



# Monterey Bay National Marine Sanctuary

## Sanctuary Office Report



Volume 11, Number 5

A REPORT FOR THE SANCTUARY ADVISORY COUNCIL MEMBERS

REPORTING PERIOD: OCTOBER 7 – DEC 5, 2014

### ABOUT THE SANCTUARY

Designated in 1992, 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, MBNMS encompasses a shoreline of 276 miles and 6,094 square statute 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. MBNMS was established for the purpose of resource protection, research, education and public use of this national treasure.

### NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA) AND OFFICE OF NATIONAL MARINE SANCTUARIES (ONMS) NEWS

#### NOAA Issues Atlantic Tuna Management Measures

On Dec. 1, NOAA Fisheries announced final regulations that will help protect Atlantic bluefin tuna by reducing dead discards and providing measures to help ensure compliance with international quotas. These regulations were developed through a comprehensive process that included input from the public, states, industry and others. The measures include areas in the Gulf of Mexico where gear is restricted in April and May, as well as off Cape Hatteras, North Carolina, a prime bluefin feeding ground from December through April. The new restrictions also include a cap on Atlantic surface longline incidental catch of bluefin both at the vessel level as well as at the fleet level. NOAA Fisheries has identified bluefin tuna as a species of concern, but it is not listed as threatened or endangered under the Endangered Species Act. NOAA scientists remain concerned about the status of the Atlantic bluefin tuna, and will continue to monitor this species closely. For full story visit: [http://www.noaanews.noaa.gov/stories2014/20141201\\_atlantictuna.html](http://www.noaanews.noaa.gov/stories2014/20141201_atlantictuna.html)

#### New Coral Species discovered off California Coast

On Nov. 5, it was reported that a NOAA-led research team has discovered a new species of deep-sea coral and a nursery area for

catsharks and skates in the underwater canyons located close to the Gulf of Farallones and Cordell Bank national marine sanctuaries off the Sonoma coast. In the first intensive exploration of California's offshore areas north of Bodega Head, a consortium of federal and state marine scientists used small submersibles and other innovative technologies to investigate, film, and photograph marine life that has adapted to survive in offshore waters reaching 1,000 feet deep. After multiple dives, the research team made two significant discoveries. First, hundreds of skate egg cases on the sea floor and in bundles on the rocks surrounding a catshark nursery area. Second, the team found a new species of deep-sea coral from the *Leptogorgia* genus at approximately 600 feet deep.

#### ICMMPA outcomes

The declaration of the first marine protected area for Bangladesh to safeguard Bryde's whales, tropical dolphins, sea turtles, and sharks was among the announcements made at the Third International Conference on Marine Mammal Protected Areas (ICMMPA 3), held November 9 - 11 in Adelaide, Australia. More than 100 delegates from over 20 countries around the globe gathered for the conference, a parallel event to the IUCN World Parks Congress, that was recently held in Sydney. "Important Marine Mammal Areas - A Sense of Place, a Question of Size," was the theme of ICMMPA 3. A new tool for conservation — the Important Marine Mammal Area, or IMMA, which the Committee along with the IUCN Marine Mammal Protected Areas Task Force, have been developing, was also announced and the Government of Mexico's National Commission of Natural Protected Areas (CONANP) stated that they would host the Fourth International Conference on Marine Mammal Protected Areas (ICMMPA 4) in 2016.

## NATIONAL MARINE SANCTUARY NEWS

### **Southeast Florida Coastal Ocean Task Force Meets to Discuss Present and Future Roles of Sanctuaries in Florida Conservation**

Dr. Billy Causey, Regional Director of Southeast Atlantic, Gulf of Mexico and Caribbean Region, presented to the Southeast Florida Coastal Ocean Task Force meeting at the Nova Oceanographic Center on October 9th. The talk covered background of FKNMS management tools and expansions, ONMS designation processes and the new Sanctuary Nomination Process. The working group is developing official recommendations on resource protection and management proposals for the South Florida region. The Task Force is an initiative of the Our Florida Reefs program, covering resource protection issues from Dade to Martin Counties, and they were extremely interested in the prospects of sanctuary nominations for the South Florida area.

### **Congressman Alan Lowenthal visits Channel Islands National Marine Sanctuary**

On November 5-6, 2014, Congressman Alan Lowenthal (D, 47th District, Long Beach, CA) started a four day tour focused on national marine sanctuaries by spending time visiting Channel Islands National Marine Sanctuary (CINMS) staff and partners. On November 5th, the Congressman, his wife Deborah Malumed, and Senior Legislative Assistant Devin Helfrich, toured the Channel Island Boating Center in Oxnard, California, where they were also welcomed by Ventura County Harbor Director Lyn Krieger and California State University Channel Islands President Richard Rush. A discussion session focused on the sanctuary's ongoing work to address marine shipping impacts, including whale ship strikes, occurring within and around CINMS through innovative partnership approaches. Air Pollution Control District staff and local elected officials from Santa Barbara and Ventura counties participated in the dialogue, along with local NGO representatives, underscoring the success of a partnership-based, voluntary, incentivized Vessel Speed Reduction trial program that has taken place this summer/fall. The Lowenthal delegation then visited the CINMS offices at the University of California Santa Barbara, where they toured the LEED-Gold certified Ocean Science Education Building, the developing Outreach Center for Teaching Ocean Science, and met with Dr. Steve Gaines, Dean of UCSB's Bren School for Environmental Science and Management and a new Board Member of the National Marine Sanctuary Foundation. The Congressman also engaged in discussion with staff about the developing Center for Excellence in Unmanned Technologies at CINMS.

### **Thunder Bay Hosts First Lecture of Four Part Series – *An Evening of Archeology***

This fall Thunder Bay National Marine Sanctuary (TBNMS) will be hosting a four part lecture series called *An Evening of Archaeology*. Open to the public, this lecture series will explore the shipwrecks of Thunder Bay and archaeological projects throughout the sanctuary system. This week TBNMS staff Tane Casserley gave a lecture on the history of the *USS Monitor*, its discovery, and the expeditions to the shipwreck. Casserley's talk highlighted the *Monitor's* technological innovations, major artifact recoveries, conservation, and the burial of the *Monitor* sailors' remains at Arlington. Diverse programming, such as this lecture series, showcases the Great Lakes Maritime Heritage Center as a popular destination for community events. The educational nature of the lecture series also offers an opportunity to engage the community of Alpena, Michigan and the general public.

### **NOAA Removes 57 tons of Marine Debris from Northwestern Hawaiian Islands**

On Oct. 28, a team of 17 NOAA divers, aboard the NOAA Ship Oscar Elton Sette, removed approximately 57 tons of derelict fishing nets and plastic litter from the Papahānaumokuākea Marine National Monument in Hawaii. Mark Manuel, operations manager for NOAA Fisheries Coral Reef Ecosystem Division and chief scientist for the mission, said "Every day, we pulled up nets weighing hundreds of pounds from the corals. We filled the dumpster on the Sette to the top with nets, and then we filled the decks. There's a point when you can handle no more, but there's still a lot out there." The divers worked out of small boats launched from the Sette, systematically surveying the coral reefs at Maro Reef, Pearl and Hermes Atoll and Midway Atoll by swimming and tow-boarding. NOAA has led this mission every year since 1996, removing a total of 904 tons of marine debris, including this year's haul. The nets are an entanglement hazard for monk seals, turtles and seabirds that depend on the shallow coral reef ecosystem for survival.

Full story at: [http://www.noaanews.noaa.gov/stories2014/20141028\\_marinedebris\\_hawaii.html](http://www.noaanews.noaa.gov/stories2014/20141028_marinedebris_hawaii.html)



## MONTEREY BAY NATIONAL MARINE SANCTUARY NEWS AND PROGRAM UPDATES



### MANAGEMENT

#### **Monterey Bay Advisory Council Meets in Southern Region**

On October 24th, Monterey Bay National Marine Sanctuary's Advisory Council met in Cambria CA. The council received updates on the progress of the CA State marine protected areas, MBNMS activities in the southern region and the new initiative to designate the Piedras Blancas Monument. The council learned about efforts to retrieve lost crab pots from sanctuary waters and voted to write a letter of support for a grant proposal to fund the process. Finally they approved a statement for the superintendent to convey to ONMS leadership related to the need for MBNMS to consider noise in the sanctuary as an issue for the upcoming management plan review process. Advisory Councils provide critical stakeholder input into sanctuary decision making processes. MBNMS' Advisory Council represents the broad spectrum of user groups, agencies, communities, NGOs and local governments associated with sanctuary waters and watersheds.

### RESEARCH AND MONITORING

#### **Research divers finish 3rd year of subtidal surveys at the Alder Creek landslide**

On November 18-19, Sanctuary Integrated Monitoring Network (SIMoN) staff (Chad King and Steve Lonhart) and two research divers from the University of California at Santa Cruz (UCSC) completed the last year of a 3-yr long monitoring program in the subtidal at the base of and adjacent to the Alder Creek landslide, which closed Highway 1 in scenic Big Sur for four months in 2011. The California Department of Transportation (CalTrans) funded the monitoring as part of their coastal development permit from the California Coastal Commission, contracting with Dr. Mark Carr at UCSC, who is the main PI for the subtidal component, while Dr. Pete Raimondi is the PI for the intertidal monitoring program. Deploying from the RV FULMAR, divers surveyed sites north of the slide, at the slide, and just south of the slide. At each of the three survey sites, divers collected data from four depth zones using protocols developed at UCSC. CalTrans added material to the existing slide, and was required by the Coastal Commission to monitor the effects of its management actions. Sanctuary staff facilitated use of the FULMAR and collaboration with UCSC researchers to conduct subtidal monitoring of sanctuary resources. This information will be used to improve future management decisions regarding landslide actions taken by CalTrans.

#### **MBNMS staff receives award from Western Society of Naturalists**

On November 15 at the annual conference of the Western Society of Naturalists (WSN) MBNMS staff member Dr. Steve Lonhart was awarded 'Naturalist of the Year.' The award was established in 1999 by then WSN president Dr. Paul Dayton in collaboration with Dr. Andrew DeVogelaere "to recognize those unsung heroes who define our future by inspiring young people with the wonders and sheer joy of natural history. The awardees are usually educators, actively working in academia who contribute substantially to teaching their students to love, appreciate and protect the wonders of nature. The Naturalist of the Year gives a featured presentation at the annual meeting about the importance of mentoring natural history at all levels and the internal rewards that one receives when inspiring others to do so." The Western Society of Naturalists is a scientific society with a strong focus on ecology, evolution, natural history, and marine biology. This award recognizes not only the work of Dr. Lonhart, but also the role of MBNMS in fostering awareness of sanctuary resources and promoting stewardship.

#### **Lost Shipping Container: Settlement Experiment Deployed in Deep Sea**

On November 11th, Monterey Bay National Marine Sanctuary (MBNMS) and Monterey Bay Aquarium Research Institute (MBARI) scientists deployed an experiment in the deep-sea to study organism settlement patterns on natural rock and mock-shipping containers (with two different types of paint). Scientists will return after one year to examine differences in settlement patterns on the various structures. MBARI's R/V Rachel Carson and ROV Ventana were used to deploy the experiment. The Save the Earth Foundation provided funding for this project. For more information on shipping containers lost at sea, see the video: <https://www.youtube.com/watch?v=PRU2PxMOh18>. Monitoring a lost shipping container is giving MBNMS Staff some great insight into the issue of container loss and their impact on the seafloor. In March 2011 and December 2013, MBNMS and MBARI, used a remotely operated vehicle to document the state of a lost shipping container in the deep sea and its impact on the local ecology. The initial study showed an adverse effect to seafloor life of an area greater than 20 times its footprint.

#### **Site visit conducted in Big Sur related to potential CalTrans operations**

On November 4, MBNMS staff (Erica Burton, Chad King, and Dr. Steve Lonhart) conducted a site visit to the intertidal just north of Big Creek bridge in Big Sur. The California Department of Transportation is applying for a coastal development permit from the California Coastal Commission to construct a "...175-foot-long viaduct to stabilize the highway, which is failing due to severe erosion at this location", which is called Cow Cliffs by CalTrans. The intertidal is within Federally

designated critical habitat for ESA-listed black abalone, is part of MBNMS, and is also within a state marine reserve. Steep cliffs precluded staff from reaching the shoreline, but numerous birds and rocks covered with algae and invertebrates were observed from above, in addition to three Harbor seals hauled out on the rocks. Site visits provide staff with an opportunity to evaluate very localized conditions, which are often over generalized in larger scale reports and remote sensing data. Access to the site would require a kayak or inflatable launched from Big Creek Reserve, and may be pursued in the near future.

### **Semi-annual NOAA dive safety training completed**

On October 30, NOAA diving staff from multiple dive units completed semi-annual safety and rescue training at the Breakwater in Monterey Bay. MBNMS divers included Chad King, Steve Lonhart, and Scott Kathey; GFNMS divers included Carlian Johnson; CBNMS divers included Lilli Ferguson; and NMFS diver Tom Laidig. This was the first training under the supervision of new Unit Diving Supervisor Dr. Steve Lonhart, and all went well. All divers were able to complete the mandated annual swim test, passed all underwater drills, and then practiced rescue tows and shore rescues. Diving safety is a primary concern during all diving operations, and requires semi-annual practice. Divers are reminded of safety policies and practice skills critical in emergency situations.

### **MBNMS divers learn line-tending methods to conduct working dive on RV FULMAR**

On October 7th, MBNMS divers practiced line-tending techniques prior to swapping out the zinc plates on the RV FULMAR. Working dives require two divers remain topside, fully suited and ready to hit the water in 60 seconds in case of an emergency experienced by the two divers working below. A line-tended diver need not have a buddy, and due to limited number of divers available, this was a viable solution. The working dive went off without any problems, however after spending 4 hr in the harbor right next to hundreds of sea lions; it is not surprising that one of the divers now has an ear infection. Working dives are necessary to do small boat husbandry dives. When four divers are not available, three can do the job as long as the safety diver is line tended. New UDS Dr. Steve Lonhart oversaw the topside training and the practice dives, which brought two new divers up to speed on the skill and one topside person.

### **MBNMS has a new NOAA Unit Diving Supervisor**

At the start of FY15, MBNMS divers have a new Unit Diving Supervisor (UDS). Dr. Steve Lonhart is taking over for Tom Laidig, a NMFS UDS that had been overseeing both NMFS and MBNMS dive operations. Long in the making, this switch in duties has only a few functional differences, where Lonhart will now take up the main administrative duties of both the MBNMS and NMFS divers at the Santa Cruz Fisheries Ecology Division and Laidig will assist with semi-annual refreshers and dive locker inspections. The MBNMS diving unit has not had an ONMS UDS for the past several years. The diving program at MBNMS has slowly grown, and with a few new ONMS divers at GFNMS and CBNMS, while the NMFS FED unit has decreased, so it was logistically the best plan to have an ONMS UDS and switch roles. Laidig has been an excellent UDS for 19 years and will continue to dive and serve as a resource for Lonhart.

### **Smithsonian divers search for invasive species**

During the week of October 6th, Dr. Steve Lonhart collaborated with Drs. Greg Ruiz and Chela Zabin, both with the Smithsonian Environmental Research Center (SERC), to conduct subtidal diving surveys for marine invasive species in central California kelp beds. SERC divers completed a series of dives from Breakwater to Coral Street in Monterey Bay, then made a few dives in Carmel Bay (Copper Roof and Monastery). The invasive bryozoan *Watersipora* was found at the Breakwater, McAbee Beach, Hopkins, and Lover's Point, and often in relatively high densities. This particular species appears to be spreading along the coast and increasing in density. As the primary field biologist for MBNMS in kelp forest ecosystems, Dr. Steve Lonhart often interacts with different Federal and state agencies, as well as NGOs. SERC has collaborated with MBNMS in the past, primarily conducting surveys and monitoring for invasive species. Lonhart's local expertise helped guide the SERC divers to particular sites, while they used their familiarity with several invasive species to conduct thorough benthic surveys.

## **RESOURCE PROTECTION**

### **California Highway Patrol and Seabird/Marine Mammal Protection Efforts**

On November 19, staff from MBNMS and GFNMS joined US Fish & Wildlife biologists in a presentation to 25 California Highway Patrol (CHP) pilots at Paso Robles Airport about negative impacts of low-overflights on seabird colonies & roost sites and marine mammal pupping & haul-out sites. The presentation centered on bird disturbance in response to three separate incidents of observed seabird flushing by a CHP helicopter engaged in valid enforcement operations along the Big Sur coast during spring/summer 2014. The presentation was well received, and CHP supervisors and pilots pledged to do what they can to minimize collateral impacts to marine birds and mammals when engaged in enforcement and search & rescue operations. Sanctuary regulations except valid law enforcement flights & emergencies from overflight prohibitions.

### **19-ft Bayliner Pitchpoles and Grounds at Point Pinos**

On November 19, two men and a woman were rescued from the ocean near Point Pinos in Pacific Grove when their 19-ft Bayliner runabout was pitchpoled by a wave nearshore as they motored toward Monterey Harbor during a recreational

fishing trip. The woman sustained serious injury and was listed in critical condition. MBNMS and NOAA OLE worked with the vessel owner to remove the majority of the hull and debris, except for the stern-drive motor. Approximately 18 gallons of gasoline was spilled. The vessel was not insured, and the incident highlights the challenge of removing derelict vessels and debris to protect sanctuary resources when the principle parties involved are suffering trauma and loss associated with a marine casualty. Mandatory state pollution insurance requirements for boats would help insure prompt professional salvage and remove the burden for salvage from the often distraught owner.

### **Whale Entanglement Team (WET) benefit event: Saving Whales - One at a Time**

On November 15th, Marine Life Studies presented a symposium as part of their Ocean Literacy Series on whale entanglement rescues. The symposium at the Museum of Monterey discussed the methodology and interagency/partner collaboration needed to help rescue whales from life-threatening entanglements. Pieter Folkens and Peggy West-Stap led the presentations which included lecture, video and stills of past disentanglements and a group demonstration on the communications that occur during a response event. MBNMS Resource Protection Coordinator and Government and Community Relations Coordinator attended the event, and approximately 50 people participated to learn more about this issue. Ten entanglement incidents have occurred in Monterey Bay over the past six months. 50 incidents are reported annually along the California coast. Events such as these are an important awareness and outreach tool for the public to better understand the entanglement threat to marine mammals, the coordination required by WET, the agencies (NMFS, ONMS, US Coast Guard, Stranding Network) and partners (a long list that includes the whale watch industry), and the resources and equipment that are necessary to support the operations.

### **CA Coastal Commission Approves Permit for Sub-surface Test Slant Well**

On November 11th, the CA Coastal Commission (CCC) unanimously approved a Coastal Development Permit (CDP) for the California American Water Test Slant Well project. The week prior, a Finding of No Significant Impact was signed by ONMS Director, concluding the federal environmental review of this project. MBNMS staff attended the CCC hearing and gave testimony as to the importance of this project in determining the viability of sub-surface intakes for potential future desalination projects within Monterey Bay. Both the CDP and the FONSI include over 30 avoidance and mitigation measures that Cal Am must implement as part of the project. MBNMS, in partnership with other state and federal agencies, are working together to ensure future desalination projects have the least impact to MBNMS resources as possible. One critical step is determining if sub-surface intakes are feasible. The decision by the CCC was critical to that end.

### **Monterey Bay Cities Flush on October 31st**

At 12:30 pm on Friday October 31st, First Flush volunteers for the Monterey Bay National Marine Sanctuary mobilized to collect samples at remaining storm drain outfalls during a storm that dropped over an inch on the Monterey Peninsula. Storm squalls starting passing through the area at 9 am but did not generate enough flow until 12:00 pm when a heavy rain fell on the area and continued for the rest of the afternoon. In all, 6 of the 9 Monterey Peninsula sites were sampled for the First Flush on Friday October 31st by 13 volunteers. During an earlier storm on October 25th, MBNMS volunteers were able to mobilize and monitor 3 of the 9 total sites. Storm drain sampling also occurred on the San Mateo County coastline on October 31st. Coordinated by the San Mateo County Resource Conservation District, 13 volunteers monitored 14 sites in Princeton Harbor and Moss Beach. Volunteers in the Santa Cruz area, coordinated by the Coastal Watershed Council, already had their First Flush event on September 25th when 21 volunteers monitored 8 sites. Samples that the volunteers collect are analyzed for E. coli, enterococcus, nitrate, phosphate, urea, copper, zinc, lead and total suspended solids. This is the 15th year of First Flush monitoring at outfalls that drain into the Monterey Bay National Marine Sanctuary. Data from First Flush aids local cities in determining which watersheds require source tracking or BMP implementation. Volunteers are essential to large scale monitoring programs seeking to collect samples at the same time from many outfalls that are geographically distant. Volunteers also aid in educating and communicating with the community in which they live to prevent urban runoff pollution.

### **MBNMS Coordination with USFS on Firefighting Air Operations**

On October 27, MBNMS staff met with a US Forest Service planner to help ensure that MBNMS is notified and consulted about future forest fire air operations that involve use of fixed wing scooper aircraft over and on sanctuary waters adjacent to the Los Padres National Forest in Big Sur. MBNMS desires to minimize environmental impacts from aircraft water scooping operations in the sanctuary to the extent practicable during an emergency. Intense aircraft operations within remote nearshore waters of MBNMS could have severe localized impacts on marine wildlife during emergency responses to forest fires. Therefore, it is essential that MBNMS receive early and effective notification of any planned air operations associated with firefighting efforts in order to provide appropriate input to the incident command system to protect sanctuary resources and qualities from incidental damage.

### **MBNMS Support for Humpback Whale Disentanglement**

At 1700 hours on Friday, October 24, MBNMS was notified by NMFS Stranding Network staff and Whale Entanglement Team (WET) leaders that a juvenile humpback whale was entangled in a deep-water research mooring more than 25 nautical miles offshore in the outer Monterey Bay. NMFS requested assistance from R/V FULMAR to support WET's small boats in an attempt to cut the whale free. MBNMS connected them to ONMS WCR staff managing the FULMAR and researched potential assistance by Coast Guard Air Auxiliary pilots to conduct aerial reconnaissance of the whale.

FULMAR and its rigid-hull inflatable provided primary support for WET, and the whale was successfully disentangled on October 29, after 3-4 weeks of continuous entanglement on the anchored mooring line. The MBNMS enforcement officer assisted the operations at sea. This incident highlighted strong coordination and collaboration between ONMS, NMFS, and WET personnel in an unplanned emergency situation that resulted in a textbook rescue of a whale in severe distress. It also highlights the utility of R/V FULMAR for such missions and the professionalism and prowess of all involved in the rescue operation. Finally, it highlights the critical importance of partnership relationships to successful sanctuary management and resource protection efforts.

## **EDUCATION, VOLUNTEER AND OUTREACH PROGRAMS**

### **California Landscape Contractors Association learns about Monterey Bay Friendly Gardens**

On October 21st, the Sanctuary Exploration Center hosted the quarterly meeting of the California Landscape Contractors Association; a meeting focused on introducing the Monterey Bay Friendly Landscaping program. The Sanctuary Exploration Center's garden was recently among the first gardens to be certified by this program and this meeting allowed thirty landscape contractors to walk through the garden, noting the rainwater collection system, native plants, drought tolerant plants, run off capturing low points and drip irrigation system. Much of the discussion focused around selling Monterey Bay Friendly to clients and rewarding them with beautiful signage which will make their neighbors jealous. For more information contact the [Green Gardener Program](#). For more information about Landscaping services in the Central Coast area, contact the California Landscape Contractors Association. The more contractors who are recommending low impact landscaping means more of these landscapes will be installed. That means less pesticides flowing into the Sanctuary and more drought tolerant landscapes using less water.

### **Tread Lightly**

On October 17th, 2014 the Exploration Center hosted a crowd source fundraiser for our Landscape Contractor Ken Foster. Ken is re launching his "Tread Lightly" bicycle powered landscaping service here in Santa Cruz. The Sanctuary Exploration Center enjoys a Community Business Partnership with Ken's Terra Nova Ecological Landscaping wherein they care for our landscape and we support them by offering our garden as a teaching garden in conjunction with our classroom and garden patio. Hosting the fundraiser was one part of how we are paying Ken for his work in our landscape. If you would like to donate to the [Indiegogo campaign](#) to re-equip the bike powered service, you can do so with this [link](#). The Sanctuary Exploration Center is committed to protecting the Sanctuary and setting a good example for the community by embedding our principles into all of our activities, including the creation and maintenance of our landscape. Once the Tread Lightly bicycle powered service is launched we hope to be first on the client list.

## NEWS COVERAGE

### [Environmental group sues over Santa Barbara fracking permits](http://www.ksbw.com/news/central-california/hollister-gilroy/environmental-group-sues-over-santa-barbara-fracking-permits/30048532)

<http://www.ksbw.com/news/central-california/hollister-gilroy/environmental-group-sues-over-santa-barbara-fracking-permits/30048532>

KSBW The Central Coast-Dec 3, 2014

### [Storm smacks Bay Area, but downpour doesn't ease the drought](http://www.sfgate.com/bayarea/article/Downpour-causes-widespread-flooding-around-Bay-5932113.php)

<http://www.sfgate.com/bayarea/article/Downpour-causes-widespread-flooding-around-Bay-5932113.php>

SFGate-Dec 3, 2014

### [NRC downgrades safety designation at Diablo Canyon](http://www.sanluisobispo.com/2014/12/03/3379873_diablo-canyon-safety-designation.html?sp=/99/100/&rh=1)

[http://www.sanluisobispo.com/2014/12/03/3379873\\_diablo-canyon-safety-designation.html?sp=/99/100/&rh=1](http://www.sanluisobispo.com/2014/12/03/3379873_diablo-canyon-safety-designation.html?sp=/99/100/&rh=1)

The San Luis Obispo Tribune-Dec 3, 2014

### [Another human footprint in the ocean: Rising anthropogenic nitrate levels...](http://www.sciencedaily.com/releases/2014/11/141127212346.htm)

<http://www.sciencedaily.com/releases/2014/11/141127212346.htm>

Science Daily-Nov 27, 2014

### [Plan To Use Gulf Oil Spill Funds For Beach Hotel Sparks Lawsuit](http://www.npr.org/2014/11/25/366335282/plan-to-use-gulf-oil-spill-funds-for-beach-hotel-stirs-debate)

<http://www.npr.org/2014/11/25/366335282/plan-to-use-gulf-oil-spill-funds-for-beach-hotel-stirs-debate>

NPR-Nov 25, 2014

### [Biology trumps chemistry in open ocean: How phytoplankton assimilate...](http://www.sciencedaily.com/releases/2014/11/141124162928.htm)

<http://www.sciencedaily.com/releases/2014/11/141124162928.htm>

Science Daily-Nov 24, 2014

### [Berkeley, California Approves Climate Change Labels On Gas Pumps](http://www.huffingtonpost.com/2014/11/20/berkeley-climate-change-labels_n_6192142.html?utm_hp_ref=climate-change)

[http://www.huffingtonpost.com/2014/11/20/berkeley-climate-change-labels\\_n\\_6192142.html?utm\\_hp\\_ref=climate-change](http://www.huffingtonpost.com/2014/11/20/berkeley-climate-change-labels_n_6192142.html?utm_hp_ref=climate-change)

Huffington Post-Nov 20, 2014

### [Ocean acidification tops the annual list of important stories ignored...](http://www.montereycountyweekly.com/news/cover/ocean-acidification-tops-the-annual-list-of-important-stories-ignored/article_0d7a2948-7033-11e4-a9db-43208979ec6b.html)

[http://www.montereycountyweekly.com/news/cover/ocean-acidification-tops-the-annual-list-of-important-stories-ignored/article\\_0d7a2948-7033-11e4-a9db-43208979ec6b.html](http://www.montereycountyweekly.com/news/cover/ocean-acidification-tops-the-annual-list-of-important-stories-ignored/article_0d7a2948-7033-11e4-a9db-43208979ec6b.html)

Monterey County Weekly-Nov 20, 2014

### [Restoring wetlands can lessen soil sinkage, greenhouse gas emissions...](http://www.sciencedaily.com/releases/2014/10/141030133400.htm)

<http://www.sciencedaily.com/releases/2014/10/141030133400.htm>

Science Daily-Oct 30, 2014

### [Impact of offshore wind farms on marine species](http://www.sciencedaily.com/releases/2014/10/141016123608.htm)

<http://www.sciencedaily.com/releases/2014/10/141016123608.htm>

Science Daily-Oct 16, 2014

### [Mangroves protecting corals from climate change](http://www.sciencedaily.com/releases/2014/10/141008131601.htm)

<http://www.sciencedaily.com/releases/2014/10/141008131601.htm>

Science Daily-Oct 8, 2014

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

**Follow MBNMS on [Facebook](#) and [Twitter](#)!**

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

## **FUN, OCEAN RELATED WEB SITES**

### **Waterlust**

<http://www.waterlust.org/about/>

### **Seasons in the Sea**

<http://www.seasonsintthesea.com>

### **Thank You Ocean**

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

### **NOAA Online Media Library**

<http://sanctuaries.noaa.gov/photos>

### **SIMON**

<http://www.sanctuariesimon.org>

### **Oceans Live**

<http://oceanslive.gso.uri.edu/>

### **Office of National Marine Sanctuaries**

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

### **NOAA Ocean Explorer**

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

### **Encyclopedia of the Sanctuaries**

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

### **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/>



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**Steve Lonhart** – SIMoN Senior Scientist

**Chad King** – SIMoN Data Analyst

### Education

**Liz Love** – Acting Education Coordinator

**Lisa Uttal** – Interim Exploration Center Director

**Carolyn Skinder** – Southern Region Program Coordinator

**Chelsea Prindle** – Education Specialist

**Nick Ingram** – Program Assistant (SEC)

**Michael Ray** – Exploration Center Gift and Bookstore Manager

**Steven Ellmore** – Program Assistant (SEC)

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### Resource Protection

**Karen Grimmer** – Resource Protection Coordinator

**Scott Kathey** – Regulatory/Emergency Response Coordinator

**Deirdre Whalen** – Government and Community Relations Coordinator

**Sophie De Beukelaer** – GIS Analyst/Permit Coordinator

**Pamela Krone-Davis** – Agriculture Water Quality Coordinator

**Bridget Hoover** – Water Quality Protection Program Director

**Lisa Emanuelson** – Citizen Watershed Monitoring Network Coordinator

### Program Operations

**Raymond Chisolm** – Program Specialist

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**Andrew White** – Network Manager and Webmaster

**Chris Young** – Exploration Center Operations Specialist



## **Learn More About Your Sanctuary**

The Sanctuary Office Report is produced bi-monthly by Monterey Bay National Marine Sanctuary staff 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 Office of National Marine Sanctuaries**

The Monterey Bay National Marine Sanctuary is one of 14 marine protected areas in the National Marine Sanctuary System encompassing more than 150,000 square miles of marine and Great Lakes waters from Washington State to the Florida Keys, and from Lake Huron to American Samoa. The system includes 13 national marine sanctuaries and the Papahānaumokuākea Marine National Monument. Visit the ONMS 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/getinvolved/welcome.html>

Sign up for the MBNMS listserv to receive email notices about upcoming Sanctuary events, and public meetings of the Sanctuary Advisory Council and Working Groups:

<http://montereybay.noaa.gov/intro/elists.html#educate>

## **- Contact Information -**

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