

GULF OF THE FARALLONES NATIONAL MARINE SANCTUARY

2nd Quarter FY2012
January through March, 2012
SUPERINTENDENT'S REPORT



Gray Whales Put Climate Change, Fisheries Issues Into the Spotlight

This spring has seen an unusual number of gray whales entering San Francisco Bay, seemingly earlier than usual. In addition, more incidents of fishing gear-entangled gray whales have been documented all along the California coast.

Beginning March 6th Farallones sanctuary staff sighted a gray whale cow-calf pair off Crissy Field Beach, and promptly released its annual “Boaters: Be Aware of Whales in the Bay” press release, to warn of the hazards to the whales, and to boaters, kayakers, paddle boarders and others who encounter them. Cow/calf pairs are especially vulnerable to disturbance by curious whale watchers. The US Coast Guard actively monitored traffic around the whales and stood ready to enforce the Marine Mammal Protection Act if harassment occurred. All whales, dolphins, seals, sea lions, sea otters and walrus are protected under the Marine Mammal Protection Act from disturbance or injury. Keeping NOAA's whale-approach guidelines in the public eye is essential to their continued protection.

Gray whales traditionally wander into coastal bays and inlets, usually only briefly. However, changes in their Arctic food supply due to a shrinking polar ice cap may be causing them to broaden their foraging patterns, and this can bring them into areas of greater potential interaction with humans and gear associated with spiny lobster, Dungeness crab, and other fisheries. Close monitoring of wildlife and human-associated impacts is increasingly important to conservation measures.



Photo: Peter Donohue/California Kayaker Magazine



MANAGEMENT

International MPA Leaders Meet with Sanctuary Staff, Tour Restoration Site

On February 15th staff from Gulf of the Farallones National Marine Sanctuary, Farallones Marine Sanctuary Association, National Park Service and local community members took 12 international agency representatives on a tour of Bolinas Lagoon and Duxbury Reef, both important nearshore habitats of the sanctuary. The group consisted of lead decision makers in the field of Marine Protected Areas from countries such as New Zealand, England, Korea, Saudi Arabia, France, and the Dominican Republic. They learned about the significance of the areas habitat and wildlife, and development of a local lagoon and watershed restoration plan through a unique collaboration between multi-agency partnerships and community groups that continue to move restoration forward.

The tour brought significant international exposure to the ecological importance of the area and the multi-partner plan for its protection and restoration. In turn, it also provided key international agency decision makers in the field of marine protected areas an opportunity to learn about the development and execution of the community supported restoration plan and apply that knowledge to programs in their home countries.

RESEARCH

Monitoring To Understand Long-Term Trends

Scientists Examine Farallones Habitat for Endangered Black Abalone

The sanctuary rocky intertidal monitoring team (GFNMS, Tenera Environmental, and the California Academy of Sciences) conducted a survey of the rocky intertidal areas of the Farallones, abbreviated due to weather and logistical difficulties. The team continued to work on proposal writing and intensive mapping of quality habitat for the endangered black abalone, *Haliotis cracherodii*. Two black abalones were documented, one aged to be about 3 to 6 years old and the second one older. Because of weather conditions, searches for red abalone, *Haliotis rufescens*, were conducted on a minimal basis. A series of red tides last summer caused a mass mortality event of red abalones along the Sonoma County coast. Data from this survey could have provided a comparison to mainland conditions. Continued assessments are anticipated in November 2012. This project is partially funded by National Marine Fisheries Service.

Long-term monitoring of the intertidal habitat provides status and trend information needed to determine the health of sanctuary living resources and biogenic habitat. Assessment of status and trends of endangered species and species of special concern are top priorities for sanctuary research staff.

SEAS - ACCESS CRUISES

ACCESS Provides Data Sets for New England Aquarium New Sentinel Species

The Applied California Current Ecosystem Studies (ACCESS) cooperative provided nearly ten years of data on Sooty Shearwater and Black-footed Albatross abundance and distribution to the New England Aquarium (NEA). These data will be used in the NEA effort to develop a tool using sentinel species to track impacts from

climate change. NEA is interested in shearwaters and albatross as their sentinel species to track changes in status and trends (i.e. health of the ocean and sanctuaries) because these seabirds are wide-ranging and can represent large-scale, climate-driven oceanographic changes. The important conservation science work of NOAA and partners in an ever-changing sea will be shared with thousands of people across the country and internationally. The NEA sentinel species project will be promoted via a major display at the New England Aquarium

(http://www.neaq.org/conservation_and_research/climate_change/climate_change_and_the_oceans.php) and through a high-profile web site being developed by Conservation International.

BEACH WATCH COASTAL MONITORING

Farallones Sanctuary Conducts Annual Review of Beach Watch Monitoring Data

Science staff provided an annual review of the Beach Watch data to volunteers, staff and Sanctuary Advisory Council members. This included analysis of trends in wildlife abundance and mortality, and volunteer effort. Highlights included: a general decrease during 2011 of marine mammal and seabird deposition (number observed per km surveyed), and oil deposition. Case studies were presented for three wintering seabird species (Sooty Shearwater, Northern Fulmar, Brown Pelican), one local breeding seabird (Brandt's Cormorant), and two marine mammals (harbor porpoise and Guadalupe fur seal). A summary of volunteer effort for 2011, compared to all previous years, shows that natural attrition accounts for the decrease in volunteer numbers since the last recruitment and training in 2008. However, we still maintain a high level of survey effort with diminishing personnel.

Beach Watch measures the status and trends, maps and characterizes the health of the sanctuary shoreline, and is a model for high-level citizen science, which provides information to our local, state and sister federal agencies for natural resource planning, emergency response, damage assessment, and restoration activities.

CONSERVATION

Minimizing Risk from Oil Spills and Vessels

Marin County Recognizes NOAA, Farallones Sanctuary, for Vessel Grounding Response

On January 31st the Marin County Board of Supervisors commended Farallones marine sanctuary site staff and NOAA's Office of National Marine Sanctuaries headquarters emergency response staff for working "cooperatively and collaboratively in partnership with the County to assist in funding the abatement" of the *F/V Tasu* that grounded on Stinson Beach in October 2011. The county honored the response team's swift action "to protect the fragile shoreline ecosystem;" and for acting "in exemplary fashion in engaging in interagency cooperation with the County of Marin, working closely with the Office of Emergency Services and participating in an evening public information meeting with the Stinson Beach community." The group also provided assurance to the community that it was committed to work with the County to resolve this matter, and further committed \$40,250 towards the removal and recovery effort." The team received recognition for being "an outstanding partner, engaging in proactive and beneficial interagency cooperation and coordination for the benefit of the public and the environment." The Board of Supervisors of the County of Marin extended its sincere gratitude and thanks to the National Oceanic and Atmospheric Administration and its staff for its partnership and commitment.

Technical Panel Examines Oil Dispersant Toxicity on Sanctuary Species

On February 2, 2012 the joint Gulf of the Farallones and Cordell Bank sanctuary advisory council working group on oil spill response technologies met to discuss toxicity of chemically dispersed oil on water column biota. Dr. Ron Tjeerdema of UC-Davis, Dr. Gary Cherr of Bodega Marine Lab, and Dr. Alan Mearns of NOAA Office of Response and Restoration presented the latest findings and implications for krill, salmonids, abalone, copepods, herring, rockfish, oysters, mussels, crab, kelp, seabirds, and marine mammals. The technical panel answered questions for over two hours. As a result, members commented that they understood the facts better and brainstormed studies specific to north-central California species.

Use of chemical dispersants in sanctuaries is controversial, the data is complex, and non-experts are confused by apparently conflicting statements and facts. This meeting paved the way for an informed recommendation to the advisory councils and superintendents.

Joint Sanctuary Working Group on Vessel Spills Meets Again

The fourth meeting of the Gulf of the Farallones and Cordell Bank sanctuaries' joint working group on vessel spills was hosted by PRBO Conservation Science in Petaluma California. The mission of this group is to make recommendations to the sanctuary advisory councils on policy and research actions the sanctuaries can implement to mitigate the effects of an oil spill on sanctuary resources. This meeting included area experts on crab, salmon, seabirds and marine mammals. Topics covered ranged from biology and population dynamics, spatial and temporal patterns in distribution, phenology, and the populations' vulnerability to the event of a large oil spill. The group will meet three more times before making recommendations to the advisory council in the spring of 2012.

Farallones Hosts HAZWOPER-24 Intensive Training for Staff, Partners

Farallones sanctuary and the marine sanctuary association co-hosted an intensive 3-day HAZWOPER-24 (Hazardous Waste Operations and Emergency Response) training to better prepare staff, volunteers and several partners for an oil spill or vessel grounding emergency or other hazardous materials event. In addition to Farallones staff and volunteers, the thirty participants represented: Cordell Bank National Marine Sanctuary, California Academy of Sciences, The Marine Mammal Center, PRBO Conservation Science, Pacific Wildlife Rescue (Monterey), Sonoma WildCare, and International Bird Rescue and Research Center. This training is prescribed by the Occupational Safety and Health Administration, and is administered by representatives of the U.S. Coast Guard Pacific Strike Team.

With over 6,000 annual large vessel transits through sanctuary waters outside the Golden Gate, and countless small boats using adjacent waters, the likelihood of hazardous material incidents from vessel groundings, collisions, and illegal discharges is high. Collaborating to pre-train partners and staff as first responders in emergencies ensures safer, faster, more effective and better coordinated operations.

REDUCING WILDLIFE DISTURBANCE

Protecting Breeding Seabird Colonies

The Seabird Protection Network is a program of the Gulf of the Farallones National Marine Sanctuary that works to reduce human disturbance to sensitive seabird breeding colonies along the central California coast.

Sanctuary Staff Discuss Local Marine Life, Regulations, with Coast Guard Pilots

Seabird Protection Network (SPN) staff spoke with United States Coast Guard (USCG) pilots about seabirds, sanctuaries and overflight regulations in place to protect wildlife along the California Coast. The USCG is an important partner in protecting coastal resources and enforcing the regulations that protect them. Coast Guard pilots frequently fly over the sanctuary waters and assist with missions to the Farallon Islands or within sanctuary boundaries. Presentations increase local knowledge of sanctuary life for pilots from around the country and increase collaboration with the Coast Guard.

The Seabird Protection Network is a program of the Gulf of the Farallones National Marine Sanctuary that reaches out to various groups who operate and recreate in areas near sensitive seabird habitats. It works to reduce human disturbance to seabird breeding colonies along the central California coast, and fosters an increase in local knowledge of sanctuary life and increased compliance with sanctuary over-flight and vessel approach restrictions that protect wildlife. These presentations encourage stakeholder dialogue, increase local knowledge of sanctuary wildlife and promote ocean stewardship.

This quarter the network made presentations to non-agency pilots including Civil Air Patrol Squadrons, Ultralight Pilots and members of the Experimental Aircraft Association; they were presented in San Francisco, San Carlos, San Jose and Hollister.

Vessel-based disturbance was the focus for talks given at the Bay Area Sea Kayakers (BASK) general meeting in San Francisco, at the Golden Gate Sea Kayak Symposium, an annual paddling skills symposium, and the Western Sea Kayakers Club of Sunnyvale. Materials distributed included Seabird Aware brochures and the new "Boater and Kayaker Guide to Special Closures in California's Marine Protected Areas: Bodega Head to Año Nuevo." The waterproof guide contains: tips for protecting wildlife, information on California's State-designated marine protected areas and maps highlighting the six Special Closure areas, which are closed to all watercraft. The guide is a collaboration between the Office of National Marine Sanctuaries and the California Department of Fish and Game. Sanctuaries are assisting Fish and Game in informing boaters about State-designated marine protected areas.

Protecting Whales, Other Marine Mammals

Farallones Staff Stands By for Possible Whale Rescues

Farallones staff who are part of the North Pacific Large Whale Disentanglement Network did preliminary work to mobilize in the event that fishing gear-entangled gray whales, migrating north from Baja California breeding grounds, made it into local waters. According to the National Marine Fisheries Stranding Network this spring has been unprecedented in numbers of entangled whales documented. Staff coordinated with local researchers and small plane owner/pilots to stand by for the possibility that aerial surveys and coastal surveys might need to be initiated locally. The Network includes marine institutions, universities, rescue centers, and governmental agencies. Staff, who are trained in assessment, documentation and communications, have participated in past whale rescues. Large cetacean rescue is dangerous, and requires concerted action closely coordinated among authorized, trained groups and agencies in order to enhance effective response while minimizing risks to humans and whales.

Partnering with Coast Guard Air Station for Enforcement

Gulf of the Farallones National Marine Sanctuary presented an overview of sanctuaries, regulations and the vision for a new Aerial Patrol Guide for Cordell Bank, Gulf of the Farallones and Monterey Bay to the US Coast Guard Air Station San Francisco during an annual training for patrol helicopters. The US Coast Guard is one of the main partner agencies for enforcement of sanctuary regulations and is currently the only federal enforcement entity that conducts air patrols within Gulf of the Farallones National Marine Sanctuary. Training US Coast Guard air patrol crews to spot potential violations of sanctuary regulations helps protect sanctuary natural and cultural resources.

EDUCATION & OUTREACH

Increasing Awareness of the Sanctuary

Public Outreach, Public Programs

Live Chat with Farallon Island Scientists an International Success

Farallones marine sanctuary and California Academy of Sciences staff delivered a live web cast to discuss rocky intertidal research and monitoring on the Farallon Islands to an audience of over 1,400 people who tuned in from as far away as Turin, Italy. The webcast was also picked up by KGO radio station and broadcast to thousands of San Francisco Bay Area listeners. The sanctuary's research and education coordinators joined academy staff on the floor of the museum to recount what it is like to live and work on the island, as well as the difficulties and dangers in accessing it. Via a Ustream web cast, scientists presented an overview of the Farallon Islands, interesting findings of the rocky intertidal monitoring project, and projected the live web cam feed on the exhibit floor at the Academy. NOAA's important conservation science work in an ever-changing sea was shared in real-time with thousands of people.

Sanctuary Spreading Messages Exponentially

Gulf of the Farallones National Marine Sanctuary education staff delivered a three-hour workshop to the Fitzgerald Marine Reserve docent class, which graduated in March 2012. Interpretive techniques, tools and tricks were provided along with key sanctuary messages for the twenty-five new docents to use as they interact with a projected 90,000 visitors and 5,000 school students on the rocky reef.

Strategic educational partnerships exponentially expand the reach of sanctuary messages by the most powerful method - word of mouth - in sanctuary waters through experiential education programming. The Reserve, a San Mateo county park and now part of the California state marine protected areas, is a strategic coastal nexus for both Monterey Bay and Gulf of the Farallones National Marine Sanctuaries that attracts over 95,000 visitors each year who come to experience the inter-tidal life.

West Coast National Marine Sanctuaries Wax POETic

Farallones communications staff took part in a strategic planning teleconference with the National Park Service (NPS) and other west coast sanctuaries' staff to begin development of a collaborative and integrated program of messaging for the Pacific Ocean Education Team, or POET program. The idea is to work with NPS to define approaches to integrating ocean messages in interpretation and education programs, products, publications and outreach efforts. The group reviewed current messages and the NPS action plan, and discussed how they could be integrated, and apply not only in coastal communities, but also the heartland. The sites will

identify the benefits of collaboration, compile an inventory of communications products including publications of each agency, and see where environmental literacy can be cross-promoted.

By collaborating with a Department of Interior agency, the sanctuaries, which are under the Department of Commerce, can combine forces and identify areas where asset sharing and collaborations can help each to realize economies of scale and amplify the reach of environmental messages.

Sperm Whale Soirée - A Sophisticated, Sold-Out Success!

The Gulf of the Farallones National Marine Sanctuary and Randall Museum education teams joined forces to deliver an innovative, integrated evening of science and art to celebrate the captivating and inspiring sperm whale. Over 300 people heard Dr. Sarah Mesnick, a NOAA Fisheries ecologist with the South West Fisheries Science Center, talk about the latest research into sperm whale societies, biology, physiology, and conservation.

The evening invited hands-on participation in multiple art forms such as sculpting and printing whale images, and audio experiences – hearing and mimicking voices of sperm whale codas using ‘sheet music’ with which participants could replicate their clicks with claves - handheld percussion instruments. An adults-only talk on the sex lives of whales profiled their startling reproductive physiology and varied mating strategies.

The power of bringing a diverse group of people together directly activates our "mirror neurons" which on this evening used the enormous appeal of the sperm whale to inspire people to get involved or amplify their involvement in preserving the diversity and complexity of our natural world.

Visitor Center

The Farallones sanctuary Visitor Center educates diverse audiences of the general public along an environmental literacy continuum including developing awareness, building a knowledge base, changing behavior, and building stewardship. Drop-in visitors come from the Bay Area and all over the world. School programs include netting plankton for view under the microscope, searching for shore crabs and activities in the Visitor Center to learn about animal adaptations. Students take part in indoor as well as outdoor activities on Crissy Field Beach.

Crissy Field Visitor Center Special Programs include – Plankton and Pastries: Visitor Center staff offer this hands-on public program to promote ocean literacy where participants net their own plankton for study in the tide station pier house. Participants collect their own samples and create their own slides of phytoplankton and zooplankton for a hands-on microscopic exploration of the weird and wonderful world of plankton. In Planktronica! participants enjoyed an evening exploring the prolific world of plankton amid a relaxed ambiance at the stunning sanctuary Pier Classroom perched above San Francisco Bay. They learned about diatoms, dinoflagellates and copepods, and discovered bizarre larvae from barnacles, crabs, and mussels. Attendees learned to use microscopes and do print-making with plankton.

The popular weekend program Creature Feature is presented to people of all ages. In the Salmon Public Program, participants help the sanctuary naturalist with a salmon dissection, learned about its seagoing and river-going life cycle, and its conservation challenges. The White Shark Public Program instructs people on shark biology and conservation of this apex predator for which the sanctuary is famous. Fisherman in the Classroom reaches middle-school students and teachers at the visitor center. This program highlights the

maritime heritage of the San Francisco and Pillar Point fishing communities. Local fishing folk participate in the development of curriculum, and deliver the programs.

Total Visitor Center Drop-in Visitors: 3,708

Creature Features: 66 people in three different programs (Crabs, salmon, white sharks)

Fisherman in The Classroom – 108 students served

Visitor Center on site K-6th grade programs - 210 students served

Elephant Seal Excursion: 20 participants

School Field Trips to Visitor Center: 508 students (24 classes)

At-Your-School (AYS) Programs

AYS Sharkmobile, Seabird Shuttle and Crab Cab Hit the Road

The *At Your School (AYS)* programs served schools throughout the San Francisco Bay area. The AYS program has reached over 22,000 bay area students in the past seven years with programs such as the Crab Cab, Seabird Shuttle and Sharkmobile. *AYS* is an outreach program of the Gulf of the Farallones National Marine Sanctuary designed to promote environmental literacy and increase students' awareness and knowledge of coastal and marine life. It includes standards-based interactive classroom programs for kindergarten through twelfth grades.

At Your School is an outreach program of the Gulf of the Farallones National Marine Sanctuary designed to promote environmental literacy and increase students' awareness and knowledge of coastal and marine life. It includes standards-based interactive classroom programs for kindergarten through high school students.

During the quarter, students and their teachers from several Bay Area schools participated in At Your School Programs (AYS). AYS staff travel throughout the San Francisco Bay area to bring ocean education to schools in Alameda, Contra Costa, San Mateo, Marin, Santa Clara and San Francisco counties. Programs include the Sharkmobile, Crab Cab, and Webs Under Waves with curricula tailored to various grade levels.

Total All AYS Programs: 230

Sharkmobile: 178

Crab Cab: 52

Oceans After School: Using the endless appeal of our local marine wildlife and habitats, the Sanctuary Education Team offers 16 hours of fun, hands-on, lively marine science programs for after-school programs on topics such as sharks, salmon, seabirds, whales, squid, and plankton. These enrichment programs are dynamic, interactive, and integrated into state standards. Our marine science educators deliver the programs during an 8-12 week window. The curriculum is best-suited for grades 3rd through 5th.

Exhibits

Interpreting Marine Protected Areas at Pt. Reyes National Seashore

This spring the sanctuary installed "Protecting Our Marine Life" signage at Drake's Bay in the Point Reyes National Seashore that explains the State of California's Marine Life Protection Act of 1999 establishing marine protected areas, known as MPAs, to help sea life survive and thrive. MPAs are designed to function as an integrated network of special ocean and coastal zones important for food web productivity and restoring the health of our oceans. The signage gives the various levels of protection to the different designations. For

example, State Marine Conservation Areas prohibit take (removal, killing or harm) of marine life, with certain permit-based exceptions. State Marine Reserves prohibit take of all living marine resources; and the take, injury, or possession of geological or cultural marine resources. Special Closures restrict all watercraft from designated zones. The sign also directs visitors to learn more about Marine Protected Areas by visiting California Department of Fish and Game's website at www.dfg.ca.gov/mlpa.

LiMPETS – Long-term Monitoring Program & Experiential Training for Students

LiMPETS Regional Programs

The Long-term Monitoring Program and Experiential Training for Students - LiMPETS - program trains middle school, high school, and other young groups to monitor the rocky intertidal and sandy shore along the California west coast national marine sanctuaries.

This quarter 293 students and 14 teachers from 13 different schools and partners in four counties carried out LiMPETS shore surveys. This included in-class trainings, and individual monitoring events at different monitoring sites. Seventeen teachers took part in an Introduction to Rocky Intertidal Monitoring professional development workshop in February 2012. At the rocky intertidal workshop participants received an in-depth curriculum, learned to correctly identify algae and invertebrates, and practiced the monitoring methods used in the field.

LiMPETS Professional Development Workshops

In March 2012, two professional development workshops were held. Fifteen teachers attended the Advanced LiMPETS: Rocky Intertidal Data Analysis for the Classroom. The workshop included a short presentation followed by data analysis activities from the LiMPETS curriculum and teacher-led investigations of LiMPETS rocky intertidal data. Five teachers participated in the LiMPETS Introduction to Sandy Beach Monitor professional development workshop. At the sandy beach workshop participants receive our new five-unit LiMPETS Curriculum and are trained to survey the distribution and abundance of the Pacific mole crab at one of many monitoring sites along the coast. For details on LiMPETS, see www.limpetsmonitoring.org

Media Outreach Highlights

Unusually High Visitation by Gray Whales Prompts High Media Interest

This quarter, several instances of gray whales coming into San Francisco Bay – coming earlier and staying longer than usual – garnered huge media attention, resulting in at least 468 news stories on the event, in local, national and international press. Most coverage carried the “do not disturb the whales” message to the public.

See separate Quarterly Media/News Report for Clippings and Story Links

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***FARALLONES SANCTUARY 2012 EVENTS CALENDAR***

**JANUARY**

1/5/2012 Sanctuary Advisory Council Retreat, Año Nuevo  
1/20-1/22 King Tides: Take Pictures!

**FEBRUARY**

2/6-2/8 King Tides: Take Pictures!  
2/12-2/14 International Marine Protected Areas Agency Summit, San Francisco CA  
2/12 Elephant Seal Walk, Año Nuevo, CA  
2/20 Rocky Intertidal Webcast from SE Farallon Island and California Academy of Sciences  
2/23/2012 Sanctuary Advisory Council Meeting, Bodega, CA

**MARCH**

3/3/2012 Sperm Whale Soiree, Sarah Mesnick, Ph.D., Randall Museum, San Francisco, CA  
3/8-3/11 San Francisco Ocean Film Festival, Bay Aquarium/Pier 39, San Francisco, CA  
3/14/2012 Beach Watch Annual Data Talk (invitational), GFNMS Headquarters  
3/15/2012 Harbor Porpoise Study, Bill Keener, Randall Museum, San Francisco, CA  
3/24/2012 Whale Watch Half Day Cruise, Half Moon Bay, CA

**APRIL**

4/13/2012 Planktonica, GFNMS Headquarters  
4/15/2012 Beach Watch Bird Walk  
4/19/2012 Farallon Islands Naturalist Training, GFNMS Headquarters  
4/25/2012 Beach Watch Advanced Training, GFNMS Headquarters  
4/29/2012 Beach Watch Advanced Training, GFNMS Headquarters

**MAY**

5/2/2012 Beach Watch Advanced Training  
5/3/2012 Shark Soiree, GFNMS and USF Presidio Hall  
5/5/2012 Beach Watch Advanced Training  
5/11/2012 Planktonica, GFNMS Headquarters  
5/12/2012 Whale Watch, Half Moon Bay  
5/16/2012 Invasive Spartina Lecture, Bolinas

**JUNE**

6/7/2012 Joint GFNMS / CBNMS Sanctuary Advisory Council Meeting, Pt. Reyes  
6/16/2012 Sanctuary Exploration: Great Egret Naturalist Walk, Audubon Canyon Ranch

**AUGUST**

8/23/2012 Sanctuary Advisory Council Meeting; San Francisco, CA



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## ***GET INVOLVED – AND STAY INFORMED!***

Sign up for the GFNMS listserv to receive email notices about upcoming sanctuary events and public meetings. To learn how to get involved in the sanctuary visit: <http://farallones.noaa.gov>.  
To learn more about the Sanctuary Advisory Council visit: [http://farallones.noaa.gov/manage/Sanctuary Advisory Council.html](http://farallones.noaa.gov/manage/SanctuaryAdvisoryCouncil.html)

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