it's been reviewed and approved.

The "Key Questions" feature is one of several ways users can search for specific information. Other search features include alphabetical, topical, and geographic searches as well as a data download function.

To learn more about the data in the inventory, go to http://www3.mpa.gov/exploreinv/explore.aspx/.

Department of Commerce Seeks Nominations for Membership on MPA Federal Advisory Committee

The Department of Commerce is seeking nominations for membership on the Marine Protected Areas Federal Advisory Committee (Committee). The Committee was established to advise the Secretary of Commerce and the Secretary of the Interior in implementing Section 4 of Executive Order 13158 and specifically on strategies and priorities for developing the national system of MPAs and on practical approaches to further enhance and expand protection of new and existing MPAs.

The Marine Protected Area Federal Advisory Committee is currently accepting nominations for one vacancy on the Committee. Nominations must be received by February 23, 2005. NOAA and the Department of Interior are particularly interested in applicants representing interests currently not represented on the Committee, including recreational diving, recreational boating, wildlife watching or aquaculture / mariculture.

Individuals seeking membership on the Committee should possess demonstrable expertise in a field related to MPAs or represent a stakeholder interest affected by MPAs. Nominees will also be evaluated based on the following factors: marine policy experience, leadership and organization skills, region of country represented, and diversity characteristics.

DATES:

Nominations must be postmarked on or before thirty (30) days from publication date on this notice [the notice was published on January 24, 2005].

ADDRESSES:

Nominations should be sent to: Lauren Wenzel, National Marine Protected Areas Center NOAA, N/ORM 1305 East West Highway Silver Spring, MD 20910

FOR FURTHER INFORMATION CONTACT:

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For details about the MPA Federal Advisory Committee, go to http://mpa.gov/fac/fac.html.

Developing the National System of MPAs: MPA Center to Hold Public Information and Feedback Forum in March in Washington, D.C.

In order to create a national system of MPAs that represents the nation's interests in the conservation and sustainable use of its natural and cultural marine resources, the MPA Center and its partners are sponsoring a series of forums to collect input and feedback from stakeholders that will be used to develop the framework for the national system. Specifically, meetings are planned for stakeholder groups including federal agencies, state and territorial agencies, the public, and the cross-sector MPA Federal Advisory Committee.

The MPA Center will hold the first public forum in Washington, D.C., on the evening of Monday, March 7. A wide announcement, including an agenda, location and times, and other details, will be circulated in the coming weeks.

Each series of forums will present stakeholder groups with information about Executive Order 13158's requirements and process to develop the system. In addition, each meeting will provide participants the opportunity to raise questions, discuss relevant issues, and offer specific recommendations for the design of the national system. The information received will be used to guide the development of the draft framework for the national system of MPAs, which the MPA Center anticipates publishing in the *Federal Register* for final public comment in early 2006.

For more information about MPA Center's efforts to develop the national system of MPAs, go to www.mpa.gov/national_system. You may also write to mpa.comments@noaa.gov to receive more information or provide feedback.

Events and Conferences

February

15-17: MPA Federal Advisory Committee Meeting, Arlington, Virginia; http://mpa.gov/fac/fac meetings.html

28-March 4: Commission on Environmental Cooperation, North American MPA Network, Loreto, Mexico; http://www.cec.org/.

March

1 – 2: 13th U.S. Coral Reef Task Force Meeting. Washington, D.C.; http://www.ces.fau.edu/taskforce/

2: NOAA's Annual Stakeholder Forum. Washington, D.C.; http://www.spo.noaa.gov/dcforum2005.htm

7-9: NOAA Office of Ocean and Coastal Resource Management, annual managers' meeting, Washington, D.C.; http://coastalmanagement.noaa.gov/pmm/.

7-10: Coastal GeoTools '05, Myrtle Beach, South Carolina. There will be MPA related sessions and posters; http://www.csc.noaa.gov/geotools/.

14-18: The George Wright Society Biennial Conference, Philadelphia, Pennsylvania; http://www.georgewright.org/2005.html.

24-26: 'Managing Our Nation's Fisheries II – Focus on the Future', co-sponsored by the eight Regional Fishery Management Councils, the three Interstate Marine Fisheries Commissions, and NOAA Fisheries; www.managingfisheries.org.

31 – April 3: National Science Teachers Association Annual Conference and Exhibit, Dallas, Texas; http://www.nsta.org/conventiondetail&Meeting_Code=2005DAL

April

12-14: MPA Center/Southeastern States Workshop (invitational), St. Petersburg, Florida

May

17-19: MPA Federal Advisory Committee Meeting, New England; http://mpa.gov/fac/fac_meetings.html

June

8 – 9: Capitol Hill Oceans Week 2005, Washington, D.C.; www.nmsfocean.org/

July

18-21: Coastal Zone '05, New Orleans, Louisiana. The MPA Center will host an exhibit booth. http://www.csc.noaa.gov/cz/

September

19-23: Oceans 2005, sponsored by the Marine Technology Society (MTS) and the IEEE Oceanic Engineering Society (OES), Washington, D.C.; http://www.oceans2005.org/.

October

23-27: First International Marine Protected Areas Congress, Geelong, Australia, http://www.impacongress.org/

November

2-4: Maritime Heritage Education Conference; location and other information to be announced.

28-December 2: Third International Symposium on Deep-Sea Corals, Miami, Florida; http://www.conference.ifas.ufl.edu/coral.

TO SUBSCRIBE: Send an email to Dana.Topousis@noaa.gov.