

2013 Accomplishments



Welcome

I am very proud of our achievements last year, most notably the process to identify "SESAs" and our subsequent work with environmental and fishing groups to protect some of

these special areas through a proposal to the Pacific Fishery Management Council. Though an arduous process, I believe it demonstrates not only our scientific capabilities, but also our ability to develop collaborative, broadly supported projects that protect sanctuary resources while enhancing relationships with diverse stakeholders. The negotiated proposal is truly an historic accomplishment and I give my heartfelt thanks and kudos to all involved.

I hope you enjoy reading about some of our other accomplishments too, from innovative ways to protect water quality, research that deepens our understanding of the sanctuary and programs to promote awareness and stewardship of this incredible place. As always, I am indebted to our steadfast partners and those of you, especially our amazing volunteers, who help us to further our mission — together we are making a difference in protecting this national treasure.

Paul Michel
Superintendent



Understanding and protecting the coastal ecosystem and cultural resources of Monterey Bay National Marine Sanctuary

Sanctuary Ecologically Significant Areas Identified

A collaborative process with stakeholders to identify Sanctuary Ecologically Significant Areas (SESAs) in offshore federal waters was finalized in 2013. Sixteen areas were identified containing special "high value" or sensitive benthic habitat, particularly those rich in corals and sponges. In the future, research and management efforts will be directed towards these special areas. A GIS online map of SESAs can be accessed to understand the criteria and data layers used to select these areas at <http://sanctuariesimon.org/maps/sesa>.

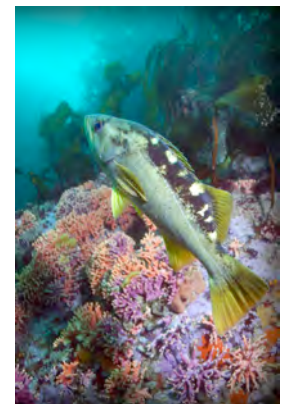
Proposal to Modify "Essential Fish Habitat" Boundaries Submitted

SESAs served as the basis for a proposal we submitted to the Pacific Fishery Management Council to modify bottom trawling fishing boundaries off the Central Coast. "Essential Fish Habitat" boundaries for "groundfish" were last set in 2006. The proposal, a collaborative product of a year-long stakeholder process involving commercial fisherman and environmental groups, closes new areas to protect sensitive coral and sponge habitats, designates "Habitat Areas of Particular Concern," re-opens some closed areas allowing access to key historically trawled areas, and includes "Voluntary Management Areas" adopted by fishermen as no bottom trawl zones.

Vessel Traffic Compliance Analysis Completed

In 2000 the International Maritime Organization (IMO) adopted recommended shipping tracks to route ships far enough from the sanctuary's coastline to allow for an effective response in the event of an oil spill. For the past three years a study was undertaken to understand vessel compliance with the recommended tracks. The Naval Postgraduate School, National Marine Fisheries Service and sanctuary staff analyzed ship traffic data using an Automated Information System. The analysis indicates good news, as a great majority of the vessels transiting through the sanctuary are complying with the IMO recommended tracks.

Helping the Hyperbaric Chamber Reopen
Multi-lock hyperbaric chambers providing emergency treatment for divers are few and far between. When the Pacific Grove chamber closed, we collaborated with interested parties to help reopen the facility. We provided two expert NOAA technicians to assist with repairs and maintenance and enhance the knowledge of the volunteer operators. Hyperbaric chambers are used to treat divers with decompression sickness, or "the bends," which occurs when divers resurface too quickly after a dive.



Chad King, MBNMS



Chad King, MBNMS



MBNMS



Pete Naylor, REEF



Dan Linehan

Partners Increase Sanctuary Awareness Along Southern Coast

"It takes a village" to raise awareness of the sanctuary and that's what our partners help us do in the southern region. Last year two new exciting programs were launched to educate visitors and inspire sanctuary stewardship. Our Coastal Discovery Center teamed up with California State Parks to offer summer programs ranging from beach exploration to plankton discovery to more than 300 visitors from nearby campgrounds. The San Luis Obispo County Tourism Business Improvement District created a new stewardship travel program encouraging visitors to learn, connect and contribute during their vacation. Visitors are directed to hands-on learning and volunteer activities related to the area's natural and cultural resources, with the Coastal Discovery Center and sanctuary featured prominently as stellar stewardship opportunities.

Sanctuary Exploration Center Marks One-Year Anniversary

The Exploration Center celebrated its one-year anniversary in July 2013. Since opening, more than 110,000 visitors have enjoyed its state-of-the-art exhibits, immersive films and interactive tools promoting ocean awareness and education. The center operates with the incredible support of 70 volunteers who engage visitors and enhance their experience. These dedicated individuals donated 8,000 hours of their time in 2013. In the past year, the center has also hosted numerous events, including a very successful "Beneath the Waves" film festival that will now become an annual event in celebration of World Oceans Day. In addition the center began offering guided tours and piloted new learning activities for a variety of different age levels.

New Look for our Website

Our website has been redesigned with a fresh, new look and easy navigation. The homepage features upcoming events and news, as well as quick links to get you where you want to go with just one click. The website contains the latest information about our programs as well as new content, like "Things to Do" featuring fun ways to experience your sanctuary, from tide pooling and fishing to whale watching and kayaking. Enjoy browsing at <http://montereybay.noaa.gov>.

It's Your Sanctuary

Building on the success of our partnership with Access Monterey Peninsula (AMP) and *Your Sanctuary* television series, we launched Your Sanctuary TV, a wealth of ocean conservation programming featuring sanctuaries and marine parks, including shows like *Waterways*, a program about Florida Keys Sanctuary and Everglades National Park. All this great content is available on cable access TV stations across the country, YouTube and streaming on AMP2. We also produced a maritime heritage episode featuring shipwrecks of the Golden Gate and began production of a travel and tourism series set for release in 2014.

Harbor Seals in Pacific Grove Gain Extra Protection

When harbor seals gave birth on Lovers Beach for the first time last spring, the public clamored for greater protection at the usual 5th and 8th Street pupping beaches, so seals would not be disturbed there and disperse to other areas. Sanctuary Bay Net volunteers stationed themselves at the beaches and were instrumental in reducing disturbance by speaking with thousands of people. The City of Pacific Grove also adopted a new ordinance providing clear guidelines for the installation of temporary fencing and signage to protect pupping and nursing harbor seals.



MBNMS

Volunteer of the Year

It is with great pleasure we announce Ms. Sandra Cohen as the Sanctuary's Volunteer of the Year. Since the Sanctuary Exploration Center's grand opening in July 2012, Sandra has become an integral member of the Exploration Center's team, donating over 200 hours in 2013. In addition to her regular weekly docent shift, Sandra is also part of a working group that helped develop the center's new guided tour program, and has led a more than ten tours. In addition she assists with sanctuary sponsored school field trips and has been involved in the Exploration Center's intertidal monitoring team. We very much appreciate Sandra's energy, guidance and tireless support, which has been instrumental in helping make the new Exploration Center such a great success.



Sportfishing Conservancy

A Sanctuary Classic

In partnership with the Sportfishing Conservancy, the sanctuary celebrated recreational fishing, photos and fun during the summer-long Sanctuary Classic event. This free fishing and photography contest promotes quality recreation in our sanctuaries and gives prizes to the pictures that best exemplify youth fishing, family fishing, or conservation.

Understanding Davidson Seamount

The Davidson Seamount, a massive underwater mountain rich in deep-sea coral forests, became part of the sanctuary in 2009. Since then awareness and understanding of the seamount has increased significantly, resulting in an updated management plan to more effectively protect this national treasure. Two new technical reports were released last year as well. Maritime activities are reviewed in *Cultural History of Davidson Seamount: A Characterization of Mapping, Research, and Fishing*. Another report covers marine mammal and seabird abundance around the seamount. (View all three reports at <http://montereybay.noaa.gov/research/techreports/techreps.html#2013>.) Public interest in the undersea mountain also remains high and KQED Public Television produced "Exploring the Corals of the Deep." To watch the show, go to <http://science.kqed.org/quest/video/exploring-corals-of-the-deep>.



Kevin L. Stierhoff, NOAA

New Report Describes Offshore Habitats

A new report, *The Natural Resources of Monterey Bay National Marine Sanctuary: A Focus on Federal Waters* synthesizes current scientific knowledge of the physical and biological resources found in offshore habitats. Information was compiled from primary literature, unpublished data and expert interviews on species, populations, communities and ecological processes. Habitats reviewed range from benthic, open ocean, submarine canyon and seamount to oxygen minimum zone, chemosynthetic biological and large detritus communities. Read the report at <http://montereybay.noaa.gov/research/techreports/trbrown2013.html>.



Chad King, MBNMS

One Fish, Two Fish...

We are often asked, "How many species of fish are there in the sanctuary?" To answer this question, staff consulted sources such as regional guidebooks, local experts, pertinent literature, field surveys and catalogued ichthyology collections. The result is compiled in a report, *Checklist of Fishes Known to Occur in Monterey Bay National Marine Sanctuary*. The answer? A whopping 525 species! View the report at <http://montereybay.noaa.gov/research/techreports/trburton2013b.html>.



Cornelia Oedekoven, NOAA

Humpbacks and Boobies and Grunion and More!

What a year for wildlife! It was a blockbuster year for some species, with unprecedented numbers filling the bay. Divers delighted in large schools of juvenile rockfishes swarming in kelp forests. Whale watchers gaped in awe at huge groups of humpback whales feasting on massive shoals of anchovies. For other species, it was a rare visit to the sanctuary that thrilled wildlife enthusiasts. Birders grabbed binoculars to catch a glimpse of Blue-footed Boobies normally seen in tropical waters. Grunion hunters were rewarded by finding these tiny fish spawning on sanctuary beaches, much further north than usual. To keep up with the latest wildlife events, visit our monitoring website at <http://www.sanctuariesimon.org/news/index.php?cID=26>.



Becky Stamski

Tracking Water Quality Improvement Efforts

Many groups are involved in projects to improve water quality, but assessing the extent and impact of these efforts has been limited due to insufficient data collection. The development of a "Central Coast Action Tracker (CCAT)," web portal addresses this need. Leading a process with stakeholders, we designed an interactive web-tracking interface that eases reporting and presents regional project information in a compelling way. A valuable tool to help us better understand where projects are occurring and the level of effort by watershed, CCAT will be useful for strategic planning and evaluating the success of conservation efforts.



California Leafy Green Products

Irrigation Nutrient Management Program Begins

After years of negotiation with the State and Regional Water Quality Control Boards, a \$1.25M contract has been finalized to develop and implement a regional irrigation and nutrient management program in the Salinas Valley. With key partners, we will conduct assessments of growing operations to determine if more efficient irrigation or fertilizer use are possible, while ensuring successful crop yields. Once assessments are complete, best management practices will be implemented and infrastructure installed as appropriate. We hope the program will become a model for other watersheds and increase our knowledge of the effectiveness of water quality practices and improvements.



Jared Figurski

AWQA Works to Protect Water Quality

The Agriculture Water Quality Alliance (AWQA) is a unique partnership bringing together farmers and ranchers with research, resource conservation, agricultural and environmental groups to protect the health of sanctuary waters and productivity of Central Coast farmlands. Since 1999 AWQA partners have worked together to reduce runoff of sediments, nutrients and pesticides from agricultural and rural lands. A recent report highlights the group's achievements over the past three years, including conducting forums on co-managing food safety and the environment, outreach to Spanish speaking and Chinese growers, a work plan for America's Great Outdoor initiative, a case study in gully stabilization, and a web-based tool to track management practices aimed at improving water quality. View the report at <http://www.awqa.org/pubs/reports.html>.

