



Monterey Bay National Marine Sanctuary Sanctuary Office Report



Volume 4, Number 2

A REPORT FOR THE SANCTUARY ADVISORY COUNCIL MEMBERS

REPORTING PERIOD: FEBRUARY 16, 2007 TO APRIL 20, 2007

ABOUT THE SANCTUARY

Designated in 1992, the Monterey Bay National Marine Sanctuary (MBNMS or Sanctuary) is a federally protected marine area offshore of California's central coast. Stretching from Marin to Cambria, the MBNMS encompasses a shoreline of 276 miles and 5,322 square nautical miles of ocean.

Supporting one of the world's most diverse marine ecosystems, it is home to numerous mammals, seabirds, fishes, invertebrates and plants in a remarkably productive coastal environment. The MBNMS was established for the purpose of resource protection, research, education and public use of this national treasure.

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA) AND NATIONAL MARINE SANCTUARY PROGRAM (NMSP) NEWS

First Lady Briefed for Trip to the Northwestern Hawaiian Islands Marine National Monument

On February 20, the Director, Deputy Director, and Communication's Chief of the National Marine Sanctuary Program attended a briefing for First Lady Laura Bush on the Northwestern Hawaiian Islands Marine National Monument, to prepare her for her upcoming trip to Midway Atoll. Susan Middleton, co-author/co-photographer of the famed book *Archipelago*, gave the overview followed by a question and answer session with Jim Connaughton, chair for White House's Council on Environmental Quality (CEQ); Dr. Gerhard Kuska, CEQ; and VADM Conrad Lautenbacher, NOAA Administrator, fielding questions from the NGOs in the audience.

NOAA Booth Star of AAAS Conference

The NOAA booth featuring the 200th Anniversary and the National Marine Sanctuary Program was the "star attraction" just inside the entrance of the American Association for the Advancement of Science (AAAS) Conference Hall in San Francisco Friday, February 16- Monday, February 19. Founded in 1848, AAAS serves some 262 affiliated societies and academies of science, serving 10 million individuals, and publishes the journal "Science."

NOAA's Les Adams, Paul Taylor, Ben Sherman and Sarah Marquis staffed the dramatic, eye-catching NOAA booth, which featured materials from the program and displayed the California "Thank You Ocean" campaign Public Service Announcement and information along with NOAA's 200th Anniversary materials and children's activity books. Eric Hackathorn with NOAA in Boulder, Colo., demonstrated the NOAA "second life" virtual reality world to throngs of visitors, who visited "NOAA Island" on a large screen monitor.

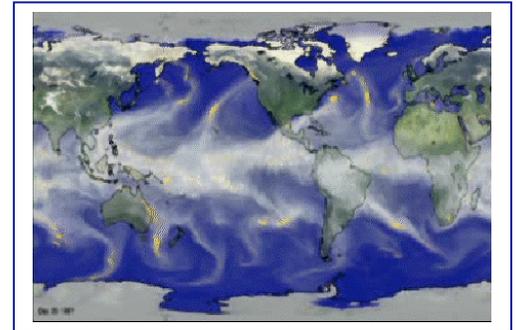
When the exhibit floor was open to the public on weekend "Family Days," Mary Jane Schramm from Gulf of the Farallones National Marine Sanctuary, and Jennifer Stock from Cordell Bank National Marine Sanctuary shared kid's activities with the crowds of thousands, including one of the program's youngest constituents.



NATIONAL MARINE SANCTUARY NEWS

Channel Islands NMS

From March 1st to May 31st, UCSB Marine Science Institute will be collaborating with the CINMS MERITO Academy program through their presentation of 'the Magic Planet' at each of the 11 MERITO Academy classes. The Magic Planet is a digital spherical projector. Some of the Earth projections include infrared satellite data depicting the development of storm systems, sea surface temperatures depicting El Niño and La Niña events, continental drift, and images of Earth's topography and bathymetry. UCSB Mobile REEF will be visiting each of the 11 classes enrolled in the pilot MERITO Academy program and will present the Magic Planet Interactive Globe and marine invertebrate touch tanks to the 330 MERITO Academy students.



Cordell Bank NMS

Dan Howard met with the board of the Pacific Coast Federation of Fishermen's Association to discuss the proposed location for the oceanographic buoy at Cordell Bank. The intent of the meeting was to make sure that the buoy placement did not interfere with any commercial fishing activity and also to spread the word that a new buoy will be deployed in the near future. In addition, information on sea surface temperature, currents, and chlorophyll concentration are a few of the parameters that will be collected and will be available to mariners via the web. We will be following up with the exact location of the buoy and providing other information that was requested by the board. There was no opposition to the proposed location and board members had several helpful recommendations.

Flower Garden Banks NMS

A ground-breaking expedition, featuring more than a dozen partners, will kick off February 27, 2007 with VIP and student tours of the U.S. Navy's nuclear powered research submarine (NR-1) and its support vessel, SS Carolyn Chouest. A media event on March 1 will herald the beginning of the expedition, which will continue from March 2-10, 2007. The expedition builds on previous work coordinated by the sanctuary and has several different, yet complementary, missions. Sanctuary researchers will explore the deeper water low-relief ridges and scarps that connect the various banks along the continental shelf in the northwest Gulf of Mexico, including the three banks that comprise the Flower Garden Banks National Marine Sanctuary. Their mission will be to observe and document plants and animals that utilize these 'hidden highways' between the banks to determine how the sanctuary may be affected by events that occur outside its boundaries. University of Rhode Island researchers, led by Dr. Robert Ballard, will explore the same areas for evidence of ancient shorelines and the people who may have lived there. Meanwhile, in the shallower waters of the sanctuary, researchers will be investigating connections on the coral reef cap, including manta ray movements, conch populations, and parrot fish predation of corals. Immersion Presents, a private organization, will air 5 broadcasts each day of the mission into classrooms and informal settings such as Boys and Girls Clubs. Students at the viewing sites around the country will have an opportunity to ask questions of the scientists on board the vessel. Individuals can follow the expedition from the comfort of their homes through 24 hour live feeds on the internet, daily mission logs and background information provided on several website.

Northwestern Hawaiian Islands National Monument

The Northwestern Hawaiian Islands Marine National Monument's Mokupapapa Discovery Center hosted Kaleo Pilago, crewmember on the voyaging canoes Hokualaka'i and Lauhoe, on February 15th as part of our monthly lecture series. He shared stories from his trip to Nihoa and Mokumanamana and presented new programs that will be available in Hilo for those interested in learning about traditional sailing. It was another full house with 65 people in attendance.

Olympic Coast NMS

Assistant Superintendent George Galasso and Office of Law Enforcement Agent John Haupt collaborated on an Enforcement Assumptions Matrix. This matrix will be used, along with those from other sanctuaries, to determine the ten-year requirements for enforcement programs within sanctuaries.



MONTEREY BAY NATIONAL MARINE SANCTUARY NEWS AND PROGRAM UPDATES



MANAGEMENT

On February 20, 2007 the Monterey Bay National Marine Sanctuary co-sponsored, along with the Monterey Bay Aquarium, Monterey Bay Sanctuary Foundation, and Santa Clara University, a very successful day-long workshop for religious leaders, scientists and conservationists called the Living Ocean Initiative. Over 160 religious leaders from central California, broadly interfaith, attended the workshop along with about 20 scientists and conservation leaders. Held at the Monterey Bay Aquarium, the purpose of the workshop was to build bridges between members of the faith, science and conservation communities in support of ocean stewardship. Rev. Deborah Streeter, a minister with the United Church of Christ and the chair of the MBNMS Advisory Council, lead a planning committee (including MBNMS's Rachel Saunders) that worked for over a year to organize the workshop. Rev. Streeter moderated the workshop, which included several showings of the "Thank You Ocean" public service announcement, a keynote address by Dr. Carl Safina, a panel discussion involving religious leaders and scientists and afternoon breakout sessions on a variety of topics. It is hoped that individual faith communities will continue the dialog back at their congregations; the planning committee also intends on pursuing more site-based follow-up events and there is discussion about replicating the effort in others locations on the west coast. For more information contact Rachel Saunders at 831-647-4237.



On March 7th, the Sanctuary Advisory Council selection subcommittee met, reviewed a total of 37 SAC applications, and passed on their recommendations to the acting superintendent. The committee members selected three nominees for each open seat including agriculture, business/industry, commercial fishing, recreational fishing, recreation, research, conservation, education and two at-large seats. The recommendations will be reviewed, interviews conducted, and a primary and secondary representative will be selected and passed on the the regional director and then to the director for review and approval. We plan to announce the new and reinstated SAC members at the April 20th SAC meeting.

On March 8 Holly Price met with Dr. Steve Ralston, a stock assessment biologist from the National Marine Fisheries Service to provide background information on the MPA workgroup effort over the past several years, discuss steps ahead and coordination with NMFS and the Pacific Fishery Management Council. Dr. Ralston accepted the MBNMS invitation to join the MPA workgroup starting with the March meeting. For information contact Holly at (831) 647-4247.

MBNMS MPA Workgroup met on March 12 to evaluate recommendations from the science workshop on offshore MPA designs regarding inclusion of the shelf break and the oxygen minimum zone as specific representative habitats. The group also initiated an evaluation of the potential need for and utility of MPAs across the sanctuary and at an array of specific locations identified by the group. This evaluation drew on on extensive information and data layers on biology, geology, oceanography, fishing patterns and existing regulations compiled by MBNMS research, resource protection and program operations staff. For information contact Holly Price at (831) 647-4247.

On March 14th, Karen Grimmer briefed the Board of Directors for the Association of Monterey Bay Area Government on

the Joint Management Plan status. She also gave an update and thanked them for their participation with the AMBAG/MBNMS Sanctuary Awards Reception and the Sanctuary Currents Symposium events in early March, and handed out the new Ecosystem Observation annual report. For more information contact Karen Grimmer at (831) 647-4253.

On March 15th, Karen Grimmer and Michele Roest met with Nick Franco, District Superintendent of San Luis Obispo Coast District, and Hoyt Fields, with Friends of Hearst Castle to discuss setting up an account with FHC for the Coastal Discovery Center to accept funds via direct deposit, donation and other revenues. A letter detailing the agreement will be brought forward for approval at FHC's executive board meeting on April 5th. In addition, MBNMS is providing a letter of support for their nomination of Hearst Castle and the San Simeon coastline as a World Heritage Site. For more information contact Michele Roest at (805) 927-2145.

RESEARCH AND MONITORING

On February 22nd, Amber Szoboszlai (Sea Grant Fellow) received the Emerging Public Policy Leader Award from the American Institute of Biological Sciences. The award will provide support for Amber to travel to Washington, D.C. in April to participate in the 2007 Biological and Ecological Sciences Coalition Congressional Visits Day. This is an annual event that brings scientists and science educators to Washington, D.C. to raise visibility and support for the biological sciences. Participants will meet with members of Congress and their staff to explain the importance of federal support for scientific research. For more information, contact Amber Szoboszlai at (831) 647-4227.

Information on "Special Status Species" in the MBNMS is now available on a new section of the SIMoN website. Special status species are those that have been listed by state, federal and international organizations due to reduced or declining population sizes. The listing status of all special status species in the MBNMS can be found on the website. In addition, status reports are available for some species. Status reports cover a variety of topics including geographic range, abundance, migration patterns, threats, current research projects, conservation efforts and management actions the Sanctuary can implement to improve species recovery. Links to maps, photos, videos, and educational materials are also included in status reports. New status reports will be added in the future. The special status species website can be accessed through the "More Links" pull-down menu on the left side of the SIMoN homepage or at: <http://www.mbnms-simon.org/projects/specialSpecies/index.php>. For more information, contact Jennifer Brown, SIMoN Research Associate at (415) 310-6764.



On March 8 MBNMS staff Scott Kathey, Chad King, and Josh Pederson participated in an annual NOAA dive training exercise. Using the R/V Fulmar, NOAA divers from the Monterey Bay area spent the day reviewing safety procedures, dive planning, and conducting dives. The latter half of this training day was focused on the loading of injured divers from an inflatable boat or directly from the water onto the R/V Fulmar. Participating groups also included NMFS, PFEL, and NOAA Corps. For more information, contact Josh Pederson at (831) 420-3660.

On March 9 staff met with Dr. Curt Storlazzi of the US Geological Survey. Staff reviewed a draft report entitled "Spatial and temporal variability in seafloor sediment mobility in Monterey Bay, Cordell Bank and Gulf of the Farallones National Marine Sanctuaries, Part I: wave-driven re-suspension" authored by Storlazzi, Reid and Golden. The report uses data on wind and wave patterns, seabed sediment characteristics, bathymetry, and inter-annual climatic conditions (e.g., El Nino and La Nina) and models how they interact to mobilize sediments at large spatial scales. This kind of information may be of use when considering the location of monitoring sites on the continental shelf or for the placement of instruments and cables. For more information, contact Steve Lonhart, SIMoN scientist, at (831) 420-3661.

Analyzing trends in oceanographic time series was a project addressed by SIMoN/MBARI Postdoctoral Researcher David Johnston. This project introduces the CalCOFI (California Cooperative Oceanic Fisheries Investigations) and the MBARI (Monterey Bay Aquarium Research Institute) programs as they relate to each other and oceanography within the Sanctuary. Many satellite, ecosystem model, and time series images are available. A web site, with the final report available for

download, is now available at http://www.mbnms-simon.org/sections/oceanography/project_info.php?pid=100190&sec=o
For more information, contact Andrew DeVogelaere, Research Coordinator and SIMoN Director at (831) 647-4213.

The Research Activity Panel met at NOAA Fisheries in Santa Cruz on March 9th. Topics on the agenda included a presentation on trophic interactions of the jumbo squid in the California Current, ROV assessment of MPA surveys, research permits in state MPAs, an overview of Sanctuary Condition Reports, a summary of the recent Statistical Design Workshop for central California MPA monitoring, the future of the Monterey Bay Crescent Ocean Research Consortium, and a summary of the recent Sanctuary Currents Symposium. For more information, contact Erica Burton, Research Specialist at (831) 647-4246.

Erica Burton (Research Specialist) attended the CBNMS Sanctuary Advisory Council (SAC) meeting at the Bodega Bay Marine Lab on March 13th. Agenda items included updated from the Superintendent (Sanctuaries Act Reauthorization, Budget, Leadership Team Meeting), update on education activities, update on the new research buoy, summary of the Cordell Bank Ocean Monitoring Program, update on the Sanctuary boundary expansion bill, protocols for development of SAC resolutions, and a panel discussion on supporting West Marin and West Sonoma heritage fishing communities and low impact fishing methods at Cordell Bank. For more information contact Erica Burton at (831) 647-4246.

On March 13, 14, and 16 Sanctuary staff (Chad King, Scott Kathey, and Josh Pederson) supervised maintenance of the NMSP's West Coast Observations moorings located on the Big Sur and Carmel coasts. Every three months, divers from UC Santa Cruz / PISCO inspect the moorings and replace their sensors. The R/V Fulmar was used as the platform for this work. More information on this project, including data from the moorings, is available through the SIMoN website at http://www.mbnms-simon.org/sections/obs/nmsp_wco.php. For more information contact Josh Pederson, SIMoN Outreach and Web Specialist, at 831-420-3660.

Starting last February, there has been a die-off of common murres along the central coast of California. Beach COMBERS, a program that surveys beach cast marine birds and mammals on the beaches of the Monterey Bay National Marine Sanctuary, reported 253 newly deposited murres in the main survey area (11 beaches in the Monterey Bay encompassing 51 km) during the weekly survey of March 1 -7, 2007. This number is 17 times higher than the March survey average of 15 birds in this same survey area since the program began in 1997. The Marine Wildlife Veterinary Care and Research Center examined the carcasses of 41 common murres and determined the birds were thin to emaciated and had not eaten recently. This suggests that poor prey availability was the cause of this die-off. Interestingly, during this same time period die-offs of auklets, and to a lesser extent puffins, have been reported in northern California and Oregon. Oceanographers have been reporting unusual oceanographic conditions off the West Coast of the U.S. over the last couple of spring seasons that resulted in lower productivity. This may explain the unusually high mortality observed. For additional information visit the "What's New in the Sanctuary" section of the SIMoN website (<http://www.mbnms-simon.org>) or contact Jean de Marignac, SIMoN Scientist, at (831) 647-4214.



The Center for Ocean Solutions is a new collaboration between Stanford University, Hopkins Marine Station, MBARI and the Monterey Bay Aquarium. The purpose of the Center is to bring partners/collaborators together to define enduring solutions to ocean problems. In April, there was a workshop to address the question of ocean acidification. As CO₂ enters the atmosphere, much of it ends up in the ocean resulting in it becoming more acidic. This has direct effects of increased dissolving rates of organisms that have calcium carbonate structures (e.g., corals and some plankton- coccolithophores). Indirect effects will impact ocean food webs, right up to the higher levels of fisheries. While many people are discussing the issue of global warming, the related issue of ocean acidification is rarely discussed. Follow ups to this initial workshop will likely result in a strategic plan to develop predictions of the ocean under different acidification scenarios and how to prepare for related resource management issues. For more information, contact Andrew DeVogelaere, Research Coordinator and SIMoN Director, at (831) 647-4213.

RESOURCE PROTECTION

The MBNMS Coastal Erosion multistakeholder workgroup met on March 7 to continue their evaluations of approaches to reduce loss of beach habitat in southern Monterey Bay and reduce the proliferation of hard coastal armoring. Holly Price and Brad Damitz led the group's discussion of the Scope of Work for a technical evaluation of various alternative strategies proposed by the group, and evaluated potential funding sources and regulatory considerations. The state offered to assist with funding a portion of the evaluation via a grant to the Association of Monterey Bay Area Governments (AMBAG), and this will be integrated with the broader evaluation the workgroup needs to conduct. For information contact Brad Damitz at (415) 259-5766.

A subcommittee of the Coastal Erosion Workgroup met on February 28 and March 7 at the MBNMS office to outline an agreement for a pilot project for beach erosion control to insert Pressure Equalizing Modules along approximately a mile of beach in Southern Monterey Bay. These low-impact devices are intended to dewater the beach and reduce sand loss without hard armoring. Sand City agreed to move ahead with a one-year contract for the devices, and AMBAG will pursue accepting the contract from Sand City over the next few months since the project crosses multiple jurisdictions. The subcommittee members and MBNMS will work towards developing shared funding sources and monitoring programs. MBNMS will host an interagency meeting later this month to evaluate permitting needs for the project. For information contact Holly Price at (831) 647-4247.

The MBNMS has been continuing to carefully monitor the installation of the Monterey Bay Aquarium Research Institute research cable within the sanctuary. There is a permit monitor aboard the cable-laying ship who reports to staff daily (at a minimum, and occasionally more often) to summarize the day's events. Additionally there are two marine mammal monitors aboard who are conducting observations and have the authority to stop operations should a marine mammal have the potential to be negatively impacted. Thus far, operations are proceeding extremely well. As of 3/29/07, the installation of the cable itself had been completed. Next steps involve installing and attaching the trawl-resistant science node to the cable, and conducting post-lay burials and an inspection of the route. Should you have any questions please contact Deirdre Hall at 831-647-4207



The installation of the Monterey Accelerated Research System (MARS) cable and the associated trawl-resistant science node by the Monterey Bay Aquarium Research Institute (MBARI) was completed within the MBNMS on April 2nd. MBNMS Permit Coordinator, Deirdre Hall,

received daily updates from both on-board marine mammal monitors and our permit monitor. There were no instances of adverse interactions with marine mammals during installation, and preliminary reports indicate that the cable has been successfully installed while meeting all permit requirements for burial. The entire route of the MARS cable, including the science node has been placed inside the MBNMS-approved 40-meter corridor. Final data and reports, including an accurate route position list of the cable, will be provided to state and federal agencies shortly. This project is the first successful installation of a research cable with the NMSP and required a significant amount of coordination, environmental analysis, oversight, and review from both MBNMS and Headquarters staff. For additional information please contact Deirdre Hall at 831-647-4207

On April 3rd, MBNMS staff (Deirdre Hall, Karen Grimmer, Holly Price & Erica Burton) attended a meeting at the Monterey Bay Aquarium Research Institute (MBARI) to receive an update on future projects slated for deployment on the MARS cable. The California Coastal Commission, and the California State Lands Commission participated via conference call. The crux of the discussions revolved around future permitting efforts and protocols. After review of the initial future projects, MBNMS staff indicated this first round of proposals will qualify for permitting under separate heading and will

need a Categorical Exclusion under the National Environmental Policy Act. Other outcomes included committing to an annual meeting for project updates, and assisting with the development of a one-page fact sheet summarizing issue-areas of concern for distribution to non-local scientists. For additional information please contact Deirdre Hall at 831-647-4207

Water Quality

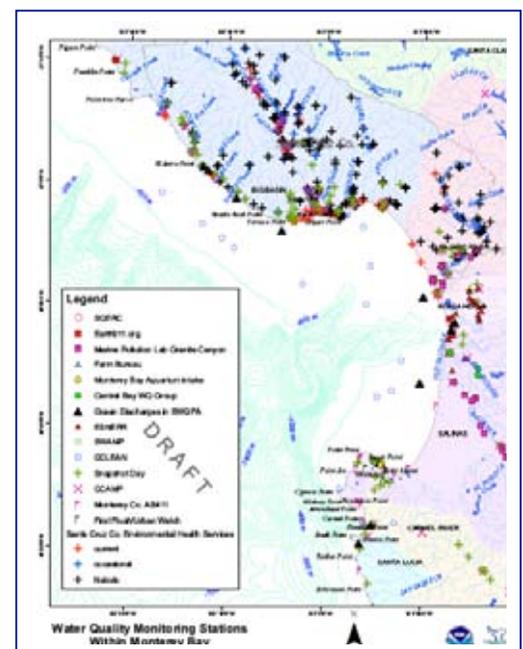
On February 17th, Bridget Hoover gave a presentation to approximately 25 members of the Half Moon Bay Yacht Club. The presentation was an introduction to both the Monterey Bay and Gulf of the Farallones NMS and an overview of the water quality monitoring programs and results. A representative of the Blue Water Task Force (Surfriders) followed up with a presentation on their programs.

On Thursday March 8, Bridget Dobrowski along with research scientist, farmer groups, and fellow conservation officials, including a representative from NMFS, met with CA Assembly Member Anna Caballero and her staff to discuss concerns over new food safety rules. A number of approaches are being taken by industry to reduce the likelihood of another devastating E. coli outbreak like the one that occurred during September 2006. While we strongly support efforts to protect consumer health, the new rules need to be based on sound science and must be compatible with on going efforts to protect and improve water quality, air quality and wildlife habitat. For more information, please contact Bridget Dobrowski at 831-647-4219 or bridget.dobrowski@noaa.gov.

On Wednesday, March 14, Bridget Hoover and Gary Conley attended an EPA sponsored meeting in San Francisco entitled “Enhancing Regional Monitoring in California”. The purpose of the meeting was to foster information exchange among three projects working to improve regional monitoring efforts and explore common interests along with potential solutions. A presentation on the current status of the Central Coast Water Quality Data Synthesis, Assessment, and Management (SAM) Project played a central role in generating discussion points during the meeting. Elements of the SAM project may provide guidance for the other regional efforts in the San Joaquin River Watershed and the Klamath River Basin, which are still in the initial phases of development. For more information, contact Bridget Hoover, Citizen Watershed Monitoring Network Coordinator, at (831) 647-4217; or Gary Conley, SIMoN Water Quality Data Analyst, at (831) 420-3663.

On March 22nd and 23rd Gary Conley met with the staff from the Regional Water Quality Control Board in San Luis Obispo to coordinate water quality data analysis and agricultural management practice tracking efforts. The purpose of the partnership with the Regional Water Board is to optimize water quality monitoring efforts and develop a system for assessment and reporting on the ecological health of water bodies within the Monterey Bay Sanctuary and its watersheds. The Regional Board has provided water quality monitoring data, assessment tools, and agricultural management practice implementation information for watersheds that flow to the Sanctuary. For more information, contact Gary Conley, SIMoN Water Quality Data Analyst, at (831) 420-3663.

A critical phase of the SIMoN Central Coast Water Quality Data Synthesis, Assessment, and Management Project (SAM) is complete. A database has been constructed to house water quality data sets from fourteen different monitoring programs on the Central Coast. The database is designed to be easily updatable, compatible with the statewide water quality monitoring program, and facilitate spatial analysis of water quality parameters. It contains about 450,000 measurements, from 915 stations, of 107 different water quality parameters including pesticides, nutrients, and metals. The first products to result from the integrated database are a set of tables that summarize the spatial/temporal extent and frequency of water quality measurements in freshwater, estuarine, and marine environments within the Central Coast region. These tables were provided to staff at Central & Northern California Ocean Observing Systems (CeNCOOS) who are working towards incorporating water quality information into their program. For more information, contact Gary Conley, SIMoN Water Quality Data Analyst, at (831) 420-3663.



The SIMoN Central Coast Water Quality Data Synthesis, Assessment, and Management (SAM) Project has delivered more than 300,000 water chemistry measurements to the Central Coast Regional Water Quality Control Board. This outcome has important regulatory implications because the Regional Board is responsible for determining which freshwater, estuarine, and marine waterways are placed on the California List of Impaired Water Bodies that do not meet beneficial uses, such as maintaining ecosystem health or recreation. The data that was contributed by the SAM project represents twelve different monitoring programs on the Central Coast and will triple the amount of information that the Regional Board currently has available to determine impairment. The partnership between the Regional Board and SIMoN will continue as data is analyzed to build a picture of water pollutant sources, status, and trends within the Sanctuary and adjacent watersheds. For more information, contact Gary Conley, SIMoN Water Quality Data Analyst, at (831) 420-3663.

The Monterey Bay Sanctuary Citizen Watershed Monitoring Network, through the Monterey Bay Sanctuary Foundation, was awarded a \$43,000 annual contract to coordinate the Monterey Regional Storm Water Management Program's Expanded Monitoring Program. This entails monitoring 20 outfalls from Carmel to Sand City that flow directly into the MBNMS. The outfalls will be monitored four times a year incorporating the Urban Watch and First Flush programs. In addition to the Sanctuary contribution, this helps to stabilize annual funding for the Network, which previously relied on small short-term contracts. For more information please contact Bridget Hoover at (831) 647-4217.

Emergency Response and Enforcement

During the week of February 11, 2007, the MBNMS and GFNMS received reports of tarballs up to 15 inches in diameter along shorelines of both Sanctuaries between the Monterey Peninsula and Bodega Head. The California Office of Spill Prevention and Response (OSPR) collected and tested several samples and determined that the tarballs originated from natural petroleum seeps in the seafloor - oil deposits often referred to as Monterey formation crude. Though a few oiled birds have been found in the northern parts of the MBNMS, numbers have not been significant and tests on oiled feathers are still pending to determine if the oiling is from the same natural event or another source. For more information, contact Scott Kathey at 831-647-4251.

On March 27 at approximately 12:00 PM, the 36-ft S/V JODY parted its anchor line during gale force winds and high seas and drifted approximately 1 mile, grounding at the US Naval Postgraduate School Beach (a sand beach) in Monterey. No one was aboard or injured in the incident. The owner had no insurance or funds to effect salvage, so the MBNMS initiated salvage after obtaining approval to utilize funds from the DARF. The vessel was immediately moved from the surf zone to prevent its destruction and scattering of debris. The vessel was demolished and transported to a waste management facility on April 2. The fuel tank was removed and contained an estimated 30 gallons of diesel fuel. MBNMS had requested that USCG Incident Management Division use the OSLTF to pay for fuel removal, but after inspecting the wreck on March 29, The USCG declared that there was no fuel remaining in the tank and that the USCG planned no remedial action. For more information, contact Scott Kathey at 831-647-4251.

Officer Bob Yerena was diverted from MBNMS duties by OLE management March 28-30 to address repeated harassment of a gray whale frequenting Santa Barbara Harbor. For more information, contact Officer Bob Yerena at 831-647-4203.

On April 3, Scott Kathey will meet with California State Parks Lifeguards from the Monterey District in the first of several meetings with public safety agencies within the Sanctuary to discuss their training needs for search and rescue MPWC teams. These meetings are part of a commitment made in the Draft MBNMS Management Plan to authorize MPWC training by public safety agencies should a NOAA regulatory update of the definition of MPWC encompass these craft and otherwise restrict them. For more information, contact Scott Kathey at 831-647-4251.

Officer Bob Yerena was diverted from MBNMS duties April 3-4 to assist OLE Special Agent Roy Torres with an inland investigation



of potential ESA violations. For more information, contact Scott Kathey at 831-647-4251.

On April 3, Scott Kathey will meet with California State Parks Lifeguards from the Monterey District in the first of several meetings with public safety agencies within the Sanctuary to discuss their training needs for search and rescue MPWC teams. The meeting went well and identified public safety agency needs for MPWC operations beyond skills training and response. For more information, contact Scott Kathey at 831-647-4251.

EDUCATION, VOLUNTEER AND OUTREACH PROGRAMS

During the month of February 2007, Multicultural Education for Resource Issues Threatening Oceans (MERITO) kicked off its Watershed Academy After-school Program with 25 students in the Recruitment In Science Education (RISE) program at Harden and Los Arboles Middle Schools. This sanctuary and BWET funded program provides hands-on, inquiry based watershed and ocean science experiences for 5th to 8th grade students that are predominately English language learners. Activities included an introduction to the MBNMS and a watershed model demonstration. For more information, contact Sonya Padrón, MERITO Bilingual Outreach Specialist at (831) 647-4211.

During the month of February, Multicultural Education for Resource Issues Threatening Oceans (MERITO) worked with Camp SEA Lab to introduce a new partnership fostered by a NOAA Ocean Literacy grant. The three-year Ocean Literacy grant will provide discounted rates and full scholarships to MERITO students attending Camp SEA lab. For more information, contact Sonya Padrón, MERITO Bilingual Outreach Specialist at (831) 647-4211.

On February 7th-10th, MERITO staff attended the National Association for Bilingual Education (NABE) conference in San Jose, CA where they attended workshops on topics that included assessment strategies for English Language Learners, Parent Expectations of Education in Mexico and the Importance of Culture and Values in Education. For more information, contact Sonya Padrón, MERITO Bilingual Outreach Specialist at (831) 647-4211.

On February 23rd, a teacher in-service was held at Marina Del Mar School. This in-service prepared four new teachers to lead the 21st and 22nd programs of the Watershed Academy After-school Program during the 2006-2007 year. Watershed Academy leaders were trained in watershed and ocean science environmental education, multicultural teaching pedagogy and in-class activities from the Watershed Academy Activity Guide. A watershed model demonstration and an introduction to the MBNMS were also delivered. Participants received Marine Science Conservation Kits and the Watershed Academy Activity Guide to facilitate their program activities. For more information, contact Sonya Padrón, MERITO Bilingual Outreach Specialist at (831) 647-4211.



On February 24th, 2007, MERITO hosted a follow-up workshop for 17 teachers and youth leaders implementing MERITO's Watershed Academy After-school Program. The workshop was hosted by the Wetlands Educational Resource Center in Watsonville and included four guest speakers who covered topics such as multicultural teaching pedagogy, LiMPETS sand crab monitoring, mudflat explorations, and introductions to lessons found in the new Watershed Academy Activity Guide. For more information, contact Sonya Padrón, MERITO Bilingual Outreach Specialist at (831) 647-4211.

The Coastal Discovery Center at San Simeon Bay successfully released 12 rainbow trout smolt into a local lake. The trout arrived as inch-long fry for the grand opening of the Discovery Center in July 2006. The fish were 8" long when released. A dozen new fry have been introduced to the tank. For more information contact Michele Roest at (805) 927-2145

Ecosystem Observations, an annual report for the Monterey Bay National Marine Sanctuary, is now available. The publication contains a summary of our 2006 program activities and accomplishments, an overview of recent monitoring projects coordinated through SIMoN, as well articles on current research in the MBNMS written by scientists from NOAA, Moss Landing Marine Labs, UC Santa Cruz, US Geological Survey, Elkhorn Slough Reserve, Monterey Bay Aquarium

Research Institute, and Naval Post Graduate School among others. Topics covered in these articles include: intertidal & subtidal surveys along the Big Sur Coast; geographic patterns of kelp forest community structure; sand waves of the Golden Gate; estuaries as nursery habitats for flatfishes; ocean ecosystems and the carbon dioxide invasion; surface current mapping with high-frequency radar as a tool for hazardous spill response; effects of artificial restricted tidal exchange and hydrodynamics in Elkhorn Slough; marine mammal surveys off the West Coast; sharks, rays and chimaeras of the sanctuary; and USS Macon 2006 expedition. Printed copies are available by request. Our website will soon feature a PDF version at <http://montereybay.noaa.gov/reports/ecoobs.html> Contact the MBNMS office at 831-647-4201, or email liz.love@noaa.gov.

The Coastal Discovery Center at San Simeon Bay is seeking volunteers for its next docent training, April 28 - May 9. The Coastal Discovery Center is cooperatively operated by the Monterey Bay National Marine Sanctuary and the California State Parks, San Luis Obispo Coast District. Located in beautiful San Simeon, in the southern region of sanctuary, the facility offers a watershed exhibit including live trout, a talking tidepool, and video voyages to Davidson Seamount and a local shipwreck. For more information contact Southern Region Program Coordinator, Michele Roest at (805) 927-2145 or michele.roest@noaa.gov.



SIGNIFICANT NEWS COVERAGE

Numerous articles were run in local papers regarding the Draft Management Plan.

WEB SITE (<http://montereybay.noaa.gov/>)

Recent Updates

Visit the web pages listed below to see recently updated sections of the MBNMS web site.

- Joint Management Plan Review
<http://sanctuaries.noaa.gov/jointplan/>

*Please take a few moments to peruse the site. Your feedback is greatly appreciated.
Comments and suggestions can be sent to andrew.white@noaa.gov.*

FUN, OCEAN RELATED WEB SITES

National Marine Sanctuary Foundation

<http://www.nmsfocean.org/>

Monterey Bay Sanctuary Foundation

<http://www.mbnmsf.org/>

Encyclopedia of the Sanctuaries

<http://www.ocean.com/Library/Encyclopedia/>

SIMON

www.mbnms-simon.org

National Marine Sanctuary Program

<http://www.sanctuaries.nos.noaa.gov/>

NOAA National Centers for Coastal Ocean Science

<http://coastalscience.noaa.gov/>

National Estuarine Research Reserve System

<http://nerrs.noaa.gov/>

NOAA Ocean Explorer

<http://oceanexplorer.noaa.gov/>

National Data Buoy Center

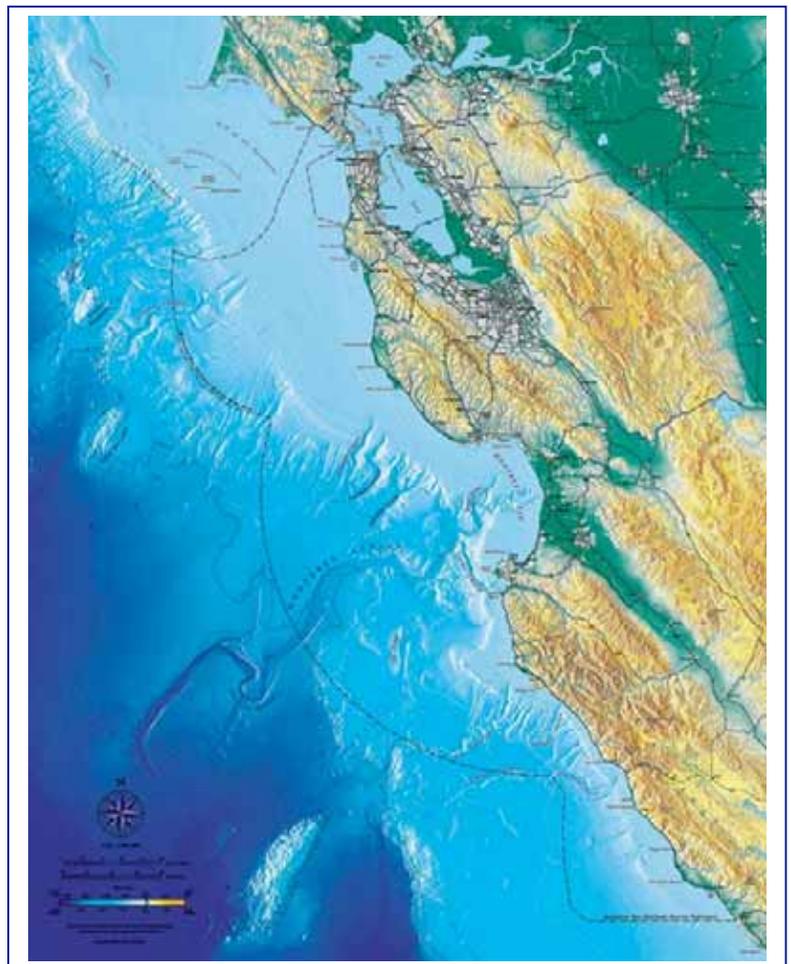
<http://www.ndbc.noaa.gov/rmd.shtml>

National Ocean Service

<http://www.nos.noaa.gov/>

National Oceanic & Atmospheric Administration

<http://www.noaa.gov/>



Learn More About Your Sanctuary

The Sanctuary Office Report is produced bi-monthly by the Monterey Bay National Marine Sanctuary in conjunction with Sanctuary Advisory Council meetings. To learn more about the Sanctuary please visit our web site at: <http://www.montereybay.noaa.gov>.

To learn more about the Sanctuary Advisory Council please visit:
<http://www.montereybay.noaa.gov/intro/advisory.html>

The National Marine Sanctuary Program

The Monterey Bay National Marine Sanctuary is one of 13 marine sanctuaries in the National Marine Sanctuary Program. This program was established under the National Marine Sanctuaries Act of 1972 which authorizes the Secretary of Commerce to designate as national marine sanctuaries areas of the marine environment or Great Lakes with special national significance due to their conservation, recreational, ecological, historical, scientific, cultural, archeological, educational, or aesthetic qualities. Visit the NMSP web site at: <http://www.sanctuaries.nos.noaa.gov/>

Get involved and stay informed!

To learn how to get involved in the Sanctuary visit:
<http://montereybay.noaa.gov/educate/internship.html>

Sign up for the MBNMS listserv to receive email notices about upcoming Sanctuary events, and public meetings of the Sanctuary Advisory Council and its Working Groups:
<http://montereybay.noaa.gov/discussiongroups/disgroups.html>.



MBNMS Staff

Karen Grimmer – Acting Superintendent
Andrew DeVogelaere – Research Coordinator
Erica Burton – Research Assistant
Lorraine Anglin – Sea Grant Fellow
Steve Lonhart – SIMoN Scientist
Jean de Marignac – SIMoN Scientist
Chad King – SIMoN Data Analyst
Josh Pederson – SIMoN Outreach Specialist
Gary Conley – SIMoN Water Quality Analyst
Dawn Hayes – Education & Outreach Coordinator
Liz Love – Education Specialist
Holly Price – Resource Protection Coordinator
Lisa Emanuelson – Resource Issue Ed Specialist
Lisa Uttal – Education Specialist
Cristy Cassel – Bilingual Education Specialist
Sonya Padron – Bilingual Education Specialist
Michele Roest – Education & Outreach Specialist, San Simeon Office
Carolyn Skinder – Program Development Specialist
Scott Kathey – Regulatory Coordinator
Deirdre Hall – Permit Coordinator
Brad Damitz – Environmental Policy Specialist
Huff McGonigal – Environmental Policy Specialist
Bridget Dobrowski – Agriculture Water Quality Coordinator
Bridget Hoover – Water Quality Network Coordinator
Lisa de Marignac – Environmental Policy Specialist
Paul Chetirkin – Management Plan Coordinator
Raymond Chisolm – Program Specialist
Rachel Saunders – Community & Public Relations Coordinator
Nicole Capps – Management Support Specialist
Christian Walters – Administrative Assistant
Andrew White – Network Manager
Sophie De Beukelaer – GIS Analyst
David Minard – R/V Fulmar Captain
Chris Willcox – R/V Fulmar First Mate

- Contact Information -

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