

**MONTEREY BAY NATIONAL MARINE SANCTUARY
ADVISORY COUNCIL**

**Final Meeting Minutes
August 17, 2018**

Monterey County Free Libraries – Marina Branch, Marina, CA

VOTING MEMBERS

Agriculture: absent
AMBAG: Stephany Aguilar
At Large: Dan Haifley
At Large: Carol Maehr
At Large: PJ Webb
Business & Industry: Al Budris
CA Coastal Commission: absent
CA Dept. of Fish & Wildlife: Paul Reilly
CA EPA: absent
CA Resources Agency: absent

CA State Parks: Eric Abma
Commercial Fishing: Kathy Fosmark
Conservation: Katherine O’Dea
Diving: Brian Nelson
Education: Tucker Hirsch
Harbors: Steve Scheiblauer
Recreation: Gary Pezzi
Recreational Fishing: Rich Hughett
Research: Dr. John Hunt
Tourism: Mike Bekker

NON-VOTING MEMBERS

Channel Islands NMS: absent
College: absent
Cordell Bank NMS: absent
Elkhorn Slough NERR: Dr. Dan Brumbaugh
Greater Farallones NMS: absent
Monterey Bay NMS: Paul Michel
National Marine Fisheries Service: Dr. Steve Lindley
U.S. Coast Guard: LT Darrina Willis

Alternates present in audience:
Tom Rowley – Business & Industry
Deb Wilson-Vandenberg – CA Dept. of Fish & Wildlife
Keith Rootsart – Diving
Jose Montes – Recreational Fishing
Dr. Steve Haddock – Research
Dawn Hayes – MBNMS

Number of audience members at 9:00 AM:
16

Number of audience members at 1:00 PM:
10

I. CALL TO ORDER, ROLL CALL, AND MEETING MINUTES

Chair Brian Nelson called the meeting to order and Secretary Gary Pezzi attended to roll call.

City of Marina Mayor Bruce Delgado welcomed the Advisory Council (AC) to the Marina Branch Library. He thanked the Advisory Council for their efforts to support MBNMS. He gave an introduction to the City of Marina, a small city of 22,000 people. It is a very diverse city with approximately 52 languages and dialects. There is a strong volunteer ethic, which he feels brings the city together. He mentioned the CEMEX sand mining plant in Marina, which will be closing in

2020. Reclamation is to be finished by 2023 with 400 acres turned over to a non-profit organization or government entity as a recreational area.

Mayor Delgado talked about the Monterey Peninsula Water Supply Project. It is his opinion Marina will not benefit from this project and will not be receiving any of the water supply.

He talked about the Fort Ord Recreational Trail and Greenway, a 30-mile greenway costing \$40 million total. It includes \$20 million from countywide sales tax which is expected to leverage another \$20 million. This will create a healthier inland quality of life with more opportunity for people to be connected to the coast.

He mentioned four access points to the dunes/sanctuary within Marina which are great for getting tourists safe and easy access to the beach.

Lastly, he again thanked the Advisory Council for supporting the sanctuary. He believes the Advisory Council is a large part of how we protect and preserve what the sanctuary provides to us all.

APPROVAL OF MEETING MINUTES

Approval of June 15, 2018 DRAFT Meeting Minutes

The advisory council approved the June DRAFT Meeting Minutes.

Al Budris introduced a motion to approve the June meeting minutes.

Seconded by Katherine O'Dea.

MOTION: Passed

(Vote: 12 in favor, 0 opposed, 7 abstentions)

II. STANDING ITEM: Superintendent Report

Paul recognized NOAA General Council Attorney-Advisors Marty McCoy and Rachel Ramos for attending the AC meeting and visiting all west coast sanctuaries.

He mentioned a recent vessel grounding, a 66-foot squid boat, just north of Natural Bridges.

MBNMS has been there every day overseeing the cleanup effort.

He also mentioned a fantastic and successful science cruise aboard NOAA Ship *Bell M. Shimada*.

Chad King will be giving a presentation on that cruise later in the meeting.

Paul is part of a hospitality/recreation and tourism leaders group. The focus is to make Monterey Bay an eco-tourism destination in the US. There will be a Sustainable Hospitality Development Summit in Monterey on January 11, 2019. For more information: <http://mbetr.org/>

Interviews are currently underway for the Executive Director of the Monterey Bay National Marine Sanctuary Foundation Chapter. This person will focus on fundraising, events and advocacy for MBNMS.

The CalAM desal project is continuing to move forward. A decision by the California Public Utilities Commission to certify the Environmental Impact Report is expected by September 13th.

MBNMS anticipates the permitting process to continue and anticipates some legal challenges.

Paul is working with Steve Ellzey, the co-producer for Your Sanctuary TV on creating sanctuary content through interviewing interesting people and field shots in the sanctuary. The intent is to involve AC members and MBNMS staff. They will be looking to schedule interviews in front of the camera. The interviews will be on local cable access. The goal is to create whole episodes to be sent to cable access channels across the country.

A partnership with US Forest Service (USFS) has been ongoing. They are working on a salmon exhibit covering watersheds, lifecycle, and the importance of terrestrial and ocean protection for salmon. It is a four-panel exhibit. It will be at the Sanctuary Exploration Center in approximately six months when complete. The exhibit will be shared with USFS and their visitor center.

Paul gave an overview of the Get Into Your Sanctuary event. A precursor to this event in this region was the Vet Into Your Sanctuary event, an opportunity to get veterans on NOAA R/V *Fulmar* to experience Monterey Bay and science conducted on board. They were able to participate in various science experiments, practice using the Whale Alert app and saw many marine mammals.

Congressman Jimmy Panetta was there for the first of two cruises. The following weekend was Get Into Your Sanctuary Day and was celebrated at the Sanctuary Exploration Center (SEC) and the Coastal Discovery Center (CDC). At the SEC, there were talks in the theater and various vendors talking to the public about how they can experience the sanctuary. The SEC saw between 600-700 visitors. At the CDC there was a whale talk, a pier exploration program and plankton tow, information about shore whaling, a scavenger hunt for kids and kayaking with Cal Poly students. Lastly, Paul announced the Ocean Fair is scheduled for August 25th in San Simeon. There would be various talks, informational booths and activities for kids.

III. PUBLIC COMMENT FOR ITEMS NOT ON THE AGENDA

None

IV-a. STANDING ITEM: Member Announcements

Katherine O’Dea, Conservation primary: Save Our Shores’ is celebrating its 40th anniversary with a very special Toast the Coast Benefit and Gala at the Monterey Bay Aquarium on Sept. 22nd.

Congressman Jimmy Panetta will speak. Dan Haifley will be recognized for his incredible career as he prepares to retire at the end of the year. All are warmly invited to attend.

Save Our Shore’s co-hosted a forum with the Moss Landing Marine Labs titled: Pathways to Responsible Aquaculture in California. This two-day event (August 10th and 11th) was an invitation-only event that drew 140 participants including representatives from state and federal government agencies, environmental non-profits and other NGOs, academia, existing aquaculture businesses, hopeful aqua culture entrepreneurs, investors, and interested citizens. Notable presenters included Secretary of Natural Resources, John Laird and Assembly member Mark Stone, both of whom talked about the promise and potential of aquaculture from a number of different perspectives and expressed general support for finding a way to promote responsible aquaculture in CA. There was a lot of information from experts presented over the two days detailing the current state of aquaculture in California and elsewhere including the potential for positive and negative impacts of developing the sector further in the state and a session on August 11th dedicated to exploring what may be possible in our Monterey Bay National Marine Sanctuary with presentations from Paul Michel, MBNMS Superintendent and Mark Silberstein, Executive Director of the Elkhorn Slough Foundation.

All presentations during the event were live streamed and recorded, the links to which can be found here for the agenda and proceedings: <https://www.mlml.calstate.edu/aquaculture/pathways-toward-responsible-aquaculture-in-california-august-2018/> and <https://caseagrant.ucsd.edu/events/pathways-toward-responsible-aquaculture-in-california>

Dan Haifley, At-Large primary: thanked everyone who worked to salvage the fishing vessel Pacific Quest, which went hard aground in the tidal area off Seymour Center north of Santa Cruz. US Coast Guard, Monterey Bay National Marine Sanctuary, California Department of Fish and Wildlife, County Sheriff and Santa Cruz Harbor Patrol.

O’Neill Sea Odyssey’s Board has hired Cyndi Dawson, of California OPC, as our new Executive Director. She will be Assistant Executive Director starting October 3 and will take over as Executive Director when I retire on December 31.

September 22, 7 am - 4 pm, SC County Govt Center parking lot - VW bus show called Santa Cruz Dub'n will benefit O'Neill Sea Odyssey

Carol Maehr, At-Large alternate: in a continuing effort to understand how cruise ship discharge monitoring is carried out, Carol read pages 277 through 280 of the Cruise Ship Discharge Action Plan from MBNMS' 2008 Management Plan. It appeared to her to be a thorough plan and includes communication with cruise ship companies. Strategy CS-2, activity 2.2 states "Standard reporting requirements will include standard documents for all cruise ships visiting MBNMS (vessel logs, printouts from holding tanks, etc.)" Carol asked again that the AC be able to review these documents. So far, the documents seem to not be available. Perhaps an evaluation at this time of how the action plan has been implemented over the last ten years would be in order, including estimated costs. Two questions being: If the Coast Guard does the inspections what are MBNMS' expenses and what role does or did Scott Kathey play?

Paul Reilly, CA Dept of Fish & Wildlife: recreational California Halibut fishing during June and July in Monterey Bay had the highest success rate in the past 5 years. Our California Recreational Fisheries Survey samplers observed a significant number of fish just over the legal size minimum of 22 inches, indicating a pulse of recruitment to the fishery by Halibut which are likely 3 to 5 years old, based on our ageing studies. Samplers also saw a wide size range of Halibut, up to 43 inches and 40 pounds.

Beach fishing Monterey County anglers noted that many of the productive beaches for surfperch and Striped Bass were unfishable for extended periods due to concentrations of drift algae and surf grass fouling hooks on Monterey, Seaside, and Marina sandy beaches. This beach wrack included kelp holdfasts, which may have been weakened by a combination of Purple Sea Urchin grazing and large swells.

In order to protect recovering populations of Yelloweye Rockfish, which are still considered overfished, the Department announced new recreational fishing restrictions that will take effect for groundfish beginning August 25, 2018 in waters north of Point Conception to the Oregon/California state line. In our management area, defined as Pigeon Point to Point Conception), take will be prohibited seaward of the 40 fathom (240 feet) depth contour through Dec. 31. It was previously allowed out to 50 fathoms.

Coastal Pelagic Species (CPS)

Updated landings for CPS in California can be found through this link:

<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=154299&inline>

The 2018/19 fishing year for Pacific Sardine is closed but vessels are allowed to land 40% sardine in their CPS loads until total incidental landings reach 2,000 mt. In the Monterey Bay area, in June and July, the amount of Market Squid landings fluctuated daily from huge to just a few tons, determined for the most part by weather. In August, there have been virtually no landings in Monterey and Moss Landing. Recently, consistent Market Squid landings in Half Moon Bay have drawn many vessels up there; however, this week an enormous and dense bloom of jellies forced all the boats back into port. Northern Anchovy landings in the Monterey Bay area, and Moss Landing especially, have been very consistent for the last couple of months until recently. A massive aggregation of anchovy kept a few vessels busy through June and July, but it has begun to disperse and become less predictable, and landings have dropped to none this week. Statewide, a total of 11,492.4 mt (46 %) out of the 25,000 mt Annual Catch Limit for Northern Anchovy in 2018 have been landed.

Stephany Aguilar, AMBAG primary: no new announcements

Kathy Fosmark. Commercial Fishing primary: the crab task force is working to develop plans to minimize impacts from crab gear in Washington, Oregon, and California. They are working towards positive changes. Motivation and opportunity to look at alternative gears including crab pots without ropes, done with GPS, is very expensive though.

There is currently a bill in legislation, SB-1017, that would affect the drift gillnet fishery. It would sunset that fishery in 2023. Fishermen have brought up some problems with the bill. Fishermen feel coerced into selling out and fair market trade is not being offered. The bill would transition the fishery to deep-set buoy gear. It will go through if Governor Brown signs the bill.

Eric Abma, CA State Parks alternate: mentioned an issue State Parks is facing at Point Lobos, there is not enough parking and it is overrun with people. A senior planner did a restoration of the south shore, the trails were so poorly defined and the area was degraded. Large amounts of vegetation were gone. 300,000 yards of soil were brought in and it looks great now.

Also, in last phases of Carmel Area General Plan, a long public process that started in 2012. Draft EIR is available on parks.ca.gov. Public comment is open through October 1st. Last public meeting will be September 10th at Rancho Cañada.

State Parks received funding from Ocean Protection Council and is looking to hire a seasonal interpretive specialist to highlight MPAs with a focus on Point Lobos.

School programs will start in the Fall with a focus on whale watching and natural resources. Whales and citizen science program for local schools. First year there will be only twelve programs.

Dr. Dan Brumbaugh, ESNERR alternate: at the last meeting, he mentioned a large 66 acre tidal marsh and grassland restoration effort at Hester Marsh on the south side of Elkhorn Slough (near Moonglow Dairy). The geo-engineering phase of that was just completed last week when the construction crew breached the temporary containment levees and a high tide brought water back into the marsh. Now the biological phase of the restoration is spinning up. We also recently submitted a new grant proposal to support the next restoration effort.

Elkhorn Slough has recently been designated as a Wetland of International Significance under the Ramsar Convention, the 39th such designation in the US. ESNERR will be having a small ceremony on Oct 5th to celebrate, with various local political leaders, including Rep. Jimmy Panetta, Asm Mark Stone, and representatives from state and federal agencies, scheduled to be in attendance.

Building on Katherine O'Dea's comments about the recent conference, Pathways towards Responsible Aquaculture in CA, he commended Save Our Shores, MLML, and CA Sea Grant for a dense, diverse, and thought provoking conference.

Building on Paul Michel and Dan Haifley's comments about the fishing boat grounding near Natural Bridges, he also acknowledged all the work that UCSC's Long Marine Lab and the UC Natural Reserve System have devoted to the initial response and clean up effort.

Gary Pezzi, Recreation primary: to tie in with other seat observations and comments on new visitors to the coast that have no idea how to drive it, or safely visit it, I added a tidbit of coastal, beach knowledge. That being that during this time of the year waters and beaches can look calm. However, there will be occasional south swell events that hit the coast. Different than late fall and Winter swells which show themselves more consistently and with some warning...southerly summer swells come in sets (sometimes 4-12 waves each) but spaced 15-35 minutes apart. Those not aware of these spaced out pulses can be taken by surprise and swept into the ocean if not careful and observant while at the beach. Share with your constituents!

Brian Nelson, Diving primary: gave a presentation to the Aqua Tutus Diving Club. Forty-three members were present and had great questions. The Monterey Shootout, an underwater photography competition, just finished. There were 165 participants. The dive newsletter was distributed and reached over 2,000 emails with a 32% open rate. Another presentation is scheduled with San Jose Flipper Dippers on September 19th. Lastly, they have not yet received word from CDFW on the urchin culling request.

PJ Webb, At-Large primary: the southern region is going through a medium natural deposition of tar event. Oiled birds are showing up. Thanks to BeachCOMBERS they had an early warning. There is a good history of what natural deposition looks like.

Highway 1 has been re-opened. Tourism and businesses are doing well but Highway 1 is treacherous. Be careful.

Possible new agenda item for the AC to consider. Other ACs are starting to weigh in and draft letters on the Department of Interior's reinterpretation of the Migratory Bird Treaty Act and incidental take of birds.

Dr. Steve Lindley, NMFS primary: the Gulf of Maine Research Institute, in collaboration with NMFS, is offering training on fisheries science and management in Santa Cruz and Portland in September and October. You can apply online: <https://www.gmri.org/fisheries-convening/mrep-west/apply>

Mike Bekker, Tourism primary: recently in a local big box grocery store, advertised Atlantic salmon labeled "via Chile" was pulled from the shelves when asked about it.

Next week 2018 Concours d'Elegance is coming up. Monterey Bay will be very busy.

Last month the Feast of Lanterns occurred in Pacific Grove. About 10,000 people attended.

Suggested MBNMS have a banner up at the stage in the future.

Pacific Grove just approved a new 116-room hotel near the library.

Round-Up has been a big issue in the news recently. Has been found in Quaker Oats. Should this be an agenda item in the future?

Rich Hughett, Recreational Fishing primary: Paul Reilly and Rich have participated in the California Collaborative Fisheries Research Program the past few years. This program started on the central coast twelve years ago and has since expanded throughout the state. The goal is to review on an annual basis the effectiveness of MPA system. Rich suggested a possible future agenda item having Jen Chiu, the statewide coordinator, give a presentation on the work this research program has done.

Dr. John Hunt, Research primary: no new announcements

Tucker Hirsch, Education primary: Annual Coastal Cleanup Day - Sept 15. Looking for a few more site captains. Spread the word and then we will be looking for lots of public volunteers on the day of. We host about 70 sites on this day. This is part of a Statewide effort. In 2017, 66,535 volunteers removed 839,632 lbs pounds of trash and recyclables from California's beaches, lakes, and waterways.

Sanctuary Stewards Training - October. We are open to taking volunteers through our training - 4 2-hour trainings over the course of the month. Especially excited for volunteers living in and/or willing to serve in the Monterey region.

SC County and PVUSD are making huge headway in partnering Environmental Education (EE) providers with school teachers, with the goals of (1) getting kids outside; (2) increasing teachers' confidence in and ability to teach the NGSS; (3) better integrating meaning EE into the curriculum. New science textbooks with the new science standards are entering classrooms this fall, and they include the CA Framework's Environmental Concepts and Principles, and are often focused on local phenomenon - i.e. biodiversity in the kelp forest as opposed to coral reefs. This is really great news for educating all CA students in CA ecosystems.

LT Darrina Willis, US Coast Guard alternate: no prepared announcements but is aware there is interest in Coast Guard regulatory role over cruise discharges, prevention and response. Will work with a representative from the district prevention office to get a presentation for the October AC meeting.

Al Budris, Business & Industry primary:

Based on the 2014 Survey, the following is expected for Monterey Car Week 2018

1. Total event attendees: 85,000 (expected over 100k for 2018)
2. Economic Impact: \$53.6 million
3. Spending / Out-of-Town Attendee: \$687.93 per day
4. Monterey County Resident: Nearly 60% of attendees are from outside of MoCo
5. Total Nights in MoCo: 41% stayed 5 or more nights with average stay of 4.4 nights
6. Car Week Events Attended: RM Auction-32%; Pebble Beach Tour d'Elegance-25%; Rolex Motorsports Reunion-25% and Pebble Beach Concours-18%
7. Demographics/Gender: Male-64%; Female-31% and No Answer-5%
8. Demographics/Average Age: 49 years
9. Demographics/Annual Income: \$115,187
10. Demographics/Ethnicity: Caucasian-65%
11. Demographics/Education: College Degree or More-63%

Steve Scheiblaue, Harbors - Monterey: there are vast schools of anchovy along the coast. This can be a problem for harbors, which in the past have seen large schools enter the harbor and die due to consuming all the oxygen.

Offshore aquaculture will involve harbor infrastructure. Offshore pens will be complicated and could be controversial. Katherine O'Dea's remarks at a recent aquaculture conference on the precautionary principle were insightful and deserve further discussion.

Tom Rowley, Business & Industry alternate: just read an article in the San Francisco Chronicle about seven northern counties in California, including Santa Cruz County, listed as high risk for wildfires. 50% of all the housing in Santa Cruz County is considered high risk. Monterey County was not included in the study, however, we aren't out of the fire season. His concern is what impacts the coast and sanctuary will face from all these fires. He suggested this as a future agenda item.

Keith Rootsart, Diving alternate: completed a Reef Check Big Sur expedition surveying sites from Big Sur to Cambria and reports healthy kelp forests at Point Sur and Andrew Molera. They went ashore at the San Simeon Exploration Center and found it looked like the presentation at the Cambria MBNMSAC meeting, but it was closed.

Keith participated in the urchin removal event at Albion Cove in Mendocino County and there were over a hundred volunteers and it was well-organized and thought out to make one large hole instead of a hundred little holes. But when the leader capsized his boat it became a hundred little holes. Keith is working with the north coast leaders to create a website to recruit and keep contact with volunteers.

Special Collection Permit for the north coast, incomplete letter received, MPAs removed from application.

SCP for central coast - slow walk week 10. No word if or when it will be approved.

Keith entered the Monterey Bay ShootOut: 165 people entered, 87 videos entered, over 800 pictures entered.

Submitted comments on California State MPA Action Plan due 8/16/18

IV-b. Update from NOAA Office of Law Enforcement's Dayna Matthews

Dayna Matthews announced his retirement and an official last day of September 30th. August 18th marks Dayna's 20th year of federal service with OLE. He thanked everybody for the opportunity to speak with them in this forum. This will be his last official AC meeting visit. His replacement has been identified as Special Agent Don Tanner. Special Agent Tanner has been with OLE for 15+ years. Most recently he was the lead agent on the Tomales Bay project getting illegal moorings removed.

Dayna gave an update on OLE staffing. An officer for Monterey Bay was identified and is being trained. All background checks are complete. This summer OLE advertised for five new agent positions, one of those being for California. Over 1,200 applications were received and are currently being reviewed.

V. INFORMATION ITEM: Marine plastics and microfibers

Dr. Sherry Lippiatt, California Regional Coordinator for NOAA's Marine Debris Program, gave a presentation on the Marine Debris Program and its pillars: prevention, removal, research, regional coordination and emergency response. She started with an overview of marine debris including the definition and sources. Prevention is addressed mainly through education and outreach as well as through NOAA Marine Debris Prevention Grants. She mentioned the NOAA Marine Debris Removal Grant Program federal funding opportunities for fiscal year (FY)'19 was announced in August. Save Our Shores was a recipient of this grant in FY'17. They have performed a significant amount of kayak and standup paddleboard cleanups in watersheds leading into MBNMS. Dr. Lippiatt also discussed how marine debris is being addressed through research. The Marine Debris Program has a citizen science program, the Marine Debris Monitoring and Assessment Project. Since 2012, this project has performed over 4,400 surveys at over 330 monitoring sites in nine countries. 2016 surveys showed consumer related collected plastic debris was more than double that of collected fishing related debris in Alaska, California and Oregon. In Hawaii and Washington, collected fishing related plastic debris was about the same as that of collected consumer related debris. When prevention grants are not offered, research grants are available. The focus for FY'19 research grants is risk assessment or exposure of populations to debris, debris fate and transport and gains in ecosystem services after debris removal. Lastly, she mentioned an example of coordinated efforts. The California Ocean Litter Prevention Strategy was developed in partnership with Sea Grant California and Ocean Protection Council which outlines how they will be addressing marine debris over the next six years.

Katherine O’Dea, Conservation primary and Save Our Shores Executive Director, gave a presentation on how Save Our Shores is addressing marine plastics. She gave an introduction to plastics and why they have become an issue. She shared statistics such as eight million tons of plastic end up in the ocean every year. Also, by 2050 oceans are expected to contain more plastics than fish. In 2017, Save Our Shores collected over 38,700 pieces of micro-plastics during beach clean-ups. Katherine discussed some short-term solutions already in effect to marine plastics such as polystyrene packaging bans and single use plastic bag bans. Save Our Shores recently submitted a petition to the Santa Cruz Board of Supervisors asking them to focus on four items: single use plastic toiletry bottles in hotels, microfiber filters for laundry facilities, single use coffee pods and single use plastic bottles of less than one gallon. Katherine ended with longer term solutions for marine plastics. The goal is to go from a linear economy to a circular economy. In other words, moving away from packaging ending up in a landfill to recovering, recycling and reusing packaging.

Tim Goncharoff, Integrated Waste Management Programs Coordinator with County of Santa Cruz Department of Public Works, gave a presentation on the steps taken in Santa Cruz County to protect MBNMS and the county from plastic pollution. Tim opened by stating plastic pollution has been a concern of Santa Cruz County for some time and there is great focus on protecting the sanctuary. In 2008 Santa Cruz County banned Styrofoam use in the food service industry and outlawed the retail sale of it by 2012. Single use plastic bags were also banned in 2012. By 2017 it was required all food service ware to be recyclable or compostable. Santa Cruz County’s environmental laws have been the model more than one hundred times in California and beyond. National chains such as Jamba Juice and Coldstone Creamery have started to change their national policies based on Santa Cruz County ordinances. Tim ended by mentioning there is still plenty to do and products to address such as plastic water bottles, plastic swabs, k-pods and plastic microfibers.

Advisory Council Member Discussion:

Advisory Council members asked Tim Goncharoff for clarifying information about microfiber laundry filters, disposing of compostable items as well as the continued use of single use plastic produce bags and plastic clamshells.

Advisory Council members asked Dr. Sherry Lippiatt about NOAA’s involvement in addressing waste and debris from wildfires ending up in sanctuaries as well as any change in direction within the Marine Debris Program under the Trump administration.

VI. INFORMATION ITEM: Report on research cruise aboard NOAA Ship *Bell M.*

Shimada

Chad King, Research Specialist for MBNMS’ Research team, gave a presentation on a recent research cruise at Davidson Seamount from July 15th to July 24th. Chad gave an overview of Davidson Seamount, seamount ecosystem and previous expeditions at this location. He gave an overview of NOAA Ship *Bell M. Shimada* and its equipment. Chad discussed the main goals and objectives of this research cruise as well as the projects being conducted. The goals included better understanding the linkages between climate, oceanographic conditions, and the abundance and distribution of seabirds, marine mammals, and their primary prey species such as zooplankton and fish as well as better understanding the distribution of microplastics in the offshore environment. Objectives included: conducting visual surveys along fixed transects to collect abundance and distribution data for seabirds, marine mammals, and other surface wildlife; collecting profile of water data including temperature, salinity, fluorescence, dissolved oxygen, and turbidity; collecting underway temperature, salinity, and fluorescence data; collect underway acoustic data to estimate

zooplankton and ichthyoplankton biomass. Chad presented videos and images demonstrating the marine mammal surveys, seabird surveys, CTD, plankton sampling, krill and fish sampling as well as persistent organic pollutants sampling. Chad ended by mentioning an upcoming opportunity MBNMS has aboard Ocean Exploration Trust's EV *Nautilus* October 21st through November 1st. The focus will be to complete initial surveys of a linear feature next to Davidson Seamount as well as biological sampling.

VI. STANDING ITEM: Working Group Updates

Research Activity Panel (RAP): The Research Activity Panel meets five times per year and has not met since the last SAC meeting, but we do have some information to share.

1. The international Deep-Sea Biology Symposium will be held at the Monterey Conference Center September 9-14. It is co-hosted by the Monterey Bay Aquarium Research Institute and the Monterey Bay Aquarium. It's certain to showcase some amazing discoveries. In charge of organizing the Symposium is RAP vice-chair Steve Haddock, who also serves as Vice President for Conferences at the Deep-Sea Biology Society. The conference website is <http://dsbs2018.org>. One-day passes are available for purchase if people want to join a particular session.
2. In early July, MBNMS scientists participated on a research cruise to Sur Ridge. There's a short write-up in the quarterly Office Report. Monterey Bay sanctuary's Andrew DeVogelaere, Erica Burton and Chad King will give a presentation on their coral work from this and previous research cruises at the Deep-Sea Biology Symposium.
3. Later in July, Monterey Bay Sanctuary's Erica Burton, Amity Wood and lead scientist Chad King participated on the NOAA Ship *Bell M. Shimada* research cruise to the Davidson Seamount. Of particular interest to me was the collection of highly concentrated water samples for chemical analysis of pollutants. We currently know very little about pollution in this type of environment.
4. Sanctuary scientist Dr. Steve Lonhart recently participated in SCUBA surveys along the Sonoma coast to gather information about sea urchin-bull kelp interactions. The West Coast Regional research vessel *Fulmar* assisted boats and divers from CDFW in the effort. More information is in the Office Report.
5. RAP members have recently been sharing information about the current dynamics of sea urchins and kelp forests in Monterey Bay sanctuary. One recommendation has been to do a comprehensive review of recent monitoring data, including satellite imagery and diving surveys to ground truth urchin densities relative to kelp spatial patterns. This is certainly a situation that highlights the value of long-term monitoring, and it would be great to use data from transects at Hopkins and elsewhere that have been monitored since at least the 1980s.
6. Members of the RAP participate on the sanctuary's Water Quality Protection Program Committee. That committee recently discussed the need for long-term monitoring and an assessment of the cumulative effects of climate change and traditional water quality stressors such as pesticides, industrial compounds, metals, nutrients, and pathogens. Climate change is causing increased ocean acidification, higher temperatures, lower dissolved oxygen and increased harmful algal blooms. These can all combine with pollutants to produce impacts that are difficult to predict. The State has issued a draft CA Ocean Acidification Action Plan and Representatives have proposed legislation in Congress to support research and advice on ocean acidification, so there may be funding targeted for this type of long-term assessment. MBNMS is considered an ocean acidification hotspot so action taken here would be valuable.

Conservation Working Group (CWG): The CWG has been exploring the possibility of leading a collaborative effort to advocate for Extended Producer Responsibility of Packaging legislation at the

state level. Following a presentation by the director of one of Canada's Packaging EPR programs (in British Columbia) and the sharing of a project plan drafted by Katherine O'Dea, CWG Co-Chair, CWG members agreed to move forward. Next steps are to form a coalition of local members but also including other similar minded organization across the state (e.g. Heal the Bay in Santa Monica has expressed interest) and to meet with CalRecycle to coordinate efforts. The CWG is also exploring other projects including alignment of various guidelines for responsible sea mammal viewing.

Sanctuary Tourism and Recreation Working Group (STAR): The STAR met on August 7th. The group reviewed the Friends to the Sanctuary (FTTS) program and next steps in the review process. Brian will present the FTTS framework at a future ONMS West Coast Regional Office meeting. The Recreation and Tourism newsletter was distributed. It was sent to 605 email addresses with a 35% open rate and a 20% click through rate.

VII. INFORMATION ITEM: Pilot project for trawl gear

Dr. James Lindholm gave a presentation on a project quantifying impacts of traditional and modified trawl gear on the seafloor habitat forming a component of Essential Fish Habitat. He started by giving existing management context. The central coast is one of the most protected seascapes in the US. There are fifty-one discrete management areas within MBNMS but according to a study in 2015 (Adelaars et al.), less than 1% of MBNMS had medium high to high conservation levels. Dr. Lindholm also gave some background information on demersal and pelagic fish habitats as well as seafloor habitat alteration. In Dr. Lindholm's study comparing the impacts of traditional and modified (less contact with the seafloor) trawl gear, results showed traditional gear left a larger footprint/door scour on the seafloor. In addition, the modified gear had less of an impact on physical and biological habitat attributes. For example, crested rim depressions in the seafloor, a physical habitat attribute used by fish to save energy, decreased by 99% from traditional trawl gear and 34% from modified trawl gear. Traditional trawl gear also used significantly more fuel than modified gear. He noted although there is still an impact on the seafloor from modified trawl gear, if we want locally caught fish, tradeoffs must be considered. A key take away from Dr. Lindholm's presentation was the habitats making up much of California's continental shelf might be less vulnerable to impacts from modified trawl gear.

Advisory Council Member Discussion:

There were various clarifying questions regarding the study and the results including productivity of a site after trawling and next steps for Dr. Lindholm's project.

Paul Michel commented there is a unique opportunity with the Collaborative Groundfish Essential Fish Habitat (EFH) Proposal likely to be approved by the Pacific Fishery Management Council. There is opportunity for research to see long-term relative impacts in areas inside and outside EFH areas. Paul proposed to work with Dr. Lindholm to develop a with research study framework if funding becomes available.

Meeting adjourned at 4:00 PM.