



## Monterey Bay National Marine Sanctuary

# Sanctuary Office Report

Volume 17, Number 4



A REPORT FOR THE SANCTUARY ADVISORY COUNCIL MEMBERS

REPORTING PERIOD: JUNE 11, 2020 – AUGUST 4, 2020

### 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

#### A magnificent new sponge from the deep gets a name

In a newly published paper, scientists have identified and named a new genus and species of sponge: *Advhena magnifica*, Latin for "magnificent alien." This new sponge was sampled and seen during missions in the Pacific on NOAA Ship *Okeanos Explorer*. Read on to learn more about this discovery. On July 25, 2017, while exploring a seamount nearly 850 miles southwest of Hawai'i during an expedition led by the NOAA Office of Ocean Exploration and Research on NOAA Ship *Okeanos Explorer*, a team of deep-ocean explorers came upon an extraordinary seascape. Dr. Chris Mah of the Smithsonian National Museum of Natural History (NMNH) dubbed the scene the "Forest of the Weird" due to the diversity of prominent sponges rising up on stalks with their bodies oriented to face the predominant current carrying tiny food particles. For more information:

<https://oceanexplorer.noaa.gov/news/oer-updates/2020/sponge-discovery.html>

#### NOAA Fisheries: Status of Stocks 2019

The annual Status of Stocks report highlights our work with partners toward the goal of maximizing fishing opportunities while ensuring the sustainability of fisheries and fishing communities that support the American economy. NOAA Fisheries is pleased to present the 2019 Report to Congress on the Status of U.S. Fisheries. This report highlights our efforts to ensure the sustainability of fisheries and fishing communities while maximizing fishing opportunities. Through the combined efforts of NOAA Fisheries, the eight regional fishery management councils, and other partners, the number of stocks on the overfishing list reached an all-time low. The total number of stocks listed as overfished slightly increased and two previously overfished stocks were rebuilt. For more information: <https://www.fisheries.noaa.gov/national/sustainable-fisheries/status-stocks-2019>

#### NOAA unveils 10-year roadmap for tackling ocean, Great Lakes acidification

Today, NOAA unveiled its new 10-year research roadmap to help the nation's scientists, resource managers, and coastal communities address acidification of the open ocean, coasts, and Great Lakes. "Ocean acidification puts the United States' \$1 billion shellfish industry and hundreds of thousands of jobs at risk," said Kenric Osgood, Ph.D., chief of the Marine Ecosystems Division, Office of Science and Technology at NOAA Fisheries Service. "Understanding how ocean acidification will affect marine life and the jobs and communities that depend on it is critical to a healthy ocean and blue economy." The research plan sets out three major objectives for ocean, coastal, and Great Lakes acidification research, and includes regional chapters for coastal zones around the U.S., Great Lakes, territories - including Puerto Rico and American Samoa - and deep ocean regions. For more information: <https://research.noaa.gov/article/ArtMID/587/ArticleID/2652/New-research-plan-sets-the-course-for-NOAA%E2%80%99s-ocean-coastal-and-Great-Lakes-acidification-science>

## NATIONAL MARINE SANCTUARY NEWS

### **SBNMS Building Pathways to Science for Underrepresented Youth**

Postdoc Tammy Silva gave a presentation as part of the STEAM (Science, Technology, Engineering, Art, Math) the Streets Virtual Guest Speaker Series. STEAM the Streets is a national public outreach initiative supported by Marion Institute whose mission is to “decrease the diversity and equity gaps in the next era of STEAM career fields through engagement, awareness, and culturally relevant content”. The Guest Speaker series brings in scientists, engineers, programmers, and other professionals in STEAM to share their personal stories about their journey towards a career in STEAM to connect with underrepresented youth and create a more inclusive STEAM career pipeline. Tammy shared stories about her early interests in the ocean, the Dr. Nancy Foster Scholarship, and what it’s like to work as a scientist with SBNMS. *Connecting with underrepresented youth and communities is essential for increasing STEAM awareness and for creating pathways for more diverse representation in STEAM and in our communities and sanctuaries.*

Related Wedlinks:

STEAM the Streets (<http://steamthestreets.org/about>)

Marion Institute (<https://www.marioninstitute.org/greenhouse-initiatives/steam-the-streets/>)

### **Assessing marine mammal climate change vulnerabilities along West Coast**

Over the past three months, scientists from Greater Farallones National Marine Sanctuary and 63 others have been working to provide assessments of West Coast marine mammal species’ vulnerability to climate change. Experts are from various stakeholder groups including NOAA and state natural resource protection agencies, academic and research institutions. The experts use the Delphi Method to evaluate anticipated impacts of 29 climate variables, such as exposure to climate parameters and sensitivity to potential changes in their habitats and prey species, for 147 species stocks. We have completed the first round of assessments. Through this fall, experts will gather as a group to review individual assessments and produce a manuscript to be used by NOAA management. Information in the final report can be used to determine species in need of additional protection to enhance their resilience to climate change. Sharing skills and expertise across management agencies, NGO’s, tribes and other stakeholders builds trust and cooperation that collaboratively addresses resource management actions, and restores and maintains a healthy coastal environment.

### **Papahānaumokuākea Marine National Monument Celebrates 10 Years as a World Heritage Site**

On July 30, 2010, Papahānaumokuākea Marine National Monument was inscribed as a mixed World Heritage site by United Nations Educational, Scientific and Cultural Organization (UNESCO). Because the monument represents one of the best examples of both the world’s cultural as well as natural heritage, it has the distinction of being named the only mixed World Heritage site within the United States. It is one of only 24 World Heritage sites in the U.S., and one of two in Hawai‘i, along with Hawai‘i Volcanoes National Park. “A World Heritage site is part of an international community that appreciates and has concerns for universally significant properties,” says Athline Clark, NOAA superintendent of Papahānaumokuākea Marine National Monument. “Through a shared interest, countries join hands to protect and cherish the world’s natural and cultural heritage, expressed in a commitment to preserving our legacy for future generations.” For more information:

<https://sanctuaries.noaa.gov/news/jul20/10-years-world-heritage-site.html>



## MONTEREY BAY NATIONAL MARINE SANCTUARY NEWS AND PROGRAM UPDATES



### MANAGEMENT

#### **Monterey Bay National Marine Sanctuary Holds Virtual Advisory Council Meeting**

On June 19, MBNMS held its first virtual Advisory Council (AC). The AC received a series of presentations and updates on the AC's Charter renewal/revision, AC member recruitment, MBNMS's Management Plan Review process, the AC's 2020 work plan, the AC's working groups and Monterey Bay National Marine Sanctuary Foundation. The next meeting will be held virtually on August 21. 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.

#### **Monterey Bay National Marine Sanctuary Advisory Council Receives Special Presentation on Offshore Wind Energy Project**

On July 16, MBNMS Advisory Council received a virtual presentation regarding offshore wind farms. The presentation was at the request of a working group, led by Rep. Salud Carbajal (D- 24th District) that has been exploring spatial solutions for potential offshore wind development in a complex area of the central California coast. A presentation was made by members of the working group primarily by California Energy Commission (CEC) and Bureau of Ocean Energy Management (BOEM) group requested input from MBNMS's Advisory Council and the public on the spatial concepts. A SAC Working Group was formed to draft a comment letter to CEC and BOEM for consideration by the entire SAC.

#### **Management Plan Review Public Meeting Held Virtually**

On July 23, MBNMS Superintendent hosted a virtual public meeting to receive comments on MBNMS's management plan review draft documents. An overview of the draft management plan, the draft environmental assessment and the proposed rule were presented to 35 participants. Comments were limited. Public comment will continue through September 4. There will be an additional presentation to the Association of Monterey Bay Area Government's board on August 12<sup>th</sup>, and to both the MBNMS and GFNMS advisory council on August 21 and 24 respectively. For information on how to comment, click [here](#).

### RESEARCH AND MONITORING

No report.

### RESOURCE PROTECTION

#### **Two Vessel Casualties in One Day and Another 3 Days Later**

On June 7, two vessels ran aground within MBNMS about 90 miles apart - a 24-ft sailboat at Marina State Beach with ½ gallon of fuel aboard and a 25-30-ft Bayliner in Half Moon Bay with 78 gallons of fuel aboard. Both vessels were totaled. Winds were 40 mph that day, with gusts to 60 mph, yet the operators took the vessels out of safe harbor. The sailboat incident resulted in no bodily injuries, but the motor boat incident resulted in the death of the owner/operator and hospitalization of a passenger, whose final status is unknown. Three days later, a 40-ft commercial fishing vessel motored on a straight course onto Cowell's Beach in Santa Cruz, mid-way along the coast between the previous two wreck sites (see the link below from a webcam video). The fishing vessel narrowly missed multiple surfers at the popular break, and immediately backed off the sandy shallows upon lurching to a stop. No fuel or debris were released. The operator likely fell asleep at the helm. Private insurance paid for removal of the sailboat. GFNMS and CA State Parks shared the cost of removal of the Bayliner. Contracting staff at NOAA Western Acquisition Division (WAD) in Boulder were excellent; quick to

respond (even over a weekend) and very helpful in processing a rapid verbal approval of salvage funds for the salvage contract. These incidents highlight ongoing threats to MBNMS shorelines from boating casualties that are often the result of poor judgement. They also highlight the different encumbrance of NMS resources between working with an insured party and an uninsured party and the complications to emergency response efforts in incidents involving fatalities. But these incidents also highlighted very effective communication and cooperation between NMS staff, OLE, and various partners, resulting in prompt responses and mitigation of threats to sanctuary resources.

### **MRSWMP First Flush 2019 Report Finalized and Online Celebration Party**

On the evening of July 15, a group of dedicated water quality monitoring volunteers joined Lisa Emanuelson, California Marine Sanctuary Foundation contractor to Monterey Bay National Marine Sanctuary, for an online celebration and presentation of First Flush 2019 results. The MBNMS First Flush program is funded by the Monterey Regional Storm Water Management Program (MRSWMP). Each fall for the past 20 years, during the first major rainstorm of the winter season, volunteers mobilize to collect storm drain samples that are tested for bacteria, nutrients, metals and other common urban pollutants. On the evening of July 15th, the 2019 sampling results and cumulative data for all First Flush sampling was presented to First Flush Volunteers, MBNMS representative and WQPP Coordinator Bridget Hoover, and MRSWMP representatives. Results from the 2019 sampling highlighted some declining concentration trends in common urban pollutants as well as some increasing concentration trends. As part of the 2019 MRSWMP First Flush monitoring, receiving water (ocean water) samples were collected which showed elevated levels of detergents in ocean water. Twenty years of water quality data informs sanctuary management as well as local municipalities' storm water managers about the quality of water flowing into MBNMS which helps to inform and prioritize pollution prevention efforts.

### **Vessel grounding on Marina State Beach in MBNMS**

On July 11, a 23ft Bayliner grounded at Marina beach in front of the CEMEX sand mine. The single engine vessel lost power and drifted slowly onto the beach, and all four occupants landed safely on the beach. The owner declined assistance from Vessel Assist, and USCG Station Monterey responded, yet did not intervene as assistance from a civilian vendor was available. The next day, the owner dug the vessel out of the sand, and MBNMS emergency response connected him with a tow company that was able to get the vessel on a trailer and tow it off the soft beach with a small tractor. State Parks provided support by securing permission from their environmental scientist to remove the vessel during snowy plover season by a qualified operator. This was a successful outcome and we were able to mobilize removal of the vessel before the next high tide cycle and avoid a salvage situation. These incidents highlight ongoing threats to MBNMS shorelines from boating casualties. They also highlight the different approaches required when working with various partners, in order to ensure prompt responses and mitigation of threats to sanctuary resources.

### **Salinas Urban Watch 2020 Starts**

On Thursday July 23, seven Salinas Urban Watch volunteers assisted CMSF contractor Lisa Emanuelson with the collection or processing of seven urban runoff and creek samples from Salinas, CA. All volunteers wore masks and remained a minimum of 6 feet from each other (other than same household residents). One volunteer assisted in the collection of field data from the seven out of sixteen sites that were checked for flow. Six other volunteers processed samples for detergents, ammonia, phosphate and chlorine. Samples were also submitted to a local certified lab for analysis of bacteria (*E. coli* and enterococcus) as well as human-sourced bacterioides (HF183). Monitoring outfalls during dry weather months is critical to understanding water quality inputs from land-based sources and potential impacts to MBNMS.

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

### **MBNMS Staff make initial reopening plans for Sanctuary Exploration Center**

During the weeks of May 18-June 12, MBNMS education staff developed initial reopening plans for the Sanctuary Exploration Center in Santa Cruz. Although re-opening is still likely some time away, it is important to consider possible procedural, policy, and facility changes that might need to take place. With California museums and visitor centers receiving the green light to re-open as of June 12, state guidelines have been made available, which helped inform our initial plan. Additionally, Exploration Center Manager, Chelsea Prindle, queried the SEC volunteer cohort on their personal views and concerns over reopening in order to make sure that any plan takes their needs and makes their concerns a priority. A total of 42 volunteers responded, with very thoughtful and informative responses. We expect additional guidance to come from ONMS and hope that this exercise can help inform system-wide decisions moving forward in the coming months. Although re-opening is likely months in the future, it is important to consider potential procedural and policy changes that will need to be implemented in light of Covid-19. Additionally, volunteer input is critical in order to ensure that their needs and concerns are being met so they feel safe to return to volunteering.

### **MBNMS Staff participate in Santa Cruz County Museum Leaders Working Group**

On June 17, a group of about 18 Santa Cruz County Museum and Gallery Leaders met to discuss reopening plans. On June 12 Santa Cruz County moved into “Stage 3” of reopening which allowed for indoor museums, galleries, and aquariums to reopen with some modifications. Of those leaders on the call, no museums had immediate plans to reopen to the public this summer. Some museums are restricted by their governing organizations, some were limited because they are already offering summer youth programs (which prohibits also being open to the public), and some did not feel they could reopen with adequate procedures to keep their staff and volunteers safe. The group also discussed possible procedure modifications they are considering for future reopening. This group will continue to meet monthly.

### **MBNMS Sanctuary Exploration Center Staff Lead Virtual Field Trip programs for Santa Cruz Youth.**

On June 23rd Sanctuary Exploration Center staff led a Plankton Exploration virtual field trip for kids age 9-11 participating in the City of Santa Cruz Virtual Summer Camp program. Students learned about MBNMS, plankton’s role in the ecosystem, any how scientists monitor plankton off the Santa Cruz Wharf. They then looked at a live plankton sample from the Santa Cruz Wharf and identified several phytoplankton species. The program was a success and will be repeated with the City of Santa Cruz several times over the course of the summer. Since schools closed back in March, thousands of students in Monterey Bay missed out on valuable environmental education experiences. By modifying field programs to be offered virtually, students are able to be exposed to this content in a new way. By piloting these programs over the summer, we are building a set of virtual programs that may be offered next school year.

### **MBNMS Sanctuary Exploration Center Completes Spring 2020 Virtual Docent Training Program**

The March 2020 “Shelter in Place” order put a halt on the SEC spring 2020 docent training planning, which has always been done in person. In an attempt to still complete the lecture portion of docent training during this closure period, SEC staff designed an online 8 week training using GoToWebinar from April 27th-June 22nd from 6pm-8pm. Although this was a necessary adjustment to accommodate a docent training class this year, the products and processes developed will be modified to create new training modules for current and new docents. Once staff and volunteers are able to meet in person at the Exploration Center, we will hold in-person exhibit training. Volunteer docents are integral in the essential functions of the Exploration Center. Docents will work towards fulfilling the mission of the Exploration Center by greeting and educating thousands of individuals about MBNMS.

### **Ernest F. Hollings Internships completed at Monterey Bay National Marine Sanctuary**

MBNMS welcomed two Hollings undergraduates this summer, who took part in virtual internships, working remotely from their respective homes. Working with Mentor Lisa Uttal, Claudia Moncada (University of South Carolina) and Ashley Finster (Notre Dame) developed, produced, and delivered this year's MBNMS Get Into Your Sanctuary virtual program. In addition to the GIYS program, Ashley and Claudia engaged the public in GIYS social media campaigns, producing content for both MBNMS Foundation and MBNMS Facebook, Instagram and Twitter accounts. Claudia also worked on a conceptual design document for a future Santa Cruz Wharf exhibit which can now provide a basis to working with MBNMS partners Save Our Shores and City of Santa Cruz to design the exhibit. Ashley also designed and organized a MBNMS photos/videos/gifs database in Google Folders, so it could be easily populated and accessed by staff in the future. The Ernest F. Hollings Scholarship provides scholarship & internship opportunities to outstanding undergraduate students. NOS/ONMS/MBNMS was proud to provide and mentor Claudia and Ashley in activities and projects that engaged, educated and challenged them giving them hands-on experience in possible marine science and education careers they would like to pursue.

## NEWS COVERAGE

### [Ross Clark, Earth Matters – What we find on the beach](https://www.santacruzsentinel.com/2020/07/04/ross-clark-earth-matters-what-we-find-on-the-beach/)

<https://www.santacruzsentinel.com/2020/07/04/ross-clark-earth-matters-what-we-find-on-the-beach/>  
Santa Cruz Sentinel – July 4, 2020

### [Inside Clean Energy: Sunrun and Vivint form new solar Goliath leaving Tesla to play David](https://www.mercurynews.com/2020/07/09/inside-clean-energy-sunrun-and-vivint-form-new-solar-goliath-leaving-tesla-to-play-david/)

<https://www.mercurynews.com/2020/07/09/inside-clean-energy-sunrun-and-vivint-form-new-solar-goliath-leaving-tesla-to-play-david/>  
The Mercury News: July 9, 2020

### [Whalefest Monterey launches ocean-themed student essay contest](https://kingcityrustler.com/whalefest-monterey-launches-ocean-themed-student-essay-contest/)

<https://kingcityrustler.com/whalefest-monterey-launches-ocean-themed-student-essay-contest/>  
King City Rustler – July 9, 2020

### [Western gull saved by kayaker, veterinarians](https://www.hmbreview.com/community/western-gull-saved-by-kayaker-veterinarians/article_c9bfab0c-c61b-11ea-904a-0b9711b3fb23.html)

[https://www.hmbreview.com/community/western-gull-saved-by-kayaker-veterinarians/article\\_c9bfab0c-c61b-11ea-904a-0b9711b3fb23.html](https://www.hmbreview.com/community/western-gull-saved-by-kayaker-veterinarians/article_c9bfab0c-c61b-11ea-904a-0b9711b3fb23.html)  
Half Moon Bay Review – July 14, 2020

### [One Ocean Film Tour set to make a splash in Southhampton](https://www.hampton.com/The-Arts/On-The-Screen/26764/One-Ocean-Film-Tour-Set-To-Make-A-Splash-In.html#.XynS2flKiUk)

<https://www.hampton.com/The-Arts/On-The-Screen/26764/One-Ocean-Film-Tour-Set-To-Make-A-Splash-In.html#.XynS2flKiUk>  
Hamptons.com

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

★★ **Check out these MBNMS Advisory Council webpage links!** ★★

**Advisory Council Meeting Agendas & Minutes**

<https://montereybay.noaa.gov/sac/sacma.html>

**Advisory Council Actions and Results**

<https://montereybay.noaa.gov/sac/sacact.html>

**Advisory Council User Group Newsletters (seats and working groups/sub-committees)**

<https://montereybay.noaa.gov/sac/advisory-nwsltr.html>

*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).*

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

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

**NOS Ocean Facts: Ocean Life**

<https://oceanservice.noaa.gov/factspage.php?siteName=oceanfacts&cat=Ocean%20Life>

**Caitlin Seaview Survey**

<http://www.catlinseaviewsurvey.com>

**SIMON**

<https://www.sanctuariesimon.org>

**Seasons in the Sea**

<http://www.seasonsintthesea.com>

**Thank You Ocean**

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

**Oceans Live**

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

**NOAA Ocean Explorer**

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

**Encyclopedia of the Sanctuaries**

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

## **MBNMS STAFF**

**Paul Michel** – Superintendent  
**Dawn Hayes** – Deputy Superintendent

### Research

**Andrew DeVogelaere** – Research Coordinator  
**Jennifer Brown** – SIMoN Ecosystem Scientist  
**Erica Burton** – Research Specialist  
**Chad King** – SIMoN Data Analyst  
**Steve Lonhart** – SIMoN Senior Scientist

### Education

**Amity Wood** – Education and Outreach Coordinator  
**Acy Wood** – Volunteer Coordinator (SEC)  
**Nick Ingram** – Exhibits/Facility Specialist (SEC)  
**Emily Pierce** – Program Assistant (SEC)  
**Chelsea Prindle** – SEC Manager  
**Michele Roest** – Program Coordinator & Community Liaison  
**Lisa Uttal** – Education Specialist

### Resource Protection

**Karen Grimmer** – Resource Protection Coordinator  
**Sophie De Beukelaer** – GIS Analyst & Research Permit Coordinator  
**Lisa Emanuelson** – Citizen Watershed Monitoring Network Coordinator  
**Bridget Hoover** – Water Quality Protection Program Director  
**Scott Kathey** – Regulatory/Emergency Response Coordinator (on detail to GRNMS)  
**Pamela Krone** – Agriculture Water Quality Coordinator

### Program Operations

**Raymond Chisolm** – Program Specialist  
**Nichole Rodriguez** – Advisory Council Coordinator  
**Andrew White** – Network Manager and Webmaster



## **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: <https://www.montereybay.noaa.gov>.

To learn more about the Sanctuary Advisory Council please visit:  
<https://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:  
<https://www.sanctuaries.nos.noaa.gov/>

## **Get involved and stay informed!**

To learn how to get involved in the Sanctuary visit:  
<https://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:  
<https://montereybay.noaa.gov/intro/elists.html>

## **- Contact Information -**

### **Monterey Bay National Marine Sanctuary**

99 Pacific Street, 455A  
Monterey, CA 93940  
Phone (831) 647-4201  
Fax (831) 647-4250