

**MONTEREY BAY NATIONAL MARINE SANCTUARY
OFFICE REPORT**

February 3, 2003-March 24, 2003

Management

Extensive Joint Management Plan Review work group meetings have been held on a variety of topics and draft plans are being written on Coastal Armoring, Harbors and Dredge Disposal, Davidson Seamount, Desalination, Benthic Habitats, Incorporating Fisheries Issues into Education and Research, Krill Harvesting, Marine Protected Areas, Beach Closures and Coliform Contamination, WQPP Implementation, Wildlife Disturbance, Motorized Personal Watercraft, Tidepool Protection, MERITO, Interpretive Facilities, Aquatic Invasive Species, Emerging Issues and Submerged Cables. For more information, contact Sean Morton (831) 647-4217.

Jenny Hauser, Program Operations Specialist, began on February 10. Jenny will be the lead in developing two action plans for the JMPP-Administration and Operations, and submerged cables. Heather Cauldwell has joined the MBNMS staff as the Administrative Assistant.

With a recent cut in NOAA ship time allocation, the MBNMS will have only 6 days at sea on a 250 ft NOAA ship in 2003. In past years, the MBNMS typically received 15-22 days at sea on NOAA ships. Offshore capabilities continue to be a problem for Sanctuary science and management. For more information, contact Andrew DeVogelaere at (831) 647-4213.

Bill Douros and Matt Stout met with the new NOAA facilities representative for the west coast, Luke Nachbar, and his boss Tony Flemming about facilities needs at the MBNMS. The visit included a tour of potential visitor center sites.

Bill Douros provided a briefing to staff of Congressman Farr, Alec Arago and Amanda Leland (on the phone), regarding the status of the joint management plan review process.

Bill Douros was in Washington, D.C. from March 17-21 meeting with and briefing Congressional representatives and their staff on matters related to the Monterey Bay National Marine Sanctuary. Major topics of discussion included the Joint Management Plan Review, Facilities planning such as for a visitor center and the Sanctuary Scenic Trail, MERITO, and support for the President's proposed FY '04 budget for the National Marine Sanctuary Program. Bill had 10 Congressional briefings during the week.

The MBNMS operating budget for FY '03 has been approved. It will be \$2-8 million, which represents a slight increase to support a program support coordinator, which in past years had been filled (as Assistant Manager) by hiring a NOAA Corps officer at no cost to MBNMS. With no new FTEs in the budget for FY '03, we are pursuing a cooperative agreement with CSUMB to hire the program support coordinator.

Education and Outreach

A new promotional brochure on the future Monterey Bay Sanctuary Scenic Trail, which will connect Santa Cruz and Monterey with a recreation and interpretive coastal path, is available for public distribution. The Trail is a long-term collaborative planning effort with participation by the MBNMS, the Association of Monterey Bay Area Governments, the National Park Service, the California Coastal Commission, and CA State Parks among many others. For more information or a copy of the brochure, contact Jen Jolly at 831-420-1630.

Thursday February 13, Michelle Templeton began the first of many community presentations to increase awareness of watershed and ocean issues within the Latino community. As one component of the MERITO program, these presentations will be given to various classes in the Watsonville Adult Education, English Language Civics program as well as ALBA farm training short courses. For more information contact Michelle Templeton: (831) 423-5942

On Saturday, February 22 Michelle Templeton, bilingual outreach specialist, and CSUMB intern, Claudia Peneda, attended the second annual Pajaro Valley Unified School District Conference, "Padres Migrantes: Cultivando Futuros Lideres" (Migrant Parents: Cultivating Future Leaders) The events workshops were led by parents working with the district to teach other parents how to encourage healthy academic and social growth in their children. Over 200 Latino parents and families attended the conference. Various community agencies and organizations hosted informational booths. The Monterey Bay National Marine Sanctuary, in partnership with Save Our Shores provided information, bilingual coloring books and over 100 free family passes to the Elkhorn Slough Reserve.

On Saturday, February 22, MBNMS and the MATE Center co-hosted the 5th annual Otter Bowl, the regional National Ocean Sciences Bowl Competition managed by CORE (Consortium for Oceanographic Research and Education which represents 66 oceanographic institutions universities and aquaria). Over 100 students and coaches from all over Northern California attended including four new teams recruited under a diversity initiative, new this year. MBNMS provided support with team recruitment, volunteer trainings, question review, field-trip support, prizes and staff support on the day. Over 50 volunteers supported this intensive day-long event! For more information, contact Dawn Hayes (831) 647-4256.

MBNMS debuted the second and third of six Threatened and Thriving posters, created by artist Kirsten Carlson and sponsored by the Monterey Bay Sanctuary Foundation. Leatherback Turtles and Sea Nettles are the two featured species in the second poster and Elephant Seals and Snowy Plovers are featured in the third poster. Background information on the status of both species, their natural history, conservation tips and where to learn more are features of the poster's back side. For more information please contact Michele Roest @ (805) 927-2145 or to request a poster, please contact Heather Cauldwell @ (831) 647-4256. Posters will be up on the MBNMS website shortly.

On February 27, Karen Grimmer, Education Specialist, attended the initial meeting of the Youth Council for Ocean Governance (Y-COG): Monterey Bay Center of Excellence in Education, a National Ocean Partnership Program (NOPP) initiative for ocean literacy, hosted by Fleet Numerical Meteorology and Oceanography Center.

On February 28th and March 1st Michelle Templeton and MERITO intern, Claudia Peneda, helped lead the Elkhorn Slough Estuarine Research Reserve's second teacher training workshop. Friday evening gave teachers an introduction to interpreting the Elkhorn Slough and an overview of the Visitor Center exhibits and their messages. Saturday provided a hands-on, interactive experience in the field preparing them to lead their own student groups. Over 30 teachers attended ranging from grades K-12.

Elephant seal season is winding down in the San Simeon area. Between the good weather and the emphasis on local travel, the area had more tourists than ever. Michele Roest from the San Simeon field office worked with paid contractors from MBNMS and volunteers from the Friends of the Elephant Seal to educate and direct tourists away from a sensitive breeding site. This program is part of the Team OCEAN program. The program ran for 10 weekends, including two busy holiday weekends, from January to March. During that time, an average of 375 people per day were directed to the proper elephant seal viewing site a few miles to the north. This number was up considerably from last year, which averaged 225 people per day. Before the program began in 2000, hundreds of people per day would come to the site and harass the elephant seals. For more information contact Michele Roest at 805-927-2145.

On March 8, Michele Roest from the San Simeon field office gave a student workshop at an "Expanding Your Horizons" conference, encouraging young women to pursue careers in math and science. Michele's workshop was titled, "Ocean Exploration with National Marine Sanctuaries." Students learned about the NMSP and participated in an activity to track the endangered leatherback turtle in MBNMS using radio satellite data.

On March 4, Karen Grimmer participated on a panel as part of CSUMB's Initial Accreditation process led by the Western Association of Schools and Colleges. The panel focused on the CSUMB's Internship Programs, and offered opportunities for interns and community partners to provide feedback on the NOAA and USDA internship grants to WASC.

On March 12, Karen Grimmer and Michelle Templeton gave a presentation for Monterey Bay Aquarium's education staff on sanctuary monitoring and education programs. Topics covered were SIMoN, LiMPETS, BeachCOMBERS, Citizen Watershed Monitoring Network, TeamOCEAN, Sanctuary Symposium and MERITO. We discussed potential collaborations for our outreach programs, and recruited an experienced Latino naturalist for MERITO's upcoming Kayak Day on March 30th.

March 12, Karen Grimmer and Michelle Templeton coordinated a meeting to discuss a potential collaboration between UCSC's MESA Summer Science Camp held at Cal Poly's Swanton Ranch in July, and Camp SEA Lab's summer programs. The outcome was an agreement that the two camps will combine their expertise to strengthen watershed education for Camp SEA Lab curriculum and provided much needed ocean-related activities for MESA's program.

Our annual research publication, *Ecosystem Observations*, is now available for distribution. The cover features stunning images from our Davidson Seamount expedition. In addition to our annual report, articles written by regional scientists and managers include topics such as the status of snowy plovers, tidepool impacts and monitoring, the role of iron in sanctuary waters,

seamounts, whale falls in the deep sea, foraging ecology of leatherback turtles, the groundfish closure, squid management, watershed monitoring, exotic species, cruise ships and more! For more information, or to request a copy, please contact Liz Love at liz.love@noaa.gov

On March 11, Michelle Templeton gave a presentation to Karen Reid's Watsonville Adult Education class on the Sanctuary. The class consisted of 26 advanced English as a second language learners. The presentation, followed a demonstration of the watershed model, included how to protect the watershed and Sanctuary, where to go to enjoy the Sanctuary, and how to become more involved. Free passes to the Elkhorn Slough Reserve were handed out to all participants.

Liz Love met with Monterey Bay Aquarium exhibit designers on March 19, 2003 to provide them with information about sanctuary programs and messages related to tidepools. They are redesigning all of the rocky shores exhibit area, and want to make sure their conservation messages align with ours.

March 13th - 16th, Lisa Emanuelson and Michele Roest attended a LiMPETS (Long-term Monitoring Program and Experiential Training for Students) workshop hosted by the Gulf of the Farallones and Cordell Bank National Marine Sanctuaries, Headlands Institute Marin Headlands, and Golden Gate National Recreation Area. All 5 west coast sanctuaries were represented along with approximately 15 teachers from as far away as Los Angeles and Washington state; Claire Johnson and Cristos Michalopoulos from the NMSP were also in attendance. The weekend was designed as an introduction to the LiMPETS program and a training in LiMPETS protocol. For more information contact Lisa Emanuelson at (831) 647-4201 or Michele Roest at (805) 927-2145.

On March 22, Julie Barrow made a presentation on MBNMS, GFNMS, and the joint management plan review to about 35 adults attending training for the Half Moon Bay State Beach Visitor Center and Plover Watch volunteer programs. For more information, contact Julie Barrow at (650) 712-8909.

The LiMPETS website is up at <http://limpets.noaa.gov>. This program is an education product to share information on student monitoring programs. For technical information on the web site, contact Josh Pederson at 831-647-4260.

Research

Jean de Marignac, SIMoN Scientist, and Josh Pederson, SIMoN Outreach Specialist, both joined our staff in February. Welcome Jean and Josh!

On January 22, a workshop was held on SIMoN monitoring projects related to Elkhorn Slough Monitoring. Twenty-eight people from the MBNMS, Moss Landing Marine Labs, Stanford University, Hopkins Marine Station, Elkhorn Slough Reserve, Cal. State Monterey Bay, and ABA Consulting and the California Energy Commission met to share research plans and coordinate information sharing and field logistics. Project topics included hydrodynamic modeling, environmental observatories, benthic and plankton monitoring, invasive species,

sidscan mapping, historical ecology, and impacts from the Duke Powerplant. This type of effort has been identified as a need since the early 1990's and we're proud that SIMoN was able to play the major role in precipitating the research projects and coordinated efforts. For more information, contact Andrew DeVogelaere at 831-647-4213.

MBNMS Research Staff and Bill Douros attended the annual Research Coordinator's meeting on January 28 - 30 at the NMFS lab in Santa Cruz. MBNMS presented posters on the SIMoN program, the Davidson Seamount, a seafloor mapping project in coastal Monterey, and the Beach COMBERS. For more information, call Andrew DeVogelaere at 831-647-4213.

A section on the May 2002 Davidson Seamount expedition has been drafted for the Office of Ocean Exploration Annual Report. For more information, call Andrew DeVogelaere at 831-647-4213.

The Alliance for California Current Ecosystem Observations (ACCEO; related to CalCOFI) recently submitted a nomination document to participate in the Regional Summit Meeting for the development of the Integrated Ocean Observing System (IOOS), organized by OCEAN.US, taking place March 31 - April 1 2003. The objective of the IOOS meeting is to share opinions on policies and governance of developing regional observing systems, achieve consensus on the terms for participating in the IOOS and formulate performance criteria for regional pilot projects. On behalf of the west coast National Marine Sanctuaries, the Sanctuary Integrated Monitoring Network (SIMoN) provided input on the nominating document and continues to play an active role in ACCEO. For more information, contact Steve Lonhart, SIMoN Scientist, at (831) 647-4222.

The Sanctuary Integrated Monitoring Network (SIMoN) continues to oversee the removal of *Undaria pinnatifida* (an invasive seaweed) from Monterey Harbor. With support from the Harbormaster's office, volunteers from the City of Monterey have removed over 1400 pre-reproductive individuals since December 2002. Most of these have been removed from H-pier, where plants re-appear every 2-3 weeks, which suggests that the microscopic stages (gametophytes) are abundant and can initiate growth asynchronously over a period of months. For more information, contact Steve Lonhart, SIMoN Scientist, at (831) 647-4222.

Jean de Marignac attended the Environmental Monitoring and Assessment Program (EMAP) meeting in San Francisco on February 5. The Sanctuaries are coordinating with EPA, NCCOS and others for a characterization of contaminants along the continental shelf of the western U.S. Contact Jean de Marignac, SIMoN Scientist, at (831) 647-4214.

John Calambokidis completed a report on humpback and blue whale populations off of California, Washington and Oregon. Interestingly, the humpback whale population estimate has dropped from 1,000 whales in the 1990's to a current estimate of 779. Several suggested factors in the decline include the 1997/98 El Nino and a lowering in the carrying capacity (related to food) in the region. For more information, contact Andrew DeVogelaere at 831-647-4213.

On February 10-14, Irina Kogan (MBNMS/MBARI Research Fellow) conducted the second of three research cruises studying the environmental impact of the NOAA-PMEL sub sea cable

stretching 95 km from Half Moon Bay, CA to Pioneer Seamount. Erica Burton (Research Specialist) was among the seven-member science party on the MBARI R/V Point Lobos. The cruise focused on the 40 km wide, continental shelf portion of the cable. The crew dove on 7 locations using the MBARI ROV Ventana and collected a total of 12 hours of video and 68 soft-sediment push cores. Visible environmental impacts included cable suspensions, organisms utilizing the cable as a substrate on which to encrust, and vertical grooves incised into the rock by the cable. In rocky areas, the cable appeared strongly damaged from abrasion and incision. For more information, contact Irina Kogan at (831) 647-4228.

The MBNMS has accepted a membership on the CI-CORE Advisory Council. This project, lead by the California State University System, will facilitate the broad advancement of coastal science by providing an essential backbone of continuous and reliable coastal observations in a variety of habitats in California. One initial project, in collaboration with MBNMS and OMAO, is development of hyperspectral survey systems to rapidly assess large coastal areas for parameters such as harmful algal blooms, kelp canopy abundance, and sediment discharge areas. For more information, contact Andrew DeVogelaere (831) 647-4213.

The MBNMS has participated in the development of a COTS proposal to NOAA for the continued funding for the U.C. Santa Cruz Center for Integrated Marine Technology. This project is describing ocean physics and how it influences the biology of plankton, seabirds and whales. A large component of this effort is to develop ways of presenting this information to the public, in partnership with SIMoN. Steve Lonhart has been added to the advisory board of CIMT in the latest proposal. For more information, contact Andrew DeVogelaere at (831) 647-4213.

On February 21st Steve Lonhart submitted a proposal in response to a NOAA Aquatic Invasive Species RFP. The study entitled "Improving detection, identification, and mapping of invasive species in the Monterey Bay National Marine Sanctuary" would complement recent surveys by the California Department of Fish and Game along the entire coast of California. Using the same protocol as the CDFG study, the proposal included Santa Cruz and Pillar Point Harbors (not in the CDFG survey) and plans to sample both sites twice in one year (rather than once as in the CDFG study). For more information, contact Steve Lonhart at (831) 647-4222.

On February 26, the SIMoN team, lead a field trip to the Pt. Pinos tide pools for conservation interests concerned about the area. There had been controversy about draft data on abalone populations not being released to the public, related to a Monterey Bay Sanctuary Foundation sponsored project to assess human impacts to rocky shores. Numerous black abalone were found during the field trip, addressing this concern. Impact by human on rocky shores is a JMPR issue for the MBNMS. For more information, contact Andrew DeVogelaere at (831) 647-4213.

We are arranging a hyperspectral survey of the MBNMS in April, using the NOAA Shrike and in partnership with CI-CORE. Similar operations may take place in October. If any west coast Sanctuary wants to coordinate operations, reducing transit costs of the plane, please contact Jean de Marignac, SIMoN Scientist, at (831) 647-4214.

Posters on the following research projects were presented at the Sanctuary Currents Symposium:

Undaria, the invasive kelp recently introduced to Monterey Harbor; the SIMoN program; the SIMoN map of monitoring study locations; integrated mapping of Del Monte beach seafloor area; and Davidson Seamount. For more information, contact Andrew DeVogelaere at (831) 647-4213.

Laurie McConnico, a Moss Landing Marine Labs graduate student working with Andrew DeVogelaere, defended her thesis on March 11. Her project is relevant to impacts of Cal Trans road maintenance on the Big Sur Coast, and the title of her talk was "Demography of the intertidal kelp *Alaria marginata* along the Big Sur coast: The population dynamics of an exposed kelp, exposed." For more information, contact Andrew DeVogelaere at (831) 647-4213.

On March 10, Andrew and Steve participated in a planning meeting to address a Central California effort to participate in IOOS (the national Integrated Ocean Observing System). There will be a proposal to locate a regional IOOS program in Central California. For more information, contact Andrew DeVogelaere at (831) 647-4213.

The MBNMS has become a Regional Alliance Member, Pacific Coast Region, for NOAA's Alliance for Coastal Technologies. For more information, contact Andrew DeVogelaere at (831) 647-4213.

Final arrangements have been made to use the NOAA Shrike for hyperspectral surveys of coastal Central CA, in cooperation with CI-CORE (Center for Integrative Coastal Observation, Research and Education). This technology is being used to assess kelp canopy cover, mapping shallow water, and distinguishing sand/rock habitats on the shore. For more information, contact Jean de Marignac at (831) 647-4214.

On March 19, Irina Kogan (MBNMS/MBARI Research Fellow) held a conference call presentation of preliminary observations from the February 2003 environmental impact survey of the Pioneer-ATOC subsea cable. Conference call participants consisted of 12 staff from the MBNMS, OCNMS, and NMSP. The presentation ended with a discussion of lessons learned and of key issues regarding submarine cables in Marine Sanctuaries. For more information, contact Irina Kogan at (831) 647-4228.

The Channel Islands National Marine Sanctuary, Channel Islands National Park, and California Department of Fish and Game recently hosted a workshop (March 14-16, 2003) to develop an ecosystem monitoring plan for the recently established Marine Protected Areas at CINMS. "The primary goal of the workshop is to develop preliminary biological and socioeconomic monitoring plans including: what to monitor; how to conduct monitoring; when to complete various portions; how to compile data into an easily accessible source; what funding and personnel needs exist; and what type of oversight is appropriate." During the plenary session, Steve Lonhart, a scientist for the Sanctuary's Integrated Monitoring Network (SIMoN), gave a presentation on how SIMoN could serve as a model for CINMS to address some of these areas of interest. For more information, please contact Steve Lonhart at (831) 647-4222.

The 3rd International Conference on Marine Bioinvasions was held at the Scripps Institute of Oceanography from March 17-19. With close to 200 hundred participants representing over 20

countries, the conference covered a wide variety of topics, including ecological and genetic consequences of bioinvasions, transport vectors, biocontrol, patterns of invasion in space and time, and environmental management and assessment. Steve Lonhart, SIMoN Scientist, gave a presentation on MBNMS efforts to remove the invasive alga *Undaria pinnatifida* from Monterey Harbor. In addition, he was one of four panel members selected to talk about rapid response systems. For more information, please contact Steve Lonhart at (831) 647-4222.

On March 20th, several agency and industry representatives met at the southern California stakeholder meeting on the development of a California Aquatic Invasive Species Management Plan in San Diego, CA. Led by Dr. Ted Grosholz (UC Davis) and Susan Ellis (CA Department of Fish and Game), the meeting allowed concerned and interested groups to provide input on the drafting of the management plan, which has been mandated by a recent state senate bill. For more information, please contact Steve Lonhart at (831) 647-4222.

The Long term Monitoring Program & Experiential Training for Students web site is up at <http://limpets.noaa.gov/welcome.html>. For more information, contact Josh Pederson at (831) 647-4260 or Dawn Hayes at (831) 647-4256.

MBNMS Research Staff met with Paul Orlando on March 18 regarding a potential for collaboration between SIMoN and National Oceanic Data Center (NODC). There are many potential areas for fruitful collaboration. For more information, contact Chad King at (831) 647-4248.

The BLM/California Coastal National Monument has expressed interest in joint funding of some SIMoN projects (with a Big Sur focus), and incorporating monitoring data sharing opportunities into the SIMoN web site. For more information, contact Andrew De Vogelaere at (831) 647-4213.

Resource Protection

NOAA uniformed officer Robert Yerena arrived at the MBNMS February 18 to assume duties as Sanctuary Enforcement Officer, responsible for enforcement surveillance, investigation, outreach, and interagency coordination.

On Feb 1 the 58-ft F/V Endeavor ran aground at Hidden Beach in Aptos. MBNMS asked our Fish and Game enforcement partner to investigate the incident on the Sanctuary's behalf. The vessel was successfully pulled off the beach by the owner's contractor with no damage to the hull and no spills. For more information contact Scott Kathey at 647-4251

Katie Siegler gave two presentations on the Sanctuary Water Quality Protection Program's Agriculture and Rural Lands Plan to Agricultural Watershed Groups in Paso Robles and Watsonville. These groups, working with the Coalition of Central Coast County Farm Bureaus, will work together to put conservation practices on their properties to protect water quality. For more information contact Katie at (831) 647-4219.

The Monterey Bay Sanctuary Citizen Watershed Monitoring Network Coordinator spoke to two

Chemistry classes at Monterey High School on February 3. The topic was water quality monitoring and how to design a monitoring program. For more information, contact Bridget Hoover, Network Coordinator (831) 883-9303.

4000 pounds of jet fuel was discharged from an Air China commercial jetliner over Sanctuary waters 8 miles west of Half Moon Bay on February 2. The fuel was ejected as part of emergency procedures after the jet suffered engine damage from impacting a flock of birds on takeoff from San Francisco International Airport. The airliner subsequently returned to SFO. The Sanctuary is investigating this incident as potentially indicative of a larger routine discharge practice by commercial airliners.

Katie Siegler presented an overview of the Sanctuary's Agriculture and Rural Lands Action Plan and Bridget Hoover presented an overview of the Sanctuary's Citizen Watershed Monitoring Network to a class at Stanford University's Hopkins Marine Station. The class was titled, "Pathways from Research to Conservation".

A 25-gallon raw sewage spill entered the Sanctuary in Pacific Grove on February 4 due to line blockage and overflow into a storm drain that drains to the sea.

A 1,000-gallon raw sewage spill entered the Sanctuary at Half Moon Bay on February 4 due to line blockage and overflow into a pond that drains to the sea.

A 10,000-gallon raw sewage spill entered the Sanctuary at Half Moon Bay on February 15 due to failure of a system relay switch. The incident has been referred to OLE for investigation.

A citizen reported to MBNMS that tar balls and oiled birds were present along 2 miles of shoreline in southern Monterey Bay on February 14. MBNMS notified response authorities, but responders did not detect a serious incident or oiled birds.

On February 18, the MBNMS was notified of a recently revealed 2002 incident in which a man decapitated a sea otter carcass to recover the skull. The information was referred to OLE for investigation.

Scott Kathey and new Sanctuary enforcement officer Bob Yerena traveled south to San Simeon to meet law enforcement personnel in the area and discuss ongoing enforcement issues in the region. They also conducted a boat patrol and orientation of Monterey Bay and discovered unpermitted coastal construction activity near Seacliff Beach. NOAA OLE is investigating with assistance from the California Department of Fish and Game Marine Patrol.

Katie Siegler attended the San Mateo Agricultural Summit, a discussion of water use and land conservation attended by farmers and ranchers, conservation groups and resource agencies. For more information, contact Katie at (831) 647-4219.

The P/B Shark Cat was removed from the water and is being prepared for transport to Salinas for installation of two new Yamaha 250 Hp engines. A refurbished trailer is also being tested. Scott Kathey recently supervised a major overhaul and upgrade to the boat trailer to expand access to

maintenance vendors outside immediate harbor areas and to facilitate improved general boat maintenance, inspection, and care. Prior to recent upgrades, the trailer was unused for 9 years. The boat will be unavailable for approximately 3 weeks, while engine installation is completed.

The Sanctuary learned that the cruise ship Crystal Harmony which visited Monterey in October of 2002 discharged treated wastewater, grey water and processed bilge water into the Sanctuary, breaking a voluntary agreement which the cruise line had made with the City and the Sanctuary to hold all wastes while within Sanctuary boundaries. We are continuing to investigate the incident, which has led to widespread media publicity and additional calls from environmental organizations for the Sanctuary to adopt a regulation banning cruise ship discharges. For additional information contact Brad Damitz at (831) 647-4252.

Katie Siegler served on the panel for the first meeting of the Agricultural Advisory Panel coordinated by the Central Coast Regional Water Quality Control. The panel, comprised of environmental organizations and agricultural industry representatives, will develop recommendations for the replacement of the expired agricultural discharge waiver. The new waiver will define criteria for agriculture's role in protecting water quality and will be linked closely to implementation of the Sanctuary's agricultural plan. For more information, contact Katie at (831) 647-4219.

Three students who were provided initial guidance and water quality sampling equipment by the Sanctuary took home eight awards at the Monterey County Science Fair, with projects focused on sampling contaminants in storm drains and local rivers which flow to the Sanctuary. For the second year in a row, one of 7th graders we assisted won first place in environmental science county-wide and is going on to state competition. For information contact Bridget Hoover, Sanctuary Citizen Watershed Monitoring Network Coordinator at (831) 883-9303.

Rachel Saunders, Community and Public Relations Coordinator, testified at a Monterey City Council meeting on March 18, 2003 in support of a city action (subsequently approved) to ban Crystal Cruise Lines from using city services for 15 years, strengthen reporting requirements related to future cruise ship visits and encourage sanctuary study of cruise line related discharge impacts. Earlier that day, the Monterey City Council also took action to support sending a letter to Admiral Lautenbaucher addressing fishery ("white paper") and SAC issues. The Council also approved a staff recommendation supporting further analysis of the train depot site in Monterey as a possible sanctuary visitor center. For more info, contact Rachel at 647-4237.

The MBNMS has released a new report presenting results from last fall's volunteer-based "First Flush" water quality monitoring event. The report, titled "First Flush 2002," showed that accumulated oil, chemicals, and litter runoff flushed from streets and other impermeable surfaces were found in the rain samples going into the MBNMS. The water sampling was conducted at 19 sites by an extensive network of volunteers with the sanctuary's Citizen Watershed Monitoring Network and the Coastal Watershed Council. Samples were analyzed in the laboratory and compared to findings of previous "First Flush" events. Metal concentrations, such as copper, lead and zinc, have increased every year at the majority of sites. Toxicity analysis of three different test organisms indicated that the water from the 2002 "First Flush" was toxic to test organisms resulting in impaired reproduction or mortality. The Sanctuary is working very closely with local

agencies to further investigate the causes of the contamination events. For more information, contact Bridget Hoover at 883-9303. A copy of the report is available at <http://montereybay.nos.noaa.gov/monitoringnetwork/events.html>

On March 28, 2003 MBNMS Superintendent Bill Douros participated in a ribbon cutting ceremony for a new bilge water pumpout facility at Santa Cruz Harbor. The installation of the new state-of-the-art system will help reduce oil pollution in the Sanctuary by providing boaters a way to remove and reclaim oil from water that accumulates in the bottom of boats. The MBNMS's Water Quality Protection Program's Marinas and Boating Plan recommended that these oil bilge pumpout facilities be put in place in the harbors in the Sanctuary and the program led efforts to secure funding for facilities in Moss Landing and Monterey. The MBNMS commended Save Our Shores and Santa Cruz Harbor for their leadership in getting the facility established in Santa Cruz. For more info, contact Rachel Saunders at 647-4237.

Special Events

Sanctuary outreach staff drew a crowd at the Migration Festival, held Saturday Feb. 8 at Seacliff State Beach. We displayed our sanctuary booth, marine mammal artifacts, and Humphrey the life-sized inflatable humpback whale.

On February 18-21, Stephanie Harlan, SAC Chair and Nicole Capps SAC Coordinator, attended the SAC Chairs/Coordinators meeting in Santa Barbara, CA. The SAC Chairs and Coordinators from each sanctuary with an Advisory Council, including the proposed Northwestern Hawaiian Islands Ecosystem Reserve, were in attendance. The meeting was to provide the National Marine Sanctuary Program an opportunity to determine the top issues affecting the nation's sanctuaries and receive advice on how to tackle these issues. It also allowed the Chairs and Coordinators an opportunity to meet their counterparts from around the country. For more information, contact Nicole Capps (831) 647-4206.

On Thursday, February 27, Education Specialist, Michele Roest from the San Simeon office attended a Marine Wildlife Viewing Workshop in Santa Barbara hosted by the Channel Islands NMS. The workshop was to provide information on proper viewing practices to boaters, whale watchers, kayakers, and nature-based tourism operators. A Marine Wildlife Viewing Handbook was developed specifically for this workshop and handed out to attendees. The workshop was sponsored by NOAA's Fisheries, Law Enforcement and National Marine Sanctuary Programs, the National Park Service, US Fish and Wildlife Service and California State Parks. Contact: michele.roest@noaa.gov.

Many MBNMS staff attended an evening lecture by international award winning photographer, Frans Lanting. Three SAC members also attended. The lecture was a benefit for the Sanctuary, and was hosted by the Monterey Bay Sanctuary Foundation.

On March 5, Karen Grimmer and Michelle Templeton met with the Earth Day/Día del Niño event committee to finalize plans for the Sunday, April 27th, 11am to 4pm celebration at Ramsay Park in Watsonville. The committee is working to develop "Earth Day" activities and programs in celebration of both Earth Day and Día del Niño, and it includes members from Save Our

Shores, Watsonville Wetlands Watch, and the City of Watsonville's Public Works Department.

On March 4 Community and Public Relations Coordinator Rachel Saunders gave a presentation and participated in a panel discussion on marine conservation organized by the Monterey Bay Aquarium for their volunteers. Other panel members included Julie Packard, Ex. Director of the Aquarium, Mark Silberstein from the Elkhorn Slough Foundation and Deborah Streeter, At-Large member, MBNMS Advisory Council member. Over 200 people attended. For more info, contact Rachel at 647-4237.

The annual Sanctuary Currents Symposium held on March 15 at California State University, Monterey Bay was a great success, as 350 people gathered to learn about this year's theme, "Threatened and Thriving Species: Lessons from the Sea." Presentations focused on jellyfish of Monterey Bay, leatherback turtles, California sea otters, snowy plovers and krill, followed by an update on the joint management plan review process. More than 30 research posters and 25 exhibits complemented the lectures, while the artist who created the artwork for our threatened and thriving series was on hand to sign two newly released posters depicting leatherback turtles and jellies, and elephant seals and snowy plovers. Dr. Jim Estes gave a thought provoking Ed Ricketts Memorial Lecture on the loss of large vertebrates from ocean food webs and the complicated effects this has on ecosystems. The day ended with a reception and awards ceremony honoring those who have contributed significantly to the sanctuary's mission in the past year.

Media Coverage

“Winter Cleaning” by Elisabeth Nadin, Monterey County Herald, 1/28/02.

“Small cities must regulate stormwater runoff; Clean Water Act compliance” by Sylvia Moore, Monterey County Herald, 1/31/03.

“Nature photographer featured at benefit” staff report, Santa Cruz Sentinel, 1/31/03.

“From warship to treasure chest: Cement Ship harbors thriving ecosystem” by Ramona Turner, Santa Cruz Sentinel, 2/3/03.

“Pollution at Scotts Creek beach may be connected to birds” by Heather Boerner, Santa Cruz Sentinel, 2/3/03.

“Making waves about cruise-ship pollution” by Emily Singer, The Monterey County Herald, 2/9/03.

“Fishing group sues state; Says new rules too restrictive” by Patrick S. Pemberton, The Monterey County Herald, 2/8/03.

“Abalone nursery; Kelp beds help rockfish population” by Elisabeth Nadin, The Monterey County Herald, 2/8/03.

“New group will focus on marine issues” by David Sneed, The SLO Tribune, 2/9/03.

"Grounded boat freed" by Kurtis Alexander, Santa Cruz Sentinel, 2/5/03.

"Stormwater killing Puget Sound salmon" by Lisa Stiffler and Robert McClure (Seattle paper), Santa Cruz Sentinel, 2/6/03.

"Humming pump marks the spot of unrepaired sewer break," by Ramona Turner, Santa Cruz Sentinel, 2/12/03.

"Beaches declared unsafe because of bacterial tint," Santa Cruz Sentinel, 2/12/03.

"Council OKs new cruise ship rule; Can release potable water in bay" by Dan Laidman, The Monterey County Herald, 2/19/03.

"Monterey to revisit discharge policies set for cruise ships; new system claims to clean wastewater" by Ken McLaughlin, The San Jose Mercury News, 2/18/03.

"Local governments to present Sanctuary Reflections Awards" The Monterey County Herald, 2/24/03.

"Plant project questioned; Residents gather information on Moss Landing desalination proposal" by Sylvia Moore, The Monterey County Herald, 2/28/03.

"Water woes lead area to give desalination plants a second look" by Brian Seals, Santa Cruz Sentinel, 2/23/03.

"Cut Cruise Ship Pollution," Editorial, L.A. Times, 3/2/03

"Cruise Line Admits Dumping in the Bay, Crystal Harmony Banned After Discharging Waste Water," Dan Laidman, Monterey Herald, 3/5/03

Cruise Ship story, News Roundup, SF Chronicle, 3/5/03

"Cruise Ships Shouldn't Dump Raw Waste, Say U S Tourists," Jim Loney, Reuters, Environmental News Network, 3/5/03

"Distracted Supervisor Allows Illegal Cruise Ship Dumping," Dan Laidman, Monterey Herald, 3/5/03

"Monterey Bans Cruise Ship Over Dumping," Nick Madigan, New York Times, 3/5/03

"Waste Official's Inquiry Lead To Disclosure," Dan Laidman, Monterey Herald, 3/6/03

"City Bans Cruise Ship, Waste Dumped in Sanctuary," Ken McLaughlin, San Jose Mercury News, 3/6/03

"Cruise Ship Prohibited From Docking In City," Peninsula in Brief Regional Roundup, San Jose Mercury News, 3/6/03

"Monterey Bids Bon Voyage To Cruise Ship That Dumped Bilge Water," Ron Harris, AP, 3/6/03

"Legislation Targets Cruise Ship Pollution," Letter to the Editor, Terri Shore, Bluewater Network, L.A. Times, 3/6/03

"City Bans Cruise Ship For Dumping: Incident Reflects Tensions Over Protecting the Ocean," MSNBC, 3/6/03

"North County Water Woes," Jessica Lyons, Coast Weekly, 3/6/03 (about desalination)

"Monterey May Consider Banning All Crystal Cruise Ships," Dan Laidman, Monterey Herald, 3/7/03

"Ban On Cruise Ships? What About Pacific Grove?," Joe Livernois, Monterey Herald, 3/7/03

"Next cruise ship faces scrutiny," Dan Laidman, Monterey County Herald, 3/8/03

"Enforce, expand cruise ship discharge rules" Letter to the Editor, Monterey County Herald, 3/8/03

"Say no to cruise ships," Letter to the Editor, Monterey County Herald, 3/8/03

"Cruise industry violates trust, environment," The Herald's View, Monterey County Herald, 3/9/03

"Desalination; County is nearly flooded with proposals for plants," Dennis Moran, Monterey County Herald, 3/10/03

KION-TV news report on cruise ship discharge, 3/5/03, interview with Rachel Saunders, MBNMS staff

KSBW-TV news report on cruise ship discharge, 3/5/03, interview with Rachel Saunders, MBNMS staff

KRON-TV (Channel 4-San Jose) news report on cruise ship discharge, 3/7/03, interview with Rachel Saunders, MBNMS staff

3/7/03, "Amid controversy, another cruise ship chugging this way," Dan Laidman, Monterey Herald

3/9/03, Op-Ed, "Those who work on the Monterey Bay can contribute to studies of marine life," Mike Ricketts, Alliance of Communities for Sustainable Fisheries, Monterey Herald

3/9/03, Bay Symposium: Threatened Species, Calendar, Santa Cruz Sentinel

3/10/03, "County nearly flooded with proposals for plants, " (Desalination), Dennis Moran, Monterey Herald

3/11/03, " Coastal Commission approves blueprint for SeaCliff," Ramona Turner, Santa Cruz Sentinel

3/11/03, Monterey Bay National Marine Sanctuary Symposium, Calendar, Monterey Herald

3/13/03, "Otter researcher will receive award," Santa Cruz Sentinel

3/13/03, Monterey Bay National Marine Sanctuary Symposium, Community Calendar, Salinas Californian

3/13/03, "Anti-cruise ship PT boat not yet being considered, " Coast Weekly

3/13/03, Lessons from the Sea, Threatened and Thriving Species -Sanctuary Symposium, Calendar, Hot Picks, Coast Weekly

3/13/03, KAZU-radio (NPR station), news story on desalination

3/14/03, Marine Sanctuary Symposium, Calendar, Santa Cruz Metro

3/15/03, "Monterey Bay National Marine Sanctuary Symposium, " Calendar, Science, Salinas Californian

3/15/03, Monterey Bay Sanctuary Symposium, evening news coverage by KSBW-TV (NBC) and KCBA-TV (Fox)

3/16/03, "Sanctuary Rules," Ken McLaughlin, San Jose Mercury News

3/16/03, " Fishermen Fear Limits on Way, Monterey Bay Officials Say 1992 Vow Not To Add Restrictions Still Stands, " Ken McLaughlin, San Jose Mercury News

3/16/03, "Something Fishey in the Bay, " Ken McLaughlin, Monterey Herald version

3/17/03, "Celebrity Mercury Shows Wastewater System to Address Worries of Pollution in Monterey, " Ken McLaughlin, San Jose Mercury News

3/17/03, "Cruise Ship Shows Off Inner Workings, " Dan Laidman, Monterey Herald

“Black water under the bridge” Professor Toro column, Monterey County Herald, 3/15/03.

“Ship puts waste up for display; Celebrity Mercury shows wastewater system to address worries

of pollution in Monterey,” by Ken McLaughlin, San Jose Mercury News, 3/17/03

“Ship shows where garbage goes; Celebrity line seeks to reassure Monterey,” by Ken McLaughlin, San Jose Mercury News, 3/17/03

“Cruise ship shows off inner workings; Monterey had its first visit of the year from a cruise ship on Sunday and allowed a tour of the systems used to process waste,” by Dan Laidman, Monterey County Herald, 3/17/03

“Crystal Cruises gets in hot water; Ship releases treated wastewater into Monterey sanctuary, violating policy,” by Jane Engle, Los Angeles Times, 3/16/03

“Monterey wants tougher cruise ship rules,” San Jose Mercury News, 3/17/03

“Monterey Considering New Rules For Cruise Ships,” The KSBWChannel.com, 3/17/03

“Mercury Crew Invites Action News Cameras Aboard,” The KSBWChannel.com, 3/17/03

“Monterey council may adopt formal system for cruise ships,” Associated Press, 3/18/03

“Monterey bans cruise line ships for 15 years,” Associated Press, 3/19/03

“Cruise line banned for 15 years; Monterey City Council bars all Crystal ships after dumping incident,” by Dan Laidman, Monterey County Herald, 3/19/03

“Tourist ships from Crystal Cruises will have to cruise right on by Monterey - for the next 15 years,” Associated Press, Wilmington Morning Star, NC, 3/19/03

“Tourist ships from Crystal Cruises will have to cruise right on by Monterey -- for the next 15 years,” San Francisco Chronicle, 3/19/03

“Marine reserves in demand; Scientists urge expansion of protection,” by Don Thompson, Monterey County Herald, 3/19/03

“Marine reserve advocates see west coast ripe for their experiment,” by Ken Coons, SEAFOOD.COM NEWS - March 18, 2003 -

“Marine reserves stir up waves of coastal politicking,” by Virginia Gewin, Oregonian 03/19/03.

“Monterey bans Crystal Cruises; Council seeks to send message to industry,” by Ken McLaughlin, San Jose Mercury News, 3/20/03

“Some cruise ships will have to avoid Monterey, Calif., for next 15 years,” New Orleans Times-Picayune, LA, 3/20/03

“Cruise ship's wastewater a drop in the bucket,” by Tamara Grippi, Carmel Pine Cone (Weekly),

March 21-27

“Protect marine sanctuary with federal law,” The Herald’s View, Monterey County Herald, 3/23/03

“Reuse for rail relic; Possible marine sanctuary visitor center,” by Dan Laidman, Monterey County Herald, 3/24/03