NATIONAL MARINE SANCTUARIES

2008 Accomplishments Report





Our ocean and its creatures have never been more in need of our help.

Threats like pollution, marine debris, habitat destruction and climate change are endangering some of our most precious ocean treasures. Entire ecosystems are in peril of collapse.

Coral reefs are ailing worldwide, once-productive fisheries are suffering severe declines, and endangered whales face ever-present hazards from marine debris entanglement and vessel strikes. Discarded cigarette lighters and other pieces of plastic trash make their way across thousands of miles of ocean, ending up in the stomachs of albatross chicks in the remote Northwestern Hawaiian Islands.

Today, perhaps as never before, our National Marine Sanctuary System is part of a larger means to address the fundamental problems confronting the nation. National marine sanctuaries offer more than just the protection of special marine areas; these special places provide opportunities to address many of the critical problems of our time, such as climate change and adaptation, sustainable economies, and national security. Our system of marine sanctuaries helps builds communities, encouraging Americans to find common ground and reach collective solutions of nationwide significance.

This report looks back on the Office of National Marine Sanctuaries' accomplishments over the past year. While 2008 was a busy and productive year for the sanctuaries, 2009 brings with it a host of new challenges and opportunities. This report begins our dialogue with you: our exploration of how we can move forward together, making solutions part of our daily lives. The men and women of the national marine sanctuaries work tirelessly to make the sanctuary system a leader in preserving our ocean resources, as well as a leader in addressing the challenges threatening our quality of life.

What will you do?

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

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Undersecretary of Commerce for Oceans and Atmosphere and NOAA Administrator Vacant

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COVER PHOTO: Paulo Maurin



WHAT WILL YOU DO?



This Laysan albatross chick was dissected following its death, revealing hundreds of pieces of plastic in its stomach. The contents of its gut weighed more than two regulation baseballs - 80 percent of it indigestible plastic - causing the bird to die of starvation. Adult Laysan albatrosses forage in areas of the North Pacific where mixing currents cause both food and floating plastic to concentrate, which they then return to feed to their chicks, presenting a serious threat to populations of these seabirds

NATIONAL MARINE

30° N

Equator

Papahānaumokuāke



Olympic Coast National Marine Sanctuary spans 3,310 square miles of marine waters off the rugged Olympic Peninsula. The sanctuary is home to many marine mammals and seabirds, diverse populations of kelp and intertidal algae, and thriving invertebrate communities. This sanctuary is also rich in cultural resources, with more than 150 documented historical shipwrecks and the vibrant contemporary cultures of the Makah, Quinault, Hoh and Quileute Nations. *Established July 16, 1994*.



Cordell Bank National Marine Sanctuary gets its name from the underwater mountain that rises to within 120 feet of the ocean's surface off Point Reyes, Calif. Upwelling of nutrient-rich deep water supports a flourishing ecosystem on Cordell Bank, making the waters of the 526-square-mile sanctuary a productive feeding destination for diverse marine creatures. Common sanctuary inhabitants and migratory visitors include whales, dolphins, seals and sea lions, black-footed albatross, and Pacific salmon. *Established May 24, 1989*.



Gulf of the Farallones National Marine Sanctuary covers more than 1,200 square miles of coastal and ocean wilderness west of San Francisco. The sanctuary is home to some of the largest populations of blue whales and white sharks on Earth, along with one-fifth of California's breeding harbor seals and the highest concentration of breeding seabirds in the contiguous United States. The sanctuary also protects numerous estuaries, bays and beaches for the public to enjoy. *Established Jan.* 16, 1981.



Monterey Bay National Marine Sanctuary

is the nation's largest marine sanctuary, spanning more than 6,000 square miles of coastal waters off central California. Within its boundaries which were expanded to include the submerged Davidson Seamount in 2008 — are a variety of habitats, from rocky shores and lush kelp forests to an underwater canyon over 10,000 feet deep. The sanctuary's diverse marine life includes 33

species of marine mammals, 94 species of seabirds, 345 species of fish and thousands of invertebrates. *Established Sept. 18, 1992*.





National Monument contains one of the last large-scale, predator-dominated coral reef ecosystems on the planet. Its waters are home to more than 7,000 marine species, a quarter of which are found only in the Northwestern Hawaiian Islands. They include many endangered and threatened species such as the Hawaiian monk seal and green sea turtle. The monument

is one of the largest fully protected marine conservation areas in the world, covering nearly 140,000 square miles — an area larger than all the country's national parks combined. *Established June 15, 2006*.



Channel Islands National Marine

Sanctuary encompasses the waters surrounding San Miguel, Santa Rosa, Santa Cruz, Anacapa and Santa Barbara Islands off the coast of California. The combination of warm and cold water currents around the Channel Islands results in a great variety of plants and animals, including large forests of giant kelp, flourishing populations of fish and invertebrates, and ulations of whales, dolphins, sea lions, harbor

abundant and diverse populations of whales, dolphins, sea lions, harbor seals and seabirds. *Established Sept.* 22, 1980.



Hawaiian Islands Humpback Whale

National Marine Sanctuary lies within the shallow, warm waters surrounding the main Hawaiian Islands and is one of the most important humpback whale habitats in the world. Scientists estimate that two-thirds of the entire North Pacific humpback whale population migrate to Hawaiian waters each winter to breed, calve and nurse their young. The continued protec-

tion of humpback whales and their habitat is crucial to the long-term recovery of this endangered species. *Established Nov.* 4, 1992.

Cordell Bank Gulf of the Farallones Monterey Bay

Olympic Coast 🦲

Channel Islands

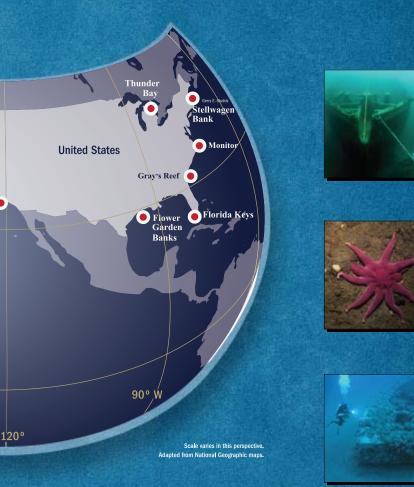
Hawaijan Islands Humpback Whale

Fagatele Bay American Samoa (U.S.)

150°

National Marine Sanctuary
Marine National Monument

SANCTUARY SYSTEM



Thunder Bay National Marine Sanctuary boasts more than 100 shipwrecks preserved by the cold, fresh waters of Lake Huron within its 448square-mile boundary. Thunder Bay's unpredictable weather and treacherous shoals have earned it the nickname "Shipwreck Alley," and its collection of wrecks represents a cross-section of the diverse vessels that have traveled the Great Lakes since the 19th century. From wooden schooners to modern freighters, these cultural treasures provide a window into the region's rich maritime history. *Established Oct. 7*, 2000.

Gerry E. Studds Stellwagen Bank National Marine Sanctuary sits at the mouth of Massachusetts Bay, just 25 miles from the busy port of Boston. Renowned for its scenic beauty and remarkable productivity, the 824-squaremile sanctuary is a popular whale watching destination and supports a rich assortment of marine life, including the critically endangered North Atlantic right whale. Stellwagen Bank's location in Massachusetts' historic shipping routes and fishing grounds also makes it a hotbed of shipwrecks representing hundreds years of maritime travel. *Established Nov. 4, 1992*.

national marine sanctuary in 1975. The site protects the wreck of the famed Civil War ironclad USS Monitor off Cape Hatteras, N.C., best known for its battle with the Confederate ironclad Virginia at Hampton Roads in 1862. In partnership with The Mariners' Museum in Newport News, Va., the sanctuary unveiled the \$30 million USS Monitor Center in 2007, further enhancing efforts to preserve, study and educate the public about this iconic piece of America's maritime past. *Established Jan. 30, 1975*.

Monitor National Marine Sanctuary was designated the nation's first



Fagatele Bay National Marine Sanctuary

embraces a fringing coral reef ecosystem contained within an eroded volcanic crater in American Samoa. Fagatele Bay is the nation's smallest marine sanctuary at one-quarter square mile and its only true tropical reef. Hundreds of species of corals, colorful reef fish, algae and other invertebrates can be found in the warm waters of the sanctuary, along with sea turtles,

dolphins, sharks, giant clams and migratory humpback whales. Established *April 29, 1986.*



Gray's Reef National Marine Sanctuary,

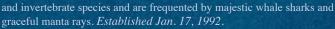
surrounds one of the largest "live bottom" reefs in the southeastern United States, located just off the Georgia coast. The 23-square-mile sanctuary consists of rocky outcroppings separated by sandy troughs, resulting in a complex habitat of ledges covered by a "living carpet" of algae and invertebrates ranging from sponges to sea stars. Gray's Reef also supports loggerhead sea turtles,

migrating right whales and a wealth of fish species, making the sanctuary a popular sport fishing and diving destination. *Established Jan.* 16, 1981.



Flower Garden Banks National Marine

Sanctuary lies 100 miles off the Texas-Louisiana coast, where underwater "gardens" emerge from the depths of the Gulf of Mexico. The sanctuary encompasses three submerged mountains called salt domes that harbor the northernmost coral reefs in the continental United States. These premier diving destinations feature numerous Caribbean reef fish





Florida Keys National Marine Sanctuary

supports one of the most diverse collections of underwater plants and animals in North America. The Keys are best known for their coral reefs, featuring North America's only living coral barrier reef, although the warm, shallow waters of the sanctuary also contain other significant marine habitats, such as fringing mangroves and seagrass meadows. Together, these complex

ecosystems provide the basis for the valuable tourism and fishing industries that are so important to Florida's economy. *Established Nov.* 16, 1990.

SCIENCE & EXPLORATION



Gray's Reef Sanctuary Staff Launch New Fish Tracking Project

Researchers at Gray's Reef National Marine Sanctuary tagged eight reef fish in May 2008, kicking off a new project to track the movement of fish around the sanctuary environment. The tagged fish – six scamp, one gag grouper and one red snapper – were caught during a four-day mission aboard the NOAA ship *Nancy Foster*, surgically implanted with acoustic tags, and released back into the sea. As the fish move through the water, the signals emitted by the tags are recorded by acoustic receivers positioned throughout the sanctuary. The tagging project is designed to help Gray's Reef sanctuary staff identify the home ranges of reef fish within the sanctuary and track how the fish use the habitat. Ultimately, information from the project will assist with management decisions as the sanctuary gains a greater understanding of fish behavior and distribution. Plans are being developed to partner with NOAA's National Centers for Coastal Ocean Science to continue tagging efforts in FY 2009. For more information, visit http://graysreef.noaa.gov/foster_tag_news.html.

National marine sanctuaries are special places that collectively create positive nationwide change.

Sanctuary Tests Innovative Techniques for Removing Deep Water Marine Debris

Cordell Bank National Marine Sanctuary staff successfully tested innovative methods of removing derelict fishing gear from the deep waters of Cordell Bank using a remotely operated vehicle (ROV) in August 2008. The team experimented with removing lost longlines and gillnets that had become entangled on the rocky reef, using the ROV's manipulator arm to cut loose and retrieve several large sections of fishing gear over the course of the six-day mission. The results of their tests will be incorporated into marine debris removal protocols that can be used for habitat restoration in other sensitive deepwater areas like Cordell Bank. In addition, sanctuary staff collected ma-



rine life attached to the derelict gear for aquaria and museum exhibits to share the underwater ecosystem of Cordell Bank with a wide audience and increase our understanding of this ocean treasure. For more information, visit http://sanctuaries.noaa.gov/missions/2008cordellbank.

Acoustic Buoys Help Protect Critically Endangered Right Whales

An innovative monitoring system is now providing enhanced protection from vessel traffic for critically endangered North Atlantic right whales. Ten automatic acoustic detection buoys along the main shipping lanes into Massachusetts Bay and Boston Harbor "listen" for right whales, with five of the buoys located in Stellwagen Bank National Marine Sanctuary. When a right whale's call is detected by one of the buoys, the information is relayed in real time to NOAA's Right Whale Sighting Advisory System, which alerts vessels in the area and may reduce the potential for harmful whale-vessel collisions. The acoustic detection system, which was installed in January 2008, was developed by Cornell University and Woods Hole Oceanographic Institution as a license requirement for two liquid natural gas ports near the western edge of the sanctuary. In areas where right whales have been detected, tankers accessing these new ports are required to slow down and post observers. It is estimated that fewer than 400 right whales remain in the North Atlantic, and protecting the majestic animals in and around Stellwagen Bank is a high priority for the sanctuary. For more information, visit http://stellwagen.noaa.gov or www.listenforwhales.org.

Researchers Conduct Deep-Sea Coral Mapping, Observe Seafloor Recovery off Olympic Coast

Olympic Coast National Marine Sanctuary staff completed a deep-sea research cruise aboard the Canadian Coast Guard vessel John P. Tully in July 2008, bringing back new information on little-known deepwater coral habitats and seafloor recovery along a telecommunications trench. During the expedition, researchers used the ship's remotely operated vehicle and highdefinition camera to document corals at several sites as deep as 1,300 meters. In the northern part of the sanctuary, the team surveyed an area of the seafloor that had been disturbed by a fiber optic telecommunication cable installed in 1999. The project revealed new locations of deep-sea corals



and sponges and contributed to marine resource managers' understanding of deepwater habitat recovery following seafloor disturbance. For more information, visit http://olympiccoast.noaa.gov/research/research_feat/ coral_mapping.html.

MARITIME HERITAGE





A team of maritime heritage archaeologists from the Office of National Marine Sanctuaries discovered the sunken remains of the British whaling ship *Gledstanes* and another mystery whaler during an August 2008 expedition to the Papahānaumokuākea Marine National Monument. The wrecks were found off Kure Atoll and French Frigate Shoals in the Northwestern Hawaiian Islands during the month-long mission to explore and document shipwrecks in monument waters. The *Gledstanes*, which wrecked at Kure Atoll in 1837, was located after divers found a pile of iron ballast and chain that led to a trail into the reef, where four massive anchors and other artifacts were found scattered. Sanctuary staff are currently conducting further investigation into the identity of the other, unknown whaling ship discovered on the expedition at French Frigate Shoals. Both vessels are some of the oldest discovered thus far in

the monument, shedding further light on the significance of 19th-century whaling in this region. For more information, visit http://sanctuaries.noaa.gov/missions/2008pmnm.

Sanctuary Staff Host First Whaling Heritage Symposium

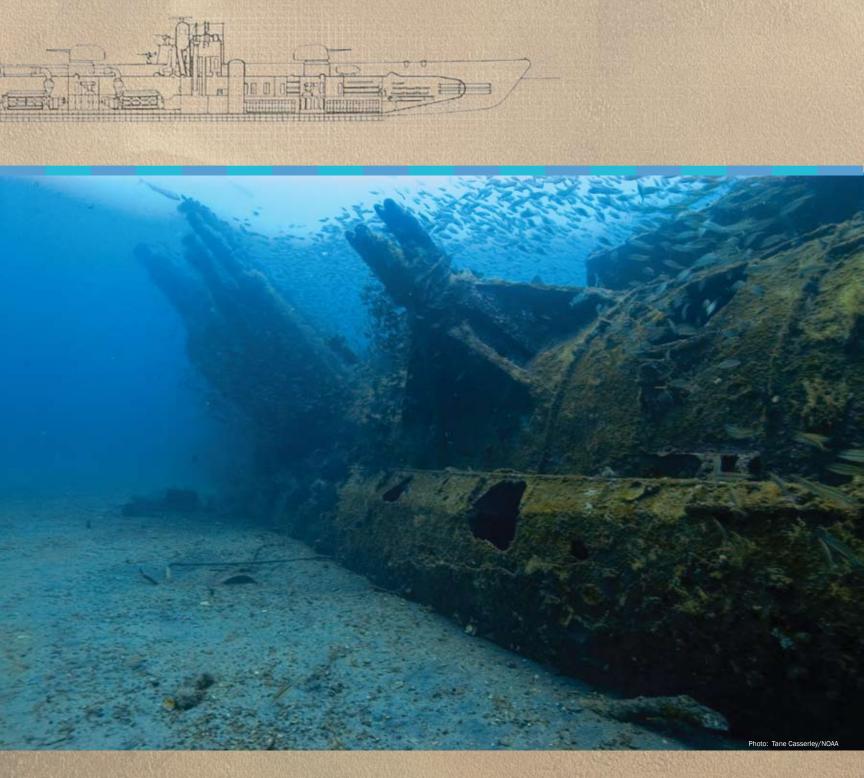
From June 15-19, 2008, the Office of National Marine Sanctuaries Maritime Heritage Program hosted the inaugural 2008 Whaling Heritage Symposium, drawing over 100 attendees from diverse agencies and organizations. Participants at the symposium, the first event of its kind, explored innovative ways to tell historic whaling narratives by incorporating concepts like the cultural heritage of whaling, minorities and American whaling history, and the geography of whaling archaeology and marine protected areas. The event was well received by both public and professional attendees, and helped foster a greater appreciation for the connections between maritime and whaling heritage, marine science, and ocean stewardship. Co-sponsors for the symposium included the NOAA Fisheries Service, National Maritime Historical Society, Mystic Seaport, New Bedford Whaling Museum, and New Bedford Whaling National Historical Park. For more information, visit http://sanctuaries.noaa.gov/maritime/whaling.

Volunteer Divers, Research Vessel SRVx Debut with Shipwreck Mapping Expedition



The new Office of National Marine Sanctuaries Volunteer Dive Program undertook its first-ever mission in September 2008, as a team of NOAA-certified Scientific Divers participated in an expedition to survey the wreckage of the freighter *Andalusia* at Olympic Coast National Marine Sanctuary. The expedition also was the first operational mission for the new 85-foot research vessel *SRVx*, which is being used to evaluate the effectiveness of a regional-class research vessel for missions in sanctuaries. During the course of the mission, five volunteer divers and two sanctuary divers located and mapped significant features of the *Andalusia*, which grounded just outside the sanctuary in 1947. In three days of diving, they conducted 25 dives and contributed 165 hours of volunteer time. The expedition was an important one for both the

volunteer dive program and the sanctuary, marking the first shipwreck dive operation in the Olympic Coast in over 10 years. For more information, visit http://sanctuaries.noaa.gov/news/features/1008_divers.html.



Sanctuary Researchers Document World War II U-boat Wrecks off North Carolina

In July 2008, Monitor National Marine Sanctuary staff coordinated a scientific research expedition to document the remains of three sunken German U-boats off the coast of North Carolina in an area known as the "Graveyard of the Atlantic." Sanctuary researchers worked with several partner organizations to survey the wrecks of the submarines U-352, U-701 and U-85, which were sunk by U.S. forces during the Battle of the Atlantic in World War II. The survey methods used were non-invasive and complied with U.S. and international policies on the treatment of war graves. The expedition was a success, producing extensive maps, photographs and video that will contribute to the goal of preserving and protecting these sites of historical significance. U.S. and British wrecks from the Battle of the Atlantic will be surveyed during the second phase of the expedition, scheduled for summer 2009. For more information, visit http://sanctuaries.noaa.gov/missions/battleoftheatlantic.

OUTREACH & EDUCATION

Walden Media Partnership Promotes Ocean Conservation



Walden Media, producer of such films as "Bridge to Terabithia" and "The Chronicles of Narnia," teamed up with NOAA's Office of National Marine Sanctuaries in 2008 to promote ocean conservation to the public – especially children – by developing

educational materials for the film "Nim's Island." A 16-page educator's guide was distributed to over 500,000 elementary school teachers, and thousands of bookmarks were made available at participating Borders bookstores. NOAA and the national marine sanctuaries were also featured on a one-hour Animal Planet special hosted by Jeff Corwin, and the "Be Wildlife Wise" public service announcement featuring Sanctuary Sam was included on the two million copies of the "Nim's Island" DVD that were released to the public in the summer. By partnering with Walden Media, thousands of children were reached with the message that they can be stewards of the ocean by learning more about the marine environment and how to protect it. For more information, visit http://sanctuaries.noaa.gov/education/nim.html.

Sanctuaries Launch Online Collection of High-Resolution Images and Videos

The National Marine Sanctuaries Media Library, an online vault featuring a comprehensive collection of high-resolution still images and video clips from across the National Marine Sanctuary System, made its debut in 2008. The Media Library provides sanctuary staff, partners and the general public with instant access to a searchable database of media files for a variety of purposes, ranging from education and outreach and PowerPoint presentations to media B-roll and commercial use. Managed by the Office of National Marine Sanctuaries, the Media Library contains thousands of images captured by NOAA scientists, educators, divers and archaeologists. This project is part of a continuing NOAA effort to enhance public awareness, understanding, and appreciation of the marine environment. To access the Media Library, visit http://sanctuaries.noaa.gov/photos.

Multicultural Program Receives Prestigious DOC Silver Medal



In November 2008, Monterey Bay and Channel Islands national marine sanctuaries were awarded a Department of Commerce Silver Medal for their Multicultural Education for Resource Issues Threatening Oceans (MERITO) program. The award, which is one of the highest forms of recognition granted by the Secretary of Commerce, was presented for MERITO's work in implementing a bilingual outreach program that expanded awareness to Latino communities and sparked community involvement in ocean issues throughout California's Santa Cruz, Monterey, Santa Barbara and Ventura counties. The MERITO program was initiated by the Monterey Bay sanctuary in 2002 and expanded to the Channel Islands in 2004. It provides inspirational ocean-themed educational programming and opportunities for thousands of participants and has had a media impact in the millions. For

more information, visit http://sanctuaries.noaa.gov/education/merito.



OceansLIVE Mission Brings Wonders of Monterey Bay to the Web

In March 2008, the Office of National Marine Sanctuaries gave students and adults alike the opportunity to experience Monterey Bay National Marine Sanctuary via innovative, real-time Internet broadcasts. The "Immersion Presents Monterey Bay" mission — hosted in partnership with renowned ocean explorer Dr. Robert Ballard, Immersion Presents and the Institute for Exploration — used cutting-edge telepresence technology to take viewers beneath the waves, transmitting live images of the sanctuary's marine life and habitats to classrooms and Boys & Girls Clubs across the country. The 33 live broadcasts conducted during the five-day mission aboard the research vessel *Fulmar* were also made available to the general public through OceansLive.org. The presentations highlighted ocean literacy messages, kelp forest ecology, deep-sea biology and exploration, and gave viewers the chance to interact with the expedition team in real time. For more information, visit http://www.oceanslive.org.

National marine sanctuaries work to resolve the critical problems of our time.

COMMUNITY INVOLVEMENT



Office of National Marine Sanctuaries, California Academy of Sciences Debut Major Farallones Exhibit At the California Academy of Sciences' grand reopening in September 2008, the Academy unveiled a new three-story, 100,000-gallon "California Coast" tank highlighting the habitats of Gulf of the Farallones National Marine Sanctuary. Constructed in partnership with the Office of National Marine Sanctuaries, the exhibit showcases the marine animals and plants of the California Current ecosystem, focusing on the Farallones sanctuary's rich and diverse rocky intertidal zone. An estimated 1.2 million people are expected to visit the Academy every year and learn how the sanctuary system protects its valuable natural, cultural and historical resources. In addition to the exhibit, the Farallones sanctuary and the Academy are training 500 docents to be interpreters on the sanctuary reefs as well as at the exhibit, promoting enjoyment of intertidal habitats without harming marine life. For more information, visit http://www.calacademy.org.

In national marine sanctuaries, diverse communities find common ground and <u>solutions</u>.

Thunder Bay National Marine Sanctuary Unveils Redesigned Shipwreck Exhibit

In June 2008, Thunder Bay National Marine Sanctuary unveiled its Exploring the Shipwreck Century exhibit at NOAA's Great Lakes Maritime Heritage Center in Alpena, Mich. The 9,000-square-foot exhibit reveals the secrets of Thunder Bay's nearly 200 shipwrecks and NOAA's role in protecting America's maritime heritage. The exhibit's centerpiece is a full-size model of a Great Lakes schooner and replica shipwreck. Visitors will also find hundreds of shipwreck artifacts on display, as well as both traditional and interactive exhibit components. Future plans call for the re-installation of NOAA's Science on a Sphere exhibit, as well as a live video feed to one of the sanctuary's most popular shipwrecks. For more information, visit http://thunderbay.noaa.gov.



Sanctuary Staff, Volunteers Respond to Cosco Busan Oil Spill

On Nov. 7, 2007, the container ship *Cosco Busan* rammed the San Francisco Bay Bridge and spilled over 53,000 gallons of oil into San Francisco Bay, impacting Monterey Bay and Gulf of the Farallones national marine sanctuaries. The Farallones sanctuary immediately deployed staff and trained volunteers from its Beach Watch program to assist with the spill response, surveying beaches for oiling and wildlife mortality. Monterey Bay and Cordell Bank sanctuary personnel also dedicated staff time at the incident command center and provided support for field activities. During a Nov. 19 congressional subcommittee hearing regarding the oil spill, the Beach Watch program was praised for its role in the spill response. Today, the sanctuaries continue to conduct natural resource damage assessment and surveillance of beaches for further oil spread. For more information, visit http://www.farallones.org/take_action/index.php.

Farallones Sanctuary Takes First Steps to Address Ocean Climate Change

In April 2008, Gulf of the Farallones National Marine Sanctuary held the inaugural Biennial Ocean Climate Summit for the Bay Area's coast and ocean. The summit brought together science and policy experts and community stakeholders to address climate change impacts and explore partnerships to enhance management, research and public outreach efforts. Over 100 participants representing government agencies, non-profit organizations and academic institutions throughout the region attended the summit, along with staff from across the National Marine Sanctuary System. In addition to the summit, the sanctuary is working to develop an Ocean Climate Action Plan for the Bay Area marine environment. For more information, visit http://farallones.noaa.gov/ecosystemprotection/website/schedule.html.

Media Coverage Value Exceeds \$23 Million for Sanctuaries in FY 2008

National marine sanctuaries work with media to inform millions of Americans about programs, missions, research and discoveries through print and electronic news coverage. Topics in 2008 that captured the attention of the news media and the public included shipwreck discoveries in the Papahānaumokuākea Marine National Monument; sanctuary staff and volunteer response to the Cosco Busan oil spill in San Francisco Bay; the "Battle of the Atlantic" expedition to document World War II U-boat wrecks off North Carolina; an "Immersion Presents" expedition in Monterey Bay; and



the results of the "SPLASH" humpback whale population study. Total media coverage in FY08 exceeded 673,300,000 impressions, for a comparable advertising value of more than \$23 million. Millions more learned about sanctuary news through online sources.

PROTECTION & MANAGEMENT

Papahānaumokuākea Marine National Monument Declared a Particularly Sensitive Sea Area



The vast marine ecosystems of the Northwestern Hawaiian Islands encompassed by the Papahānaumokuākea Marine National Monument received additional protection under a new, internationally recognized designation on April 4, 2008. The International Maritime Organization declared the waters of the monument a "Particularly Sensitive Sea Area" (PSSA) – a designation that includes measures to protect marine resources of ecological and cultural significance from damage by ships while helping keep

mariners safe. Under the PSSA designation, a ship reporting system was implemented and special zones in the monument known as "areas to be avoided" were added to international nautical charts to direct ships away from coral reefs, shipwrecks and other sensitive areas that may pose a navigation hazard. The monument is the world's 11th marine protected area to receive PSSA designation, joining special places like Florida Keys National Marine Sanctuary, the Great Barrier Reef, and the Galapagos Archipelago. For more information, visit http://papahanau-mokuakea.gov/news/welcome.html.

Florida Keys Sanctuary Releases Revised Management Plan Following Extensive Public Process In December 2007, Florida Keys National Marine Sanctuary released its revised management plan, the result of six years of rigorous review and public involvement. The sanctuary's management plan is designed to identify the best strategies to protect the natural and cultural resources the Florida Keys, and the sanctuary is mandated by Congress to review the plan every five years to assess its effectiveness. When the Florida Keys sanctuary's first management plan was under development in the 1990s, it received more than 6,000 comments from the public. The 2007 revised plan, which also solicited comments at public meetings and via the Federal Register, received only a few dozen comments — proof that the extensive public involvement throughout the creation of the original plan succeeded. The revised plan contains four new action plans addressing science management and administration, damage assessment and restoration, operations, and evaluation. For more information, visit http:// floridakeys.noaa.gov/management/welcome.html.

R/V Manta Dedicated at Flower Garden Banks National Marine Sanctuary



In June 2008, Flower Garden Banks National Marine Sanctuary commissioned a new, custom-designed research vessel, the R/V *Manta*. Designed with flexibility in mind, the *Manta*'s ability to adapt to the goals of a project make it a valuable tool for the sanctuary and its partners. The vessel greatly enhances the staff's ability to respond to natural events such as hurricanes, coral diseases and coral bleaching, as well as human disturbances such as oil spills, anchoring and illegal fishing activities. The

Manta will also be used for education and outreach activities, including professional development workshops. The vessel leverages the resources of many partners in the Gulf of Mexico region, including other government agencies, academia and non-profit organizations. The *Manta* has already proven to be an asset to the local community by providing support to emergency response and recovery teams immediately following Hurricane Ike. For more information, visit http://flowergarden.noaa.gov/about/rv_manta.html.

YOU CAN MAKE A DIFFERENCE

HTTP://SANCTUARIES.NOAA.GOV/MAKEADIFFERENCE





MAKE A DIFFERENCE!

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