

## Monterey Bay National Marine Sanctuary Sanctuary Office Report



Volume 2, Number 4

A REPORT FOR THE SANCTUARY ADVISORY COUNCIL MEMBERS

REPORTING PERIOD: MAY 23, 2005 TO JULY 5, 2005

#### 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.

input into the development of their own plans.

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

Presentation on Community Participation in Coastal Management
National Marine Sanctuary Program (NMSP) staff traveled to San Juan,
Puerto Rico and gave a presentation on "Sanctuary Advisory Council
Participation in Site Planning and Management" at a joint NOAA
(International Programs, Coastal Programs/Coral Program) and Puerto
Rico Dept. of Natural Resources (DRNA) workshop on preparing MPA
Management Plans. Overall, the presentation generated a lot of
discussion about how the NMSP sets up and manages advisory council
and other forums for public participation in site planning and operations.
The DRNA has identified a system of MPAs around the territory, but few
actually have management plans. NOAA wanted NMSP to present how
they use advisory councils to provide DRNA with a potential model or at
least to generate thought and discussion about using more public-based

#### **NOAA Preserve America Initiative**

On June 30, 2005, staff for the NOAA Preserve America Initiative attended the ceremony to announce the designation of 24 new Preserve America Communities. Secretary of the Interior Gale Norton, Representatives Brad Miller and Michael Turner, co-chairs of the Congressional Historic Preservation Caucus, and John L. Nau, III, chairman of the Advisory Council on Historic Preservation were on hand to recognize the communities receiving the Preserve America Community designation for their dedication to protecting and celebrating their heritage. Among these designations were two NOAA coastal communities- Hatteras Village, North Carolina and Alpena, Michigan. Both communities are important NOAA partners in protecting, preserving and promoting cultural and archeological treasures - America's maritime heritage. NOAA, and its National Marine Sanctuary Program in particular, is an active partner in the Administration's Preserve America Initiative. Monterey, California was designated a Preserve America community earlier this year. Under NOAA's Preserve America Initiative, a plan is being developed to assist other NOAA communities to obtain Preserve America Community designation status. Recently NOAA Fisheries and NOAA National Marine Sanctuary Program staff lent support for the proposed Galveston, Texas, application. Upcoming meetings in Gloucester and Scituate, Mass. will take place to pursue designation.

#### **Capitol Hill Oceans Week**

The National Marine Sanctuary Foundation hosted the 5th annual Capitol Hill Oceans Week June 7-9, 2005 in Washington D.C. The forum brought together a wide-range of key stakeholders who discussed important ocean and coastal issues. Panel speakers included Members of Congress, as well as representatives of the federal and state government, industry, academia, and nonprofit organizations. In conjunction with Capitol Hill Oceans Week, the Foundation hosted its Leadership Awards Dinner, which honored leaders for their longstanding commitment to protecting our ocean and coastal resources. Mr. Kimokeo Kapahulehua of the Hawaiian Islands Humpback Whale National Marine Sanctuary was presented the 2005 Volunteer of the Year Award at the dinner. Mr. John Fischer was nominated as the Volunteer of the Year by the Monterey Bay National Marine Sanctuary. In 2004, Stephanie Harlan was nominated by the Monterey Bay National Marine Sanctuary and received the award for the Volunteer of the Year.

#### NATIONAL MARINE SANCTUARY NEWS

#### **Channel Islands NMS**

The *R/V Shearwater* completed the sixth and final three-day Xantus's murrelet monitoring cruise on June 8. Xantus's Murrelets are one of the rarest seabirds in the world and are considered one of the marine bird family Alcidae most vulnerable to imminent extinction. The Channel Islands National Marine Sanctuary has partnered with scientists from the California Institute of Environmental Studies since 1999 to monitor the nesting of these birds at Anacapa Island. This year, surveys have discovered 25 nesting attempts (including one second clutch) and if hatching proceeds as expected, scientists anticipate over 90% nest success. To date, eight nests have hatched, 15 are still being incubated, and it appears that two nests have been abandoned. Nocturnal surveys and captures have demonstrated the highest murrelet numbers recorded since these surveys began in 2001 and relatively high proportions of birds with brood patches (an indication of a nesting bird) attending congregations. These results likely demonstrate the benefits the removal of non-native black rats (a known predator of nesting Xantus's Murrelets) from Anacapa Island in the fall of 2002. In addition, scientists have located four Pigeon Guillemot nests in two caves and the two Cassin's Auklet nests first discovered in 2003 are again active this season.

#### **Fagatele Bay NMS**

On May 23, the Fagatele Bay National Marine Sanctuary hosted its initial Sanctuary Advisory Council meeting. Eight members attended the meeting, which included Tim Keeney, Deputy Assistant Secretary of Oceans and Atmosphere, Allen Tom, Pacific Island Regional Coordinator and Faleseu Eliu Paopao, Director of the American Samoa Department of Commerce. Presentations by Allen Tom, Sanctuary Manager Nancy Daschbach and Sanctuary Advisory Council Coordinator Allamanda Amituana`i gave the new members a grounding in the national, regional and local programs.

#### Florida Keys NMS

A Florida Keys National Marine Sanctuary biologist and a Coral Restoration Monitoring Team member extracted multiple cores from an unusually large, mushroom-shaped Montastrea annularis coral head identified on the Broward county reef tract. The colony was in approximately 27 feet of water, was approximately 8 feet tall, and measured approximately 50 feet at its base. The extracted cores approached 80 inches in length, and initial estimates based on observed growth rates in the area approximate the age of the colony at 400-500 years old. Two cores were provided to Nova Southeastern University for its analysis, and one was kept for analysis by Florida Keys National Marine Sanctuary biologists. Results of the analysis may reveal several clues about South Florida's coastal water temperature and quality. Digital still and video images were captured to document the unusual coral colony and the coring process.

#### Flower Garden Banks NMS

The annual long term monitoring cruise to collect data on the status and health of the coral reefs of the East and West Flower Garden Banks was successfully conducted June 5-10. This monitoring project is being carried out by the environmental consulting firm PBS&J, under a contract co-funded by NOAA and the Minerals Management Service (MMS). All data required under the contract was obtained. During the cruise, a colony of the elkhorn coral (Acropora palmata) was observed at the East Flower Garden Bank. This is only the second observation of this branching coral ever recorded in the sanctuary. The only other specimen was discovered at the West FGB several years ago. Prior to that sighting, this species had not been recorded in the northern Gulf of Mexico

#### **Hawaiian Islands Humpback Whale NMS**

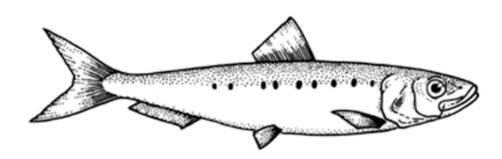
Kauai Programs Coordinator Jean Souza will be installing this week two temporary photo displays at the upcoming annual Kauai Family Ocean Fair and at the Princeville Public Library on the island's north shore. The exhibit will feature the endangered Hawaiian Monk Seal and will be on display for a month. Two other photo displays, of the sanctuary and humpback whales, and the near-stranding of melon-headed whales in Hanalei Bay were featured at Princeville Library in January. Since January, four of the public libraries on Kauai have invited Jean to be a featured lecturer, with her "45-Ton Talks About Hawaii's Humpback Whales" drawing in crowds of 25-80 people per session. The audiences have included local residents, as well as uninformed visitors, youth organizations, and preschoolers. As such, post-lecture activities have sometimes included hands-on activities geared for various age groups. Humpback whale posters and educational materials were also distributed. Three of the four events were coordinated in celebration of National Library Week; one was in celebration of Oceans Day.

#### Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve

On May 14 NOAA Ship Hi'ialakai departed for a multidisciplinary science expedition to the Northwestern Hawaiian Islands. On the 19th, our maritime archaeologist discovered a new shipwreck that appears to be a barge, possibly dating to WWII. During the early morning of May 20th, following completion of hydrographic survey operations, the Hi'ialakai headed towards Maro Reef, the next stop on the expedition. Other scientific teams are documenting the health of coral reefs, installing permanent survey datums on coral reefs, examining and tagging a variety of fish species, and acquiring additional multibeam sonar data in French Frigate Shoals. The expedition has been very successful so far, and periodic reports from the ship will be posted on the website: hawaiireef.noaa.gov.

#### **Olympic Coast NMS**

An Olympic Coast National Marine Sanctuary habitat mapping specialist led a side scan sonar survey aboard the NOAA's McArthur II from June 15-23. The effort, part of a collaboration with NCCOS personnel, was primarily to document areas of hard seafloor which may potentially harbor cold water coral communities. The survey produced over 82 hours of logged sonar data, covering approximately 286 linear nm (529 km) of tracklines, and over 245 square km (71 square nm) of the sanctuary. Using a Klein 3000 dual frequency side scan sonar, several potential targets were discovered and will be revisited in the future with aid of an remotely operated vehicle outfitted with video equipment. In addition to documenting potential coral habitat, the data will contribute significantly to the sanctuary's active benthic habitat mapping program.







### MONTEREY BAY NATIONAL MARINE SANCTUARY NEWS AND PROGRAM UPDATES

#### JOINT MANAGEMENT PLAN REVIEW

MBNMS staff are continuing to prepare the draft management plan and draft environmental impact statement for clearance through NOAA. While most of the work on the management plan itself has been completed, staff continues to work on regulatory issues and the subsequent analysis as required by the National Environmental Policy Act (NEPA), Administrative Procedures Act (APA) and the Regulatory Flexibility Act. MBNMS and other Joint Management Plan Review staff are working with TetraTech, the NEPA contractor, to complete the analysis of proposed regulatory modifications. All regulatory related decisions have been made at this time so that the required analysis can be completed and submitted for clearance. The clearance, printing and distribution process is expected to take approximately four months.

Bill Douros, Sean Morton and Huff McGonigal have been involved in extensive discussions with NMSP, NMFS and NOAA leadership to determine if it is feasible and legal to adapt ecosystem protection fishing regulations to protect the Davidson Seamount. These regulations were recommended by the Pacific Fisheries Management Council (PFMC) as part of its action on the groundfish Essential Fish Habitat project, and are recommended to help meet the NMSP goal of protecting the seamount. NOAA has decided to continue both regulatory processes in parallel until further data are prepared and evaluated, and future PFMC action is more clear. This has delayed the release of the draft Management Plan.

If you have questions regarding the management plan review, please contact Sean Morton at (831) 647-4217 or sean.morton@noaa.gov.

#### **MANAGEMENT**

On June 1 and 2, four congressional staffers representing the Honorable Sam Farr, Lois Capps, Anna Eshoo, and Jerry Lewis visited MBNMS for a facilities-related tour. On June 1, the group learned about the Santa Cruz visitor center plans and visited the site with City and MBNMS representatives. On the second day, the staffers traveled to Monterey for a more in-depth presentation on the MBNMS and discussion on focused topics such as the new vessel and dock, the Sanctuary Scenic Trail, the California Signage Plan, and West Coast regional initiatives. Luke Nachbar, Matt Stout, Ted Lillestolen and Paul Orlando escorted the group through site visits to all four California National Marine Sanctuaries. For more information, contact Karen Grimmer at (831) 647-4253.

On May 26, Scott Kathey, filling in for an injured Bill Douros, briefed 25 command staff personnel from US Coast Guard Sector Command, San Francisco on the NMSP and MBNMS programs, and highlighted opportunities for joint NOAA/USCG operations. The sector commander pledged increased support for MBNMS enforcement objectives, as well as enhanced coordination between the sector and MBNMS. For more information, contact Scott Kathey at (831) 647-4251.

During the week of June 13 - 17, MBNMS staff participated in an international exchange of information and ideas with Dr. David Haynes, Manager Water Quality Research and Monitoring for the Great Barrier Reef Marine Park Authority. Dr. Haynes and MBNMS staff participated in a field visit with Kirk Schmidt, MBNMS Advisory Council Agriculture representative to tour agricultural operations, participated in an Urban Watch volunteer water quality monitoring event in Pacific Grove, and conducted several information sharing meetings. For more information, contact Chris Coburn at (831) 420-1670.

From July 5-8, Bill Douros attended a meeting in Silver Spring with senior leadership for the National Marine Sanctuary Program for initial discussions on FY06 budget allocations. Additional meeting topics included the evolving role of the regions in the NMSP and strategies to improve support of filed sites.

On July 15, Bill Douros and Scott Kathey attended a change of command ceremony to welcome the new Captain of the Port, William Uberti, to the San Francisco group, and say farewell to the outgoing Captain Swanson. For more information, contact Scott Kathey at (831) 647-4251.

From August 1-4, MBNMS staff hosted Malcolm Turner of the Great Barrier Reef Marine Park Authority (GBRMPA) as part of ongoing efforts of exchange between the NMSP and GRBMPA. Dawn Hayes, Education and Outreach Coordinator, will visit the GBRMPA later in August as part of a delegation discussing education matters. For more information, contact Dawn Hayes at (8310 647-4256.

#### RESEARCH AND MONITORING

In May, the NOAA ship *McArthur II* was used to survey the wreck of the *USS Macon*. Maps are now complete, in GIS format, demonstrating two previously known debris fields in high resolution, and additional targets that likely represent ballast released from the air ship before it plummeted into the waters of the Big Sur coast. For more information, contact Jean de Marignac at (831) 647-4214.

On May 28, Josh Pederson completed NOAA diversater training at the NOAA Dive Center in Sand Point, WA. For more information, contact Josh Pederson at (831) 647-4260.

The multiagency Elkhorn Slough Tidal Wetland Plan process is predicting continued extensive loss of marshes, and has started developing consensus that a viable solution to the problem is developing engineered structures to limit tidal flow. There is interest in presenting the plan and findings to date to the MBNMS Advisory Council. For more information on the planning process, see http://www.elkhornslough.org/tidalwetlandplan.htm. For other information, contact Andrew DeVogelaere at (831) 647-4213.

The MBNMS Research and Resource Protection Teams are embarking on a collaboration with the National Center for Coastal Ocean Science and the Pfleger Institute of Environmental Research to study the impacts of trawling to benthic habitats of the sanctuary. This study need was identified by the Joint Management Plan Review working group on benthic trawling effects and will likely take advantage of NOAA ship *McArthur II* operations in 2006. For more information, contact Andrew DeVogelaere at (831) 647-4213.

On June 4-5, Michele Roest and Jean de Marignac hosted a training/refresher for Beach COMBERS in the southern region of the MBNMS, from Cambria to San Simeon. Hannah Nevins, Beach COMBERS coordinator from Moss Landing Marine Laboratories was the guest presenter and leader of the training. For more information, contact Michele Roest at 805-927-2145.

On May 24-25, Steve Lonhart attended the Aquatic Nuisance Species Task Force meeting in Monterey and gave a presentation on the latest efforts to manage the invasive Asian kelp *Undaria pinnatifida* in Monterey Harbor. He also led a field trip down to the harbor, showing over 30 participants a dock infested with *Undaria*, and discussed the methods being used to manage its spread. For more information, contact Steve Lonhart at (831) 647-4222.

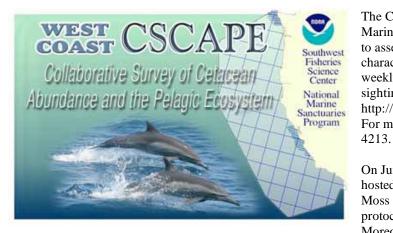
Rick Stumpf and colleagues from the National Center for Coastal Ocean Sciences have completed a project on using remote sensing data to compile and synthesize information on chlorophyll, turbidity, temperature, wind and precipitation. Maps and time series of these parameters were developed for Monterey Bay, Gulf of the Farallones, and Cordell Bank National Marine Sanctuaries, and will be used to address management plan issues. For more information, contact Andrew DeVogelaere at (831) 647-4213.

Sanctuary staff continue to participate in the End-user Committee (EUC) for the Central and Northern California Ocean Observing System (CeNCOOS). As one of the regional associations for the US Integrated Ocean Observing System (IOOS), CeNCOOS covers the west coast from the California-Oregon border to Point Conception, near Santa Barbara. The EUC has canvassed a wide array of stakeholders and is developing targeted products with the assistance of the CeNCOOS Science Committee and the Data Management Committee. The next meeting will be held at the Romburg-Tiburon Center near on June 22, 2005. For more information, contact Steve Lonhart at (831) 647-4222.

On May 23rd, Sanctuary staff attended the workshop titled, "Aquarium industry strategies for consumer awareness and education about introduced aquatic species" held in Monterey. Sponsored by the University of California at Davis RIDNIS project (Reducing the Introduction and Distribution of Non-native Aquatic Invasive Species through Education and Outreach), the workshop included large and small aquarium industry representatives, as well as scientists, and wholesalers. Steve Lonhart gave a presentation on the MBNMS Introduced Species Action Plan. In addition, a new consumer awareness program developed by NOAA, USFWS, and the Pet Industry

Joint Advisory Council, called "Habitattitude," was presented by Marshall Meyers and could serve as an important outreach tool for the MBNMS. For more information, contact Steve Lonhart at (831) 647-4222.

The 3rd International Symposium on Deep-Sea Corals, Science and Management will be help November 28 through December 2 in Miami. Andrew DeVogelaere, Erica Burton, and Huff McGonigal have submitted and abstract titled, "Protecting deep-sea corals by including Davidson Seamount in the Monterey Bay National Marine Sanctuary. For more information, contact Andrew DeVogelaere at (831) 647-4213.



The CSCAPE 2005 cruise is a collaboration between the National Marine Fisheries Service and the National Marine Sanctuary Program to assess the abundance and distribution of marine mammals and to characterize the pelagic ecosystem off the U.S. West Coast. The first weekly science report, including a species list and number of sightings, is available on the web at http://swfsc.nmfs.noaa.gov/PRD/PROJECTS/CSCAPE/default.htm For more information, contact Andrew DeVogelaere at (831) 647-

On June 11, the MBNMS and Moss Landing Marine Laboratories hosted an appreciation event for the BeachCOMBERS volunteers in Moss Landing, CA. This event included a review on the sampling protocol, and how to identify beach cast marine birds and mammals. Moreover, the Beach COMBERS findings to date were reviewed, and

included assessing harmful algal bloom impacts and gillnet bycatch. For more information, contact Jean de Marignac at (831) 647-4214.

Becky Stamski, MBNMS Sea Grant Fellow, completed a technical report, "Coastal Erosion and Armoring in Southern Monterey Bay." It provides background information on the geomorphic history of the area, summarizes the results of regional erosion studies, documents coastal development that may be threatened by erosion, and lays the groundwork for an investigation of alternatives to coastal armoring that are available for responding to coastal erosion. For more information, contact Andrew DeVogelaere at (831) 647-4213.

As part of her Sea Grant Fellowship, Becky Stamski completed two map series in collaboration with the MBNMS Water Quality Protection Program. One series provides information to assist in development of farm plans to help standardize a database of management practices and how they impact water quality. The maps can be viewed at: http://www.awqa.org/pubs/maps.html, under "Hydrologic Maps". The second set of maps display topography, watershed classification, and location of water quality monitoring sites for the MBNMS region. For more information on the farm management maps, contact Bridget Dobrowski at (831) 647-4248. For more information on the water quality maps, contact Donna Meyers at (831) 420-1609.

On June 15, Andrew DeVogelaere gave a presentation at the Monterey Bay Aquarium Research Institute seminar series, with a focus on the Joint Management Plan Review Process, the Sanctuary Integrated Monitoring Network (SIMoN), and the linkages between the two efforts. For more information, contact Andrew DeVogelaere at (831) 647-4213.

From June 13-29th, three Sanctuary staff participated in a series of diver training sessions hosted by the Partnership for Interdisciplinary Studies of Coastal Oceans (PISCO) at UC Santa Cruz. PISCO is training divers to collect subtidal data as part of their long-term, large-scale monitoring program along the entire west coast of the United States. Research divers included undergraduate and graduate students from UCSC and Oregon State University, scientists from the California Department of Fish and Game, and staff from the Sanctuary Integrated Monitoring Network (SIMoN). Dr. Steve Lonhart lectured on invertebrate identification and assisted with field identification during and after dives. For more information, contact Steve Lonhart at (831) 647- 4222.

On June 24, Sanctuary staff viewed the recently installed thermistor array off Pescadero Point. Over the following month, staff from the Partnership for Interdisciplinary Studies of Coastal Oceans (PISCO) at UC Santa Cruz installed 11 thermistor arrays within the Sanctuary from Pigeon Point down to Big Sur as part of the Sanctuary program's West Coast Observatories Initiative. These moorings collect water temperature at a variety of depths from the surface to 20 m deep. These data will be downloaded every three months and made available through a partnership with PISCO, the National Data Development Center, and the Sanctuary Integrated Monitoring Network (SIMoN). For more information, contact Steve Lonhart at (831) 647- 4222.

During January through May, the long term beachcast monitoring programs of Beach COMBERS and Beach Watch detected an unusual increase in mortality of seabirds (Cassin's and Rhinoceeros Auklets; Cormorants; Common Murres). Necropsies established the major cause of death to be starvation. This year's poor recruitment of rockfishes, which are important prey for these seabirds, may be the cause of this increased mortality. For more information, contact Jean de Marignac at (831) 647-4214.

On June 20, Sanctuary staff met with Professor Mark Carr (UC Santa Cruz) to discuss analysis of data collected along the Big Sur coast related to erosion impacts on the shallow subtidal. The study, which began in September 2003, is funded by the California Coastal Impact Assistance Program and the Monterey Bay National Marine Sanctuary. A model is being developed to predict subtidal species assemblages based on terrestrial geology, nearshore conditions, and the presence/absence of kelp. For more information, contact Steve Lonhart at (831) 647-4222.

Andrew DeVogelaere participated in a boat tour of Elkhorn Slough and dinner for Dr. Robert Dynes, President of the University of California. The President was interested in partnerships and collaboration between the U.C. campuses and resource managers, and topics covered included ocean observatories, marine reserves, interpreting research, applying research findings, and the way the Sanctuary program encourages public participation in addressing resource management issues. For more information, contact Andrew DeVogelaere at (831) 647-4213.

The Monterey Bay Sanctuary Foundation led the submission of a proposal to the Volunteer Catalyst Mini-Grant program offered by the National Marine Sanctuary Program. The title of the proposed project is "Undaria detection and reporting, Monterey California" and the effort would address removal of invasive algae in the sanctuary. For more information, contact Andrew DeVogelaere at (831) 647-4213.

On July 18, eight MBNMS staff members participated in the removal of *Undaria* from the Monterey Harbor. Staff removed over 100 pounds (wet weight) of *Undaria* and measured over 500 individuals. For more information, contact Steve Lonhart at (831) 647-4222.

#### SIMoN

The Sanctuary Integrated Monitoring Network (SIMoN) has launched three new and improved interactive maps. The maps address the themes of habitat, water quality, and near real-time observatories along the west coast. Please click on http://www.mbnms-simon.org/other/gen/imaps.php to view the data and create your own custom maps. For more information, contact Chad King at (831) 647-4248.



Heather Cauldwell and Nicole Capps collecting and recording *Undaria* removed from the Monterey Harbor. Photo Credit: Steve Lonhart

On June 6, a new Beach COMBERS section of the SIMoN website was released. This new section provides a project summary of the beach monitoring effort, resources for volunteers, and an online data entry system. Go to http://www.mbnms-simon.org/sections/beachCombers/index.php?l=n to have a look at the new webpages. For more information, contact Josh Pederson at (831) 647-4260.

The SIMoN Science Committee (SSC) met to review six full proposals submitted in response to a request for proposals to study critical prey in the Monterey Bay National Marine Sanctuary. The SSC recommendations, along with staff reviews, will be presented to the MBNMS Superintendent for a final approval by mid-June. For more information, contact Steve Lonhart at (831) 647-4222.

On June 3, the SIMoN team finalized a summary document on the oceanObs information management tool developed for the Central and Northern California Ocean Observing System (CeNCOOS). This tool will provide the region with a way to organize and access information on the numerous ocean observatory programs between Pt. Conception and the California/Oregon boarder. The document will be used by SIMoN and NMSP Headquarters to develop links between the sanctuary program and the National Integrated Ocean Observing System (IOOS). For more information contact Josh Pederson at (831) 647-4260.

Sanctuary staff continue to work with the technical development team at the National Coastal Data Development Center to develop new mapping products for SIMoN, and a data base system (oceanObs) to track summary information on ocean observatory projects. For

more information, contact Josh Pederson at (831) 647-4260.

#### RESOURCE PROTECTION

The MBNMS Marine Protected Areas (MPA) working group met on May 25 to review habitat maps, the predictability of upwelling features in the Sanctuary, MPA design criteria, and progress on a variety of initiatives including a decision support tool and socioeconomic studies that are being initiated in collaboration with the state's efforts. The next meeting of the working group will be August 17 at the MBNMS office. For more information, contact Holly Price at (831) 647-4247.

The MBNMS sent a letter to both the National Science Foundation and Texas A&M University stating that the recent permit request to drill 10 boreholes within the Sanctuary would require a more complete environmental review- in the form of an Environmental Impact Statement. For more information, contact Deirdre Hall at (831) 647-4207.

On June 10, the Southern Monterey Bay Coastal Erosion and Armoring Workgroup met in Monterey. The meeting was focused on erosion rates in the region, and included presentations from several coastal erosion experts. The goal of this effort, which is being led by the MBNMS, is to develop a proactive regional approach to address coastal erosion and to minimize the negative impacts of coastal armoring in the Southern Monterey Bay region. For more information, contact Brad Damitz at (831) 647-4252.

MBNMS Research and Resource Protection teams hosted a meeting on June 20 and 21 with the contractor IM Systems group and the State's Marine Life Protection Act staff to initiate work on development of a decision support tool for use in designing alternative MPA networks. The tool will be used by the MBNMS MPA working group for the offshore federal waters of the Sanctuary and by the State's working group to designate marine reserves within three miles of shore. The group reached agreement on priority data layers to be included in the tool, types of model queries to assess biological and socioeconomic aspects of MPAs, and an approach to data standardization. For more information, contact Chad King at (831) 647-4248.

The Conservation Working Group held its monthly meeting on June 21 in Cambria to facilitate discussions with environmental groups at the southern end of the Sanctuary. Topics discussed included an update on the JMPR and planning for outreach around the fall release of the document, as well as specific issues such as MPAs, Davidson Seamount, water quality. Holly Price, Rachel Saunders and Michele Roest participated. For more information, contact Michele Roest at (805) 927-2145.

#### **Water Quality**

On May 18 and 19, Bridget Dobrowski, Agriculture Water Quality Coordinator, attended the California Regional Outreach Conference: Success Strategies for Small and Limited Resource Farmers, in Burlingame, CA. Resource Managers, Outreach Coordinators and small Farmers were in attendance from around the country. The second day of the conference involved a tour of farms along the coast in San Mateo County. All the farms visited are working with our partner agencies, Natural Resource Conservation Service and San Mateo Resource Conservation District, to improve water quality draining from their farm to the MBNMS. For more information contact Bridget Dobrowski at (831) 647-4219.

On May 18, Donna Meyers, Regional Water Quality Coordinator, attended the Conservation Working Group (CWG) of the Channel Island National Marine Sanctuary to participate in a discussion of water quality research and monitoring in the Channel Islands National Marine Sanctuary. The CWG is preparing a background report on water quality for the Channel Islands Sanctuary Advisory Committee. For more information, contact Donna Meyers at (831) 420-1609.

On June 1, Bridget Dobrowski gave a presentation on the MBNMS Agriculture and Rural Lands Plan to 25 farmers in Gilroy, as part of the University of California Cooperative Extension's Farm Water Quality Planning Short Course. For more information, contact Bridget Dobrowski at (831) 647-4219.

On June 10, Bridget Hoover met with representatives of the Central Coast Regional Water Quality Control Board to discuss the implementation of a grant to monitor urban and agriculture impacts on two drainages in the City of Salinas. The study design and monitoring locations were decided. Monitoring will begin in August. For more information, contact Bridget Hoover at (831) 883-9303.

A water quality look-up tool was created by Josh Pederson, SIMoN Outreach Specialist, which will enable users to query water quality data based on parameter, frequency, and the watershed monitoring program. The tool can be found at the following link: http://www.mbnms-simon.org/sections/waterQuality/projects.php?sec=wq For more information, contact Josh Pederson at (831) 647-4260.

On May 21 and June 11, the Monterey Bay Sanctuary Citizen Watershed Monitoring Network, along with the Coastal Watershed Council, conducted Urban Watch trainings in Monterey and Capitola. Approximately 20 volunteers were in attendance at each training. Urban Watch is a dry weather water quality monitoring program, in which storm drain outfalls in Monterey, Pacific Grove, Scotts Valley, Capitola and Live Oak are monitored 4 times a month for common urban pollutants. The monitoring began June 1 and will go through October. The Scotts Valley training is scheduled for June 18. For more information, contact Bridget Hoover at (831) 883-9303.

On June 22, the Monterey Bay Sanctuary Foundation hosted a dinner for approximately forty-five individuals involved in water quality monitoring in the MBNMS. The evening was an opportunity for the water quality monitoring community to discuss ongoing projects and also featured a talk from Sam Ziegler, Non point Source Program Manager from Region IX of the U.S. E.P.A., who discussed data needs for answers to questions about management effectiveness. The venue, food, and materials for the dinner were all donated by local businesses contacted by a team of dedicated volunteers. For more information, contact Chris Coburn at (831) 420-1670.

On June 23, Chris Coburn gave a presentation to about 25 members of the Pajaro River Watershed Council. The talk provided background on the MBNMS and the WQPP, and focused on water quality issues related to the Pajaro River, including elevated nutrients, bacteria, and persistent pesticides. For more information, contact Chris Coburn at (831) 420-1670.

On June 29, the MBNMS Water Quality Protection Program and the Monterey Bay Sanctuary Foundation hosted a Plumbers Workshop in Santa Cruz. The workshop, funded from a grant from the California Coastal Conservancy, carried out a strategy in the Beach Closures and Microbial Contamination Action Plan and was attended by most of the larger business operating in Santa Cruz County. The goal of the workshop was to develop partnerships between local jurisdictions, the MBNMS, and businesses who can play a significant role in reducing bacterial contamination entering the MBNMS. For more information, contact Chris Coburn at (831) 420-1670.

#### **Desalination**

On May 23, Brad Damitz met with Tom Luster of the California Coastal Commission, to discuss implementation of the MBNMS' Desalination Action Plan. The action plan lays out a framework for a regional approach to minimize impacts to marine resources from the construction and operation of desalination facilities within the sanctuary. On May 25, Brad also met with Steve Saiz of the State Water Resources Control Board in Sacramento, to discuss the development of environmental standards for desalination plants operating within MBNMS boundaries. Also, on May 25, Brad met with Scott Flint of the California Department of Fish and Game in Sacramento, to discuss the development of MBNMS guidelines for the siting of desalination plants and associated infrastructure within the MBNMS.

#### **Enforcement**

On May 2, Officer Bob Yerena conducted a training for 10 members of Coast Guard Station Monterey to instruct them in recognizing MBNMS regulatory violations and in NOAA enforcement procedures. For more information, contact Bob Yerena at (831) 647-4203.

On May 9, marine biologist Bridget Watts gave a presentation to Coast Guard personnel at Station Monterey at the request of the Sanctuary. Ms. Watts trained Coast Guard personnel in identification of marine mammals and routine cetacean/pinniped behavioral characteristics so that the Coast Guard can develop wildlife protection procedures during periodic weapons training at sea. At the request of the MBNMS, Nancy Black (MBNMS Advisory Council member) subsequently donated marine mammal identification materials to the Coast Guard to assist this effort. For more information, contact Scott Kathey at (831) 647-4251.

NOAA General Counsel for Natural Resources (GCNR) recently concluded a \$5,000 settlement agreement with the insurer for a sailing vessel from which a mast and rigging were discharged into the Sanctuary on April 9, 2005. The owner was cooperative with Sanctuary enforcement personnel during the investigation and made an unsuccessful attempt to locate and remove the mast and rigging. The settlement funds will be used for habitat restoration in the Sanctuary. For more information, contact Scott Kathey at (831) 647-4251.

On May 14, a 16-ft recreational vessel was abandoned at anchor near Davenport after the engine failed. The vessel subsequently took on water and sank. NOAA Enforcement is investigating the incident and working with the owner for removal of the vessel and outboard motor. For more information, contact Bob Yerena at (831) 647-4203.

On May 16, a burned out automobile was reported along the shoreline near Scott Creek. NOAA Enforcement is investigating the report in conjunction with the CA Highway Patrol and will take any necessary action for removal of any abandoned material found within the Sanctuary. For more information, contact Bob Yerena at (831) 647-4203.

On May 18, Bill Douros, Karen Grimmer, and Scott Kathey met with the incoming commander for US Coast Guard Station Monterey, LT Marc Warren, and briefed him on current and future cooperative efforts between the station and the Sanctuary, including construction of a floating dock for the future *R/V FULMAR*, Sanctuary Advisory Council participation, and enforcement assistance. LT Warren was very receptive to working with the Sanctuary on multiple projects and programs. For more information, contact Scott Kathey at (831) 647-4251 or Karen Grimmer at (831) 647-4253.

On February 25, 2004, the *M/V MED TAIPEI* discharged 15 loaded cargo containers into the MBNMS during a transit outside the US Territorial Sea from San Francisco to Los Angeles. MBNMS staff, NOAA GCNR and the Department of Justice (DOJ) are continuing leading discussions with the responsible parties about recovery of the containers or a compensatory settlement agreement. For more information, contact Scott Kathey at (831) 647-4251.

On May 25, Officer Bob Yerena provided training to two NOAA Special Agents servicing GFNMS and CBNMS in enforcement procedures and issues specific to NMS violations and investigations. NMS cases are different in many respects from typical fisheries cases as they address issues such as sewage spills, vessel groundings, low overflights, etc. NMS cases require OLE and GCEL to employ unfamiliar procedures and methods in addressing Sanctuary regulatory violations. For more information, contact Bob Yerena at (831) 647-4203.

On May 22, a 24-ft recreational vessel was reportedly towed into Sanctuary waters and sunk off Moss Landing. NOAA OLE is investigating the report. For more information, contact Bob Yerena at (831) 647-4203.

On May 24, the 52' S/V FLASH ran aground in sand/mud in San Simeon Cove. The vessel sustained no visible damage, and there were no reported discharges or natural resource injuries. Michele Roest facilitated salvage efforts from the MBNMS satellite office near the grounding site. The vessel was refloated the following day without incident. For more information, contact Scott Kathey at (831) 647-4251.

On May 26, Scott Kathey participated in a west coast regional NMS review of a near-final Sanctuary overflight monitoring feasibility study. The study identifies needs and alternative methods for monitoring low-altitude air traffic in Sanctuaries and enforcing NMS overflight prohibitions. The report identified some very promising techniques for assessing and responding to aircraft disturbance within Sanctuaries. For more information, contact Scott Kathey at (831) 647-4251.

The *P/B SHARK CAT* was inspected by a marine surveyor on June 1 and found to be structurally sound and appropriately outfitted to perform its mission. For more information, contact Scott Kathey at (831) 647-4251.

On June 1, an MBNMS dive team assisted the Coast Guard in recovering an equipment item accidentally lost overboard at the Monterey Coast Guard Pier. This was a rare opportunity for MBNMS to assist the Coast Guard in return for long-standing operational and logistical support to the Sanctuary from USCG Station Monterey and District 11. For more information, contact Scott Kathey at (831) 647-4251.

During dark morning hours of May 29, a sport utility vehicle crashed into the waters of Elkhorn Slough adjacent to the Highway 1 bridge and sank. The sole occupant died in the crash. During recovery of the vehicle, an estimated 20 gallons of gasoline was released into the water and carried out toward the ocean by an ebb tide. No cleanup effort was implemented. For more information, contact Scott Kathey at (831) 647-4251.

In 2002, the MBNMS initiated requests to the US Fish and Wildlife Service and NMFS for incidental take of sensitive and protected species resulting from fireworks displays authorized by the MBNMS over sanctuary waters. The review and authorization process has proceeded very slowly over the past three years, however, a biological opinion from the US Fish and Wildlife Service was issued June 22, followed by an incidental harassment authorization issued by NMFS June 30. The MBNMS has developed extensive guidelines for authorizing professional fireworks displays within sanctuary boundaries. For more information, contact Scott Kathey at (831) 647-4251.

On January 31, the 62-ft *M/V ALBION* sank in the Sanctuary. One of the responsible parties has solicited bids for recovery of an estimated 1,500 gallons of fuel from on-board tanks as well as the vessel itself. However, the planning effort is proceeding slowly. Another responsible party desires to act more swiftly and is coordinating with NMSP HQ to conduct an ROV survey of the wreck on July 20. For more information, contact Scott Kathey at (831) 647-4251.

On June 8, Scott Kathey attended the change of command ceremony for US Coast Guard Group San Francisco on behalf of the MBNMS. Scott also toured the Group operations center and the Vessel Traffic Service command center to better understand how to coordinate with these sites for emergency response and enforcement purposes. For more information, contact Scott Kathey at (831) 647-4251.

On June 9, Scott Kathey gave a presentation to six USCG C-130 pilots at Coast Guard Air Station Sacramento about overflight restriction zones and sensitive wildlife areas within the three central California coast national marine sanctuaries. For more information, contact Scott Kathey at (831) 647-4251.

Scott Kathey attended annual Hazardous Waste Operations and Emergency Response (HAZWOPER) refresher training in Cupertino on June 17 to maintain emergency response proficiency skills. For more information, contact Scott Kathey at (831) 647-4251.

On June 11, an automobile ran off the west shoulder of Highway 1 and crashed into intertidal habitat of the Sanctuary near Little Pico Creek in the southern end of the Sanctuary. There were no fatalities, and some minor debris was discharged into the Sanctuary. CA State Parks Ranger Bill Payne, a deputized Sanctuary Enforcement Officer, investigated the incident and forwarded a report to NOAA OLE Officer Bob Yerena for action. For more information, contact Bob Yerena at (831) 647-4203.

On June 13, State Parks staff at Ano Nuevo Reserve witnessed a small aircraft flush marine mammals and seabirds during several low-altitude passes over Ano Nuevo Island and Point Ano Nuevo. NOAA OLE is investigating. For more information, contact Bob Yerena at (831) 647-4203.

#### EDUCATION, VOLUNTEER AND OUTREACH PROGRAMS

On June 3, Stacia Fletcher met with Beverly Serrel, an independent contractor and nationally recognized exhibit planner/evaluator and author, to discuss front-end evaluation and interpretive planning for the MBNMS Visitor Center. For more information, contact Stacia Fletcher at (831)-420-1630.

On June 4, Lisa Emanuelson and Michelle Templeton staffed an informational booth at the Monterey Bay Aquarium for their grand opening of the Ocean's Edge exhibit. Thousands of local and national visitors attended the event. Other guest exhibitors included the Surfrider Foundation USA, Save Our Shores, Friends of the Sea Otter, Tagging of Pacific Pelagics and the Monterey Bay Aquarium's Dive Office and Seafood Watch program. MBNMS staff provided water quality and urban runoff information to over 750 community members. For more information, contact Michelle Templeton at (831) 647-4211.

On June 16, Sanctuary staff led sandcrab monitoring and beach clean-up activities at Monterey State Beach for 50 students from Natividad Elementary School in Salinas. Students received in class instruction prior to monitoring as part of the LiMPETS program. For more information, contact Cristy Cassel at (831) 647-4215.

Four members of the Education team attended the National Marine Educator's Association conference in Maui, HI from July 13-16. For more information, contact Dawn Hayes at (8310 647-4256.

Michelle Templeton, MERITO Program Manager, was in Ecuador July 20-August 2 as part of a new exchange directed by Congress. For more information, contact Michelle Templeton at (8310 647-4211.

#### **MERITO**

On May 19, Sanctuary staff led 18 girls from the Salinas Girl Scout program in storm drain stenciling activities. For more information contact Cristy Cassel at (831) 647-4215.

On May 22, MBNMS intern, Luis Rodriguez, continued demographic interviews at the Elkhorn Slough National Estuarine Research Reserve as part of a 3-year effort to better understand its demographic visitor-ship at partner sites. For more information, contact Cristy Cassel at (831) 647-4215.

On May 21, Sanctuary staff presented three workshop sessions on Healthy Environment for our Future at Salinas Union High School District's annual Migrant Parent Conference. Over 50 parents participated in the event promoting issues such as gang prevention, college preparation, academic success and environmental health. For more information, contact Michelle Templeton at (831) 647-4211.

During the week of May 23, Sanctuary staff and interns hosted 50 youth enrolled in the MERITO Watershed Academy after-school program at Kammann Elementary, Los Arboles Middle School, Del Rey Woods Elementary and the Salvation Army Youth Center. Activities included a tidepool exploration and a visit to the Monterey Bay Aquarium. This marked their last week of programming for the academic year and all students received a Watershed Academy Diploma and completed post-evaluation surveys. For more information, contact Cristy Cassel at (831) 647-4215.

On May 29, Sanctuary staff concluded a two-year demographic study at the Elkhorn Slough National Estuarine Research Reserve in an effort to better understand its demographic visitor ship. For more information or results, contact Cristy Cassel at (831) 647-4215.

On May 31, Sanctuary staff presented to 19 English language learners through the Salinas Adult Education program. The presentation focused on water quality issues and the Davidson seamount and was followed by an interactive watershed model demonstration addressing urban runoff. Participants were provided free passes to the Elkhorn Slough National Estuarine Research Reserve. For more information, contact Cristy Cassel at (831) 647-4215.

During the week of May 30, Sanctuary staff culminated their Watershed Academy after-school program for the 2004-2005 school year at Pájaro Middle School and the Boys and Girls Club. Twenty students received a Watershed Academy Diploma and completed a post-evaluation survey during their graduation party. For more information, contact Cristy Cassel at (831) 647-4215.

During the week of June 6, Sanctuary staff culminated their Watershed Academy after-school program for the 2004-2005 academic year at Rolling Hills and Alianza Middle Schools with a visit to the Monterey Bay Aquarium. Twelve students received a Watershed Academy Diploma and completed a post-evaluation survey during their graduation party. For more information, contact Cristy Cassel at (831) 647-4215.

On June 16, Sanctuary staff hosted a mudflat lab in Moss Landing for 20 Girls Scouts enrolled in the MERITO Watershed Academy after-school program. For more information, contact Cristy Cassel at (831) 647-4215.

#### SIGNIFICANT NEWS COVERAGE

"Sunken blimp draws marine researchers" by Brian Seals, Santa Cruz Sentinel, 5/21/05

"Queen of skies: Dirigible crash off Big Sur detailed at Monterey museum" by Joe Livernois, 5/23/05

USS Macon article on Cyber Diver News Network, New Zealand, 5/22/05

"Reinventing the iron anchor: Sanctuary seeks ocean-friendly designs" by Susan D. Brown, Monterey County Herald, 5/22/05

"Keeping the kayaks by the sea" by Victoria Manley, Monterey County Herald, 5/24/05

"Ship runs aground near San Simeon, crews will try to salvage" by Kathe Tanner and Bert Etling, San Luis Obispo Tribune, 5/25/05

"Less harm in California's oil leases than Florida's?" Guest Commentary, Ridgecrest Daily Independent, 5/25/05

"Anchors away! Oceanographers seek better way to moor sensors" by Susan D. Brown, Monterey County Herald, 5/29/05

"Design competition attempts to reinvent the iron wheel" by Susan D. Brown, Contra Costa Times, 5/29/05

"Sanctuary group takes up ocean issues; Extended protections proposed" by Rachel Kane, Monterey County Herald, 5/28/05

"Carmel quits storm drain panel" by Kevin Howe, Monterey County Herald, 6/1/05

"In the water: State fair offers close look at our surfing legacy" by Gwen Mickelson, Santa Cruz Sentinel, 6/7/05

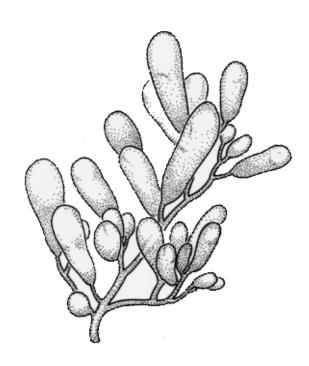
"Offshore fishing bill draws local ire: Government wants to increase aquaculture area to 200 miles" by Virginia Hennessey, Monterey County Herald, 6/8/05

"Bush proposal seeks to cultivate fish farming in Federal waters" by Kenneth R. Weiss, LA Times, 6/8/05

"Paddling Preachers: TeamOCEAN volunteers act as Sanctuary missionaries in kayaks" by Ryan Masters, Monterey County Weekly, 6/9/05

"Bay research topic of seminar" Santa Cruz Sentinel, 6/27/05

"One Fish, Two Fish; Great Annual Fish Count surveys species in the Sanctuary" by Adam Joseph, Monterey County Herald, 6/30/05 "Counting Humpbacks; NOAA launches survey of endangered whale species" by Bettina Adragna, Monterey County Herald, 6/30/05



#### WEB SITE (<a href="http://montereybay.noaa.gov/">http://montereybay.noaa.gov/</a>)

#### **Recent Updates**

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

- Sanctuary Advisory Council Member Economic Disclosure Information <a href="http://montereybay.noaa.gov/intro/advisory/sacmem.html">http://montereybay.noaa.gov/intro/advisory/sacmem.html</a>
- Updated Maps

http://montereybay.noaa.gov/intro/maps.html

Ecosystem Observations

http://montereybay.noaa.gov/reports/ecoobs.html

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

#### FUN, OCEAN RELATED WEB SITES

#### **Encyclopedia of the Sanctuaries**

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

#### **NOS Data Explorer**

http://www.nos.noaa.gov/dataexplorer/welcome.html

#### **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/

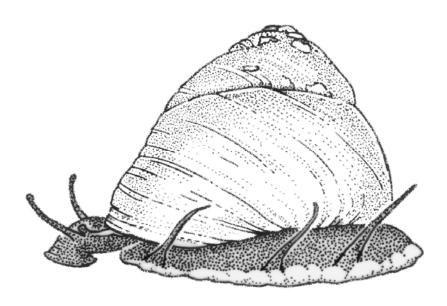
#### **National Oceanic & Atmospheric Administration**

http://www.noaa.gov/

#### **CALENDAR 2005**

AUGUST	
Aug 12	RAP meeting, 9 a.m12 p.m., Monterey Bay Aquarium
SEPTEMBER	
Sept 1-17	Shearwater Cruise
Sept 9	RAP meeting, 9 a.m12 p.m., Moss Landing Marine Laboratories
Sept 17	California Coastal Cleanup Day, 9 a.m12 p.m.
Sept 18	MBNMS' 13 <sup>th</sup> Anniversary
Sept 18	MERITO Kayak Day, 12:30 p.m4p.m.
Sept 18	World Monitoring Day
Sept 19	SEP meeting, 3:30 p.m5:30 p.m., Moss Landing Marine Laboratories
Sept 20	CWG meeting, 9:30 a.m12:30 p.m., Moss Landing Harbor District meeting room
Sept 20	First Flush Training for Monterey, Pacific Grove and Seaside, 6 p.m., MBNMS office
Sept 21	First Flush Training for Santa Cruz, Capitola and Live Oaks
Sept 24	First Flush Field Training and Monitoring Event
Sept 29	Channel Islands 25 <sup>th</sup> Anniversary Event, Santa Barbara Zoo
OCTOBER	
Oct 7	Advisory Council Meeting, Codiga Center and Museum, Agricultural History Project, Watsonville
Oct 16	MERITO Tidepool Day, 2 p.m4 p.m., Point Pinos
Oct 18	CWG meeting, 9:30 a.m12:30 p.m., Moss Landing Harbor District meeting room
NOVEMBER	
Nov 4	RAP Meeting, 9 a.m12 p.m., Hopkins Marine Station
Nov 6	MERITO Hike Day, 12:30 p.m4:30 p.m., ESNERR
Nov 15	CWG Meeting, 9:30 a.m12:30 p.m., Moss Landing Harbor District Meeting Room
Nov 21	SEP Meeting, 3:30 p.m5:30 p.m., ESNERR
DECEMBER	
Dec 9	MBNMS/GFNMS Joint Advisory Council Meeting-San Mateo County

<sup>\*\*</sup>During 2005, the BTAP will be meeting on an as needed basis\*\*



#### **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: <a href="http://montereybay.noaa.gov/discussiongroups/disgroups.ht">http://montereybay.noaa.gov/discussiongroups/disgroups.ht</a> ml.

#### **MBNMS Staff**

William Douros – Sanctuary Superintendent Andrew DeVogelaere – Research Coordinator Erica Burton – Research Assistant Steve Lonhart – SIMoN Scientist

Jean de Marignac – SIMON Scientist

Chad King – SIMON Data Analyst

Josh Pederson – SIMoN Outreach Specialist

Dawn Hayes – Education & Outreach Coordinator

**Liz Love** – Education Specialist

Lisa Emanuelson – Resource Issue Ed Specialist

**Michelle Templeton** – MERITO Program Manager

Cristy Cassel - Bilingual Education Specialist

**Michele Roest** – Education & Outreach Specialist, San Simeon Office

**Stacia Fletcher** – Education & Outreach Specialist, Santa Cruz Office

Holly Price - Resource Protection Coordinator

Scott Kathey - Regulatory Coordinator

**Deirdre Hall** – Permit Coordinator

**Brad Damitz** – Environmental Policy Specialist

 $\textbf{Huff McGonigal} - Environmental\ Policy\ Specialist$ 

**Bridget Dobrowski** – Agriculture Water Quality Coordinator

**Chris Coburn** – Water Quality Protection Program Director

**Donna Meyers** – Regional Water Quality Coordinator **Bridget Hoover** – Water Quality Network Coordinator **Lisa de Marignac** – Environmental Policy Specialist **Karen Grimmer** – Program Operations Coordinator **Sean Morton** – Management Plan Coordinator

Paul Chetirkin – Assistant Management Plan

Coordinator

**Raymond Chisolm** – Program Specialist **Rachel Saunders** – Community & Public Relations Coordinator

Nicole Capps – Advisory Council Coordinator & Management Support Specialist

**Heather Cauldwell** – Administrative Assistant

Andrew White - Network Manager



#### Contact Information -

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