



Monterey Bay National Marine Sanctuary

Sanctuary Office Report



Volume 14, Number 3

A REPORT FOR THE SANCTUARY ADVISORY COUNCIL MEMBERS

REPORTING PERIOD: MARCH 28, 2017 – MAY 19, 2017

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

Study: Global plant growth surging alongside carbon dioxide

A trace gas present in the atmosphere in miniscule amounts is helping scientists answer one of the biggest questions out there: Has plant growth increased alongside rising levels of carbon dioxide in the atmosphere? It turns out the answer is Yes – in a big way. A new study published in the April 6 edition of the journal *Nature* concludes that as emissions of carbon dioxide from burning fossil fuels have increased since the start of the 20th century, plants around the world are utilizing 30 percent more carbon dioxide (CO₂), spurring plant growth. In 2007, NOAA scientist Stephen Montzka wrote a pivotal paper that identified the trace gas, carbonyl sulfide, as a key to estimating how much CO₂ plants are taking in as they grow. For full story: <http://www.noaa.gov/news/study-global-plant-growth-surging-alongside-carbon-dioxide>

California dryness and recovery challenge multi-century odds

Between October 2011 and September 2015, California saw its driest four-year period in the instrumental record, which dates back to 1895. Parts of the state lost more than two full years of precipitation during the prolonged, severe dry spell. But, a new study by NOAA NCEI scientists (link is external) suggests that from the longer-term view of paleoclimate records, the southern Central Valley and South Coast parts of the state saw their worst dry spell in nearly 450 years. California's hardest hit areas would likely need several decades for their long-term average precipitation to recover back to normal levels. Published in the *Journal of Climate*, this study also looked at how long it would take the state to recover from its current precipitation deficits. And, the scientists found that California's hardest hit areas would likely need several decades for their long-term average precipitation to recover back to normal levels, starting from the 2012–2015 deficits. "The odds of the state completely recovering from its extreme dryness within two years are estimated at less than 1 percent," said Dr. Eugene R. Wahl, NCEI paleoclimatologist and lead author of the study. "But, the state is moving a good way towards recovery if very wet conditions continue into spring." For full story: <https://www.ncei.noaa.gov/news/california-dryness-and-recovery-challenge-multi-century-odds>

Humpback whales are dying on the East Coast. NOAA wants to know why.

Since January 2016, 41 humpback whales have died along the U.S. East Coast, from Maine to North Carolina. A team of veterinarians, marine biologists, marine mammal stranding network members, and others are determined to understand why. Humpback whales in U.S. Atlantic coastal waters are no longer an endangered species, but they are an integral part of our marine environment – and one of the most iconic. Thus, the significant die-off of these whales (defined as an 'unusual mortality event' under the Marine Mammal Protection Act) demands an investigation to determine what environmental conditions or human activities could be the cause. While no evidence of infectious disease or high levels of harmful biotoxins have been found in animals tested so far, these will be some of many indicators scientists will research. For 10 of the whales, however, NOAA found evidence of vessel interactions, such as propeller wounds or blunt force trauma indicative of a ship or boat strike. The investigation will evaluate these findings as well any changes in habitat. For full story: <http://www.noaa.gov/news/humpback-whales-are-dying-on-east-coast-noaa-wants-to-know-why>

NATIONAL MARINE SANCTUARY NEWS

Shipwreck Artifact Conserved through Partnership by Channel Islands National Marine Sanctuary, Channel Islands National Park, and State of California

Robert Schwemmer, West Coast Regional Maritime Heritage Coordinator, serving as principal investigator and diver, joined law enforcement rangers from the Channel Islands National Park to record a Pelorus artifact in situ and perform an archaeological recovery mission. The Pelorus, a maritime navigational instrument, was first discovered in October 2016 during a joint Park and Sanctuary annual shipwreck reconnaissance expedition onboard the NPS R/V *Sea Ranger II* at the shipwreck site of the *Equator* off Anacapa Island. It's believed that storm surge in 2016 exposed the artifact on a sandy substrate that lies in shallow water and is part of the bottomlands managed by the California State Lands Commission. The nonferrous metal ring of the Pelorus was in good shape for its age, the degree marks were clearly delineated from 0 to 360, and a glass fragment that once covered the compass rose was still in place. A second mission to document the artifact was completed in February 2017 off the NPS R/V *Ocean Ranger*, the dive team took photo-documentation and it was determined the vertical wire sight vane was missing, likely damaged due to being tumbled in recent storm surge. Schwemmer contacted the California State Lands Commission and CSU Chico Heritage Resources Conservation Lab to coordinate a mission to recover and conserve the artifact before further damage could occur. Working under a CINMS Superintendent's permit and complying with other agency requirements, the successful recovery mission was completed and the Pelorus is now in conservation at the lab with a timeline of 12 months to conserve. The Pelorus will eventually be put on public display at a museum or learning center, with the location to be determined in consultation with the State of California. The Channel Islands shipwreck reconnaissance program contributes to scientific knowledge and enhancement of management practices related to submerged and terrestrial archaeological resources. The sanctuary works in collaboration with the Channel Islands National Park, the National Park Service's Submerged Resources Center, and Coastal Maritime Archaeology Resources volunteer organization. The agencies conduct research, participate in joint annual expeditions at sea to search for new discoveries, survey, map and monitor known archaeological sites, and share these discoveries with the American public. For more information on ship and aircraft wrecks at the Channel Islands: http://sanctuaries.noaa.gov/shipwrecks/pdfs/shipwreck_final.pdf. Through the discovery, study, protection and promotion of our maritime cultural heritage, including an ongoing commitment to the Channel Islands shipwreck reconnaissance program, national marine sanctuaries and their partners help Americans learn more about our past and teach us about the critical need to be wise stewards of our ocean planet.

Sanctuaries participation in the removal of 20+ tons of debris from Olympic Coast

Washington CoastSavers is dedicated to keeping the Washington's beaches clean of marine debris through coordinated beach cleanups, education and prevention. As a founding member of Washington CoastSavers, Olympic Coast National Marine Sanctuary organized staff and volunteers of all ages representing the Youth Environmental Stewardship Program, Port Townsend Marine Science Center, Northwest Watershed Institute, and Americorp. The overall effort consisted of over 1300 volunteers that removed marine debris from more than 65 beaches up and down Washington's shorelines coast. Volunteers hauled 20 tons of marine debris consisting of hundreds of bags of garbage, boat parts, floats, rope and plastic off these shorelines. This year through a new partnership with TerraCycle, some of the hard-to-recycle marine debris waste was recycled instead of heading to the landfill. Coastal cleanups engage communities to enhance and protect special places while keeping coastal areas safe and open to the public in order to support tourism, recreation and our economy. <http://olympiccoast.noaa.gov/protect/marinedebris/>



MONTEREY BAY NATIONAL MARINE SANCTUARY NEWS AND PROGRAM UPDATES



MANAGEMENT

Monterey Bay National Marine Sanctuary Holds Advisory Council Meeting, Welcomes New Members

On April 21st, the MBNMS Advisory Council met and received a series of presentations and updates on the MBNMS Advisory Council member recruitment, desalination update, Management Plan Review Council Workshop on Agriculture Water Quality Alliance (AWQA), update on AC Council Chairs meeting and information on Watsonville Wetlands Watch. Actions taken included: the approval of recommendations as presented from the AWQA workshop, changing the Recreation and Tourism Subcommittee to a Working Group, and approval of the February AC meeting minutes. Three new Advisory Council members were sworn in: Keith Rootsart (Diving alternate), Mindy Maschmeyer (Tourism alternate), and Kristen Petersen (AMBAG alternate). Returning members included Dan Haifley (At-Large primary), Cynthia Mathews (At-Large alternate), Michael Bekker (Tourism primary), and Brian Nelson (Diving primary). MBNMS would like to thank Phil Sammet, Kirk Schmidt, and Steve Scheiblauer for their many years of dedication to the Advisory Council. Beginning May 1st, MBNMS will begin recruiting for three additional AC seats including Agriculture alternate, Conservation alternate, and Education alternate. Sanctuary Advisory Councils are community-based advisory bodies consisting of representatives from various user groups, government agencies and the public at large. The role of the council is to provide advice to the sanctuary superintendent on the designation and/or operation of a national marine sanctuary.

RESEARCH AND MONITORING

Beach COMBERS Celebrates 20 Years of Monitoring

May 2017 marks 20 years of beachcast surveys by volunteers of the Coastal Ocean Mammal and Bird Education and Research Surveys (Beach COMBERS). The original goal of the program was to determine human and natural impacts to the Monterey Bay National Marine Sanctuary ecosystem. This long-term monitoring of beached marine birds and mammals has enabled resource managers to determine trends in deposition to better identify significant events affecting wildlife including oil spills, fishery interactions, harmful algal blooms, and natural starvation events. Several documented events were of regional significance occurring along the west coast of North America, including the 1997-98 El Niño, and 2003 Fulmar die-off. The documentation of other events made important contributions to science, including 1998 domoic acid bloom, 2007 mystery foam, S/S *Luckenbach* oil spill, and gill-net bycatch. During the last 20 years, approximately 185 volunteers have participated in the program; contributing more than 31,000 hours. Today, there are more than 90 volunteers; many of them long-term participants. This program is a collaboration among Moss Landing Marine Laboratories, Monterey Bay National Marine Sanctuary, U.S. Geological Survey, U.S. Fish & Wildlife Service, California Department of Fish & Wildlife, and Save The Earth. Since 1997, trained volunteers have surveyed beached marine birds and mammals monthly at selected sections of beaches throughout the Monterey Bay area, with the specific goal of using deposition of beach cast carcasses as an index of the health of the sanctuary. On average, Beach COMBERS detect 2.5 events per year, where baseline numbers of dead organisms are significantly surpassed. These could be natural events (e.g., a low productivity year for food) or human caused (e.g., an oil spill). Beach COMBERS accomplishments and information can be found on the web site <http://www.sanctuarysimon.org/monterey/sections/beachCombers/index.php?l=n>.

MBNMS Research Activity Panel Meets at Elkhorn Slough NERR

On May 12th, the Monterey Bay National Marine Sanctuary (MBNMS) Research Activity Panel (RAP) met at Elkhorn Slough National Estuarine Research Reserve (ESNERR) in Watsonville, CA. Agenda items included: Elkhorn Slough Ecology and How Estuarine Ecosystems Are Changing; California Marine Protected Areas

Management Program: Science Priorities, Information Management and What Comes Next? (by Ocean Protection Council); Summary of California Department of Fish and Wildlife Public Meetings on Artificial Reefs; RAP action plan for long-term monitoring; summary of April Sanctuary Advisory Council meeting; and RAP membership. The MBNMS Research Activity Panel (RAP) is a working group of the MBNMS Advisory Council. The RAP meets six times per year, and advises SAC and sanctuary staff on basic and conservation science issues. <http://montereybay.noaa.gov/sac/rap/rapma.html>

RESOURCE PROTECTION

California Marine Protected Areas Collaboratives Charter Workshop takes place at the State Capitol in Sacramento

California is home to the largest scientifically designed network of marine protected areas (MPAs) in the nation. Monitoring is a crucial component of MPA management, so a team of state and non-state partners is collaborating to implement a monitoring program that will inform network-wide adaptive management. Leading the team is California Fish and Game Commission, California Department of Fish and Wildlife, California Ocean Protection Council and California Ocean Science Trust. Monterey Bay National Marine Sanctuary (MBNMS) staff Lisa Uttal participated in a two –day workshop as a co-chair for the Santa Cruz Network Collaborative and representing their local communities. The State of California convened this meeting to get input for a state charter for the California State MPA Collaborative Network. This Act aims to protect California’s marine natural heritage through establishing a statewide network of [marine protected areas](#) (MPAs) designed, created, and managed using sound science and stakeholder input

(<https://www.wildlife.ca.gov/Conservation/Marine/MPAs/FAQsite>). MBNMS is an important partner with this MPA effort because as a federally protected area, there are several state MPAs nested within MBNMS 6000 square mile boundary and there are a lot of activity overlap on the state and federal level and an opportunity to collaborate.

ACCESS coming to Monterey Bay in May

Conservation Science staff from Applied Ecosystem California Current Surveys (ACCESS) are assisting staff from Monterey Bay sanctuary to design and execute ACCESS throughout the Monterey Bay area and Santa Cruz County coast. Over the past two years, there have been increased sightings of entangled humpback, blue and gray whales in commercial and recreational crab pot gear. Sanctuary staff are working with National Marine Fisheries Service, The Nature Conservancy, and the California Dungeness Crab Fishing Gear Working Group to collect data, model the co-occurrence of large whales and crab pots, and identify baleen whale hot spots in an effort to decrease the risk of entanglement of large whales in central California. ACCESS is a collaborative effort of Cordell Bank and Greater Farallones sanctuaries and Point Blue Conservation Science for ongoing data collection to understand status and trends of sanctuary resources, ecosystem health, and response to climate change.

Agriculture Water Quality Alliance Meeting on SWAT Model

The MBNMS agricultural water quality coordinator facilitated an AWQA meeting on the Soil and Water Assessment Tool (SWAT) applied to the Moro Cojo watershed on 4/5/17 at the Monterey County Farm Bureau. Kim Null from Moss Landing Marine Lab presented the model results and how it could be used to identify locations for practices to improve water quality. AWQA stakeholders reviewed the model and made suggestions for how model data could be improved and suggested additional data sources. Modeling nutrient transport and the effect of management practices on water quality can be a decision support tool to help discern the most cost effective and beneficial management practices. The likelihood of adoption of practices by growers can be increased if an accurate portrayal of projected benefits that can provide growers with this knowledge base.

Monterey MPA Collaborative meeting at MBNMS

On April 7, the Monterey MPA Collaborative members met at the MBNMS office to discuss a variety of topics, including a report out from Statewide MPA Collaborative's Charter Workshop where an agreement between the State and the 14 collaborative groups was discussed. The group reviewed a new MPA tool developed by CSUMB student Katie Neylan that includes a flip chart designed for divers to better understand state and federal MPAs and where to dive in MPAs. CMSF staff provided an update on OPC funded signage plan for MBNMS, and MBNMS announced the upcoming regional BioBlitz slated for June 23rd-July 2nd 2017. State Parks and MBNMS are planning to mobilize on June 28th in the morning at Point Lobos and Point Pinos. Lastly, State Parks staff are considering taking on the role of co-chair in the near future. A network of State MPAs are nested within the Federal MPAs along the California coast. The Monterey MPA Collaborative Network fosters productive partnerships between local community members, state and federal MPA organizations.

MBNMS Advisory Council Conservation Working Group meets to discuss marine debris

On April 10, the Sanctuary Advisory Council CWG met to discuss a number of topics including following up on the recommendations that were approved by the SAC in February of this year. The group invited Douglas George with CenCOOS to discuss his work and potentially collaborate on developing a model looking at current patterns (spatial and temporal) in order to better understand the movement patterns of marine debris in MBNMS. The group also reviewed the results of a survey to a dozen beach clean up organizations to understand if they keep data on their clean ups and if so, what types of data they collect. Follow up includes the development of some research questions for a funding proposal that can be used for multiple grants. The MBNMS Conservation Working Group is a working group of the MBNMS Advisory Council. The CWG meets monthly, and advises the SAC and sanctuary staff on conservation and science issues.

Redirecting Wayward Ships Within MBNMS

On April 17, MBNMS monitoring of vessel traffic within the sanctuary detected an oil tanker loitering inshore of International Maritime Organization (IMO) recommended vessel tracks through the sanctuary. MBNMS notified the Coast Guard that the T/V ATLANTIC LILY had closed half the distance to shore from the IMO vessel track line in an apparent holding pattern just south of San Francisco Bay. Shortly after notification to the Coast Guard, AIS data indicated that the tanker proceeded due west to a safer loitering position more distant from shore. IMO vessel tracks were established in 2000 through a NOAA/Coast Guard initiative to push major ship traffic further offshore within the sanctuary for enhanced protection against grounding should a vessel lose power or steerage. This action was a key strategy for averting a major vessel casualty and potential spill in the remotest parts of MBNMS. Monitoring of IMO track use is important for ensuring compliance by the thousands of cargo vessels that pass through MBNMS each year. This incident represents one of many successful collaborative efforts between MBNMS and local Coast Guard authorities to protect sanctuary resources on a daily basis.

Entanglement Team responds to humpback whale in MBNMS

April 16, 2017, the CA Whale Entanglement Team responded to a humpback whale entangled in Dungeness crab pots aboard the R/V Fulmar. Monterey Bay Whale Watch (MBWW) re-sighted the whale and were able to stand by while the response team reached the location. The team was able to cut away the crab pots leaving approximately 30' of trailing line, which will hopefully slip through the whale's mouth and away. The response entailed many people including team leader Pieter Folkens, Peggy Stap, Scott Benson, and the crew of MBWW and the R/V Fulmar. We are hoping for a re-sight to ensure the whale is completely free of line. This whale has been identified as CRC-11107 first documented as an adult in 1998 by John Calambokidis. In another situation earlier in the month, a gray whale entangled with a steel frame around its head was sighted moving up the coast until it reached Half Moon Bay. Sadly the whale has not been re-sighted to date. Whale entanglements are

increasing and are identified by the West Coast Regional Resource Protection Coordinators as a priority over the next 5 years as the issue represents one of the major threats to large whales. Sanctuary staff participates with a number of partners (NMFS Stranding Network, WET Responders, USCG) in the effort to better understand and reduce this threat.

EDUCATION, VOLUNTEER AND OUTREACH PROGRAMS

Monterey Bay National Marine Sanctuary and California State Parks Air on Periscope

MBNMS joined CA State Parks on a live-streamed Periscope broadcast entitled, “Partners in Protection; Monterey Bay National Marine Sanctuary and CA State Parks,” hosted by Erin Gates. During the broadcast, MBNMS’ Carolyn Skinder shared with viewers the role MBNMS and the Coastal Discovery Center play in protecting our ocean through education and monitoring. During the broadcast, viewers followed Skinder from the San Simeon Pier to the Coastal Discovery Center as she collected and demonstrated plankton, explained its role in the ocean food web, and invited viewers to visit the Center. Following Skinder came an interview with CA State Parks’ Ranger Brett King and his canine, Artos. Ranger King informed viewers about how MBNMS and CA State Parks work together to enforce regulations that help balance public use with resource protection. Throughout the live broadcast, questions were asked by 611 viewers. To view this Periscope program, go to: <https://www.periscope.tv/w/1MYxNLqkgZQGw> Periscope is a social media platform used by over 10 million people, most between the ages of 16 to 34. It is a fast and inexpensive way to spread messages shared by MBNMS and CA State Parks who work together to protect the natural resources of coastal California while serving the public who come to enjoy this special place.

Monterey Bay National Marine Sanctuary Exploration Center Hosts First Friday: An Art and Science Event

On April 7, 2017 the MBNMS Exploration Center hosted a First Friday science and art event highlighting the abundance of life that marks the beginning of spring within Monterey Bay National Marine Sanctuary. The event featured local artist, Yeshe Jackson’s pop-up art gallery that displayed many different landscapes and animals found along California’s central coast. Over 50 First Friday attendees enjoyed plankton-viewing, refreshments, do-it-yourself squid printing, and live music. The community was able to celebrate the springtime abundance caused by upwelling, the process when northwest winds move surface waters offshore and replaced by cool, nutrient-rich water from below that brings many different species to the sanctuary. Community events such as First Fridays are a perfect opportunity to bring art, activities, and science together as an innovative education tool to promote and inspire visitors to protect and conserve the health of Sanctuary ecosystems.

Monterey Staff Train Point Sur Volunteers about MPAs and Monterey Bay National Marine Sanctuary

Twenty new recruits from the Point Sur Lighthouse Volunteer Program were trained by MBNMS staff in a two-hour presentation and discussion. They learned about MBNMS research and resource protection activities. This included sharing stories about the sanctuary’s developing Plankton Monitoring Program, Water Quality Protection, Davidson Seamount research and Condition Report culminating with an overview of State and Federal Marine Protected areas. Pt Sur is located in the southern region of MBNMS and volunteers lead group tours from a 400 ft promontory that overlooks MBNMS and two State Marine Protected Areas (Point Sur State Marine Conservation Area, Point Sur State Marine reserve). The volunteers are the eyes and ears for activities occurring along MBNMS coastline. Sharing MBNMS mission and activities with other volunteer groups help to ‘train’ and inform them so that they can better interpret and educate the public about MBNMS mission and activities.

Monterey Bay National Marine Sanctuary kicks off 25th Anniversary “Sea Below the Surface” Speaker Series

On Wednesday, April 19th, Monterey Bay National Marine Sanctuary officially kicked off its 25th anniversary speaker series of public presentations on the state of sanctuary resources, while reflecting on 25 years in ocean protection. The “Sea Below the Surface” series features talks by local marine researchers that discuss the status and trends of sanctuary conditions, including water quality, habitat status, biological and/or cultural resources, while highlighting a few key species from each of four different environments found within the sanctuary: estuarine, nearshore, offshore and seamount environments. This month’s series focused on estuarine environments of Monterey Bay National Marine Sanctuary, with presentations given by Dr. Kerstin Wasson, Research Coordinator of Elkhorn Slough National Estuarine Research Reserve on Wednesday, April 19th at the Sanctuary Exploration Center in Santa Cruz, and was followed by another presentation on Thursday, April 20th by Mark Silberstein, Executive Director of Elkhorn Slough Foundation at the Pacific Grove Museum of Natural History in Pacific Grove. A total of 75 guest, including both volunteer docents and community members, attended April’s speaker series presentations. The next 25th anniversary speaker series will be held on May 17th and May 25th, and will focus on habitats and species health of the nearshore environments found within the sanctuary. A goal of MBNMS education and outreach programs is to inform and educate the public on the health of sanctuary ecosystems and to inspire conservation practices. A special recognition for this year’s outreach efforts focuses on celebrating the MBNMS 25th Anniversary in ocean protection.

18th Annual Snapshot Day is on May 6th, 2017


The annual sanctuary-wide water quality event, Snapshot Day 2017, is coming up on May 6th. Volunteer trainings are scheduled for April 29th in the Monterey County, April 30th in Santa Cruz and San Mateo Counties and May 2nd in San Luis Obispo County. Snapshot Day is the oldest and largest water quality event of its kind in California.

Monterey Bay National Marine Sanctuary participates in Hopkins Marine Station Open House Event

MBNMS joined Stanford University’s Hopkins Marine Station Open House event on Saturday, May 6 from 10-4pm. The free community event opened the doors to over 2000 visitors to explore and experience the biological laboratories from the oldest marine lab on the US Pacific Coast, while offering science talks by marine researchers. MBNMS was exclusively invited to host an interactive booth with activities and displays about the sanctuary, highlighting volunteer programs that engage the community in resource protection through outreach and education. Six shoreline naturalist volunteers from MBNMS’ Bay Net program set up spotting scope stations nearby the MBNMS booth to provide visitors with information and natural history of coastal residents, including local shorebirds and harbor seals that are in pupping season. As part of our Ocean Literacy education and outreach activities, MBNMS participates in community events to increase its messages of ocean awareness, inspiration, and conservation of important sanctuary resources to the public.

Monterey Bay National Marine Sanctuary Exploration Center Hosts First Friday: “A Whale of A Time!” Art and Science Event

On Friday, May 5th the MBNMS Exploration Center hosted “A Whale of A Time!” First Friday science and art event celebrated the return of whales to the sanctuary! The event featured local artist, Robert Seals and his Whale Mobile art van which displayed marine wildlife made from metal and wood. The Exploration Center was excited to have over 180 people from the community attend the event and enjoy refreshments, live jazz music and a paper plate whale craft. This time each year, various whale species such as gray whales and humpback whales become more abundant in the sanctuary as they migrate along the coast and feed. To commemorate the whales presence in the sanctuary, the exhibits highlighted local groups such as the Marine Life Studies Whale Entanglement Team and the Save the Whales non-profit organization. The pop-up historical gray whale exhibit was fun for visitors because they had the opportunity to participate in an Ocean Sound game to test their knowledge on sounds in the ocean and win a gray whale pin! Community events such as First Fridays are a great opportunity to bring art,



activities, and science together as an innovative, educational tool to promote and inspire visitors to protect and conserve the health of Sanctuary ecosystems.

NEWS COVERAGE

How a bankrupt shipper's blunder turned in to a bureaucratic nightmare for Ottawa

<http://www.theglobeandmail.com/news/british-columbia/how-a-bankrupt-shippers-blunder-turned-into-a-bureaucratic-nightmare-for-ottawa/article34718136/>

The Globe and Mail-April 16, 2017

Volunteers clean beaches on Earth Day

<https://register-pajaronian.com/article/volunteers-clean-beaches-on-earth-day>

Register-Pajaronian-Aprils 23, 2017

Could an offshore wind farm in SLO County hurt endangered whales?

<http://www.sanluisobispo.com/news/local/environment/article147254914.html>

The San Luis Obispo Tribune-April 27, 2017

President Trump's offshore oil plan promises jobs, provokes California protest

<http://www.pressdemocrat.com/news/6938994-181/trumps-offshore-oil-plan-promises?artslide=0>

The Press Democrat-April 28, 2017

Sharks Foundation promotes environmental awareness in April

<https://www.nhl.com/sharks/news/sharks-foundation-promotes-environmental-awareness-in-april/c-289253518>

NHL.com-May 3, 2017

Pure Water Monterey recycled water project hailed at groundbreaking, challenges remain

<http://www.montereyherald.com/government-and-politics/20170505/pure-water-monterey-recycled-water-project-hailed-at-groundbreaking-challenges-remain>

Monterey Herald-May 5, 2017

Commentary: Protecting California's coast an ongoing effort

<http://www.santacruzsentinel.com/opinion/20170506/commentary-protecting-californias-coast-an-ongoing-effort>

Santa Cruz Sentinel-May 6, 2017

Earth Day volunteers removed 1,165 lbs of trash

<http://www.tpgonlinedaily.com/earth-day-volunteers-removed-1165-lbs-trash/>

Aptos Times-May 8, 2017

Letter: SOS will keep fighting offshore oil drilling

<http://www.santacruzsentinel.com/article/NE/20170514/NEWS/170519888>

Santa Cruz Sentinel-May 14, 2017

The Monterey Bay Aquarium has the chilliest livestream on the internet

https://motherboard.vice.com/en_us/article/the-monterey-bay-aquarium-has-the-chillest-livestream-on-the-internet

Motherboard.com-May 17, 2017

Pacific Marine Mammal Center still treating poisoned sea lions

<http://www.latimes.com/socal/daily-pilot/news/tn-dpt-me-lb-sea-lion-update-20170517-story.html>

Los Angeles Times-May 17, 2017

Web Site (<http://montereybay.noaa.gov/>)

Follow MBNMS on Facebook (<https://www.facebook.com/MBNMS>) and **Twitter** (<https://twitter.com/mbnms>)

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

FUN, OCEAN RELATED WEB SITES

Caitlin Seaview Survey

<http://www.caitlinseaviewsurvey.com>

SIMON

<http://www.sanctuariesimon.org>

Seasons in the Sea

<http://www.seasonsintthesea.com>

Waterlust

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

Thank You Ocean

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

NOAA Online Media Library

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

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/>

Your Sanctuary TV

<http://yoursanctuarytv.org/>

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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://montereybay.noaa.gov/sac/advisory.html>

The Office of National Marine Sanctuaries

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>

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