

**MONTEREY BAY NATIONAL MARINE SANCTUARY  
ADVISORY COUNCIL**

**Final Meeting Minutes  
August 19, 2016  
Moss Landing Marine Laboratories, Moss Landing, CA**

Agriculture: Jimmy Dutra  
 AMBAG: Steve McShane  
 At Large: Dan Haifley  
 At Large: Gary Hoffmann  
 At Large: PJ Webb  
 Business & Industry: Al Budris  
 CA Coastal Commission: Tami Grove  
 CA Dept. of Fish & Wildlife: Paul Reilly  
 CA EPA: Maria de la Paz Carpio-Obeso  
 CA Resources Agency: Cyndi Dawson

CA State Parks: absent  
 Conservation: Katherine O'Dea  
 Diving: Brian Nelson  
 Education: Tucker Hirsch  
 Commercial Fishing: Kathy Fosmark  
 Harbors: Steve Scheiblauer  
 Recreation: Gary Pezzi  
 Recreational Fishing: Richard Hughett  
 Research: John Hunt  
 Tourism: Mike Bekker

**NON-VOTING MEMBERS**

College: Clifton Herrmann  
 Channel Islands NMS: absent  
 Cordell Banks NMS: absent  
 Elkhorn Slough NERR: absent  
 Greater Farallones NMS: absent  
 Monterey Bay NMS: Paul Michel  
 National Marine Fisheries Service: Steven Lindley  
 U.S. Coast Guard: LT Kip Hutchinson

Alternates present in audience:  
 Christina McGinnis: At-Large  
 Letise LaFeir: Conservation  
 Phil Sammet: Diving  
 Bart Selby: Recreation  
 Steven Haddock: Research  
 Deb Wilson-Vandenberg: CA Dept. of Fish & Wildlife  
 Dawn Hayes: Monterey Bay NMS

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

Jim Harvey, Director of Moss Landing Marine Laboratories (MLML), welcomed the MBNMS Advisory Council to MLML. MLML is part of the California State University (CSU) system. MLML has nine faculty members with a third of that faculty being new this year. MLML recently celebrating its 50<sup>th</sup> anniversary during a three-day event.

Jim answered questions regarding the budget for MLML. It takes \$3.3 million to run the facility (including five additional properties) and pay all salaries. \$20 million is brought in through contracts and grants each year.

Jim also answered questions regarding the status of the Research Vessel Point Sur. The Point Sur is a 135 foot vessel that was operated for the National Science Foundation (NSF). It has since retired with NSF and is now owned by the University of Southern Mississippi. MLML is in the process of discussing the operation of a new joint vessel with Scripps Research Institute for the CSU and University of California systems.

#### **APPROVAL OF MEETING MINUTES**

Approval of June 17, 2016 DRAFT Meeting Minutes

**MOTION: Al Budris, Gary Pezzi seconded.**

(Vote: 15 in favor, 0 opposed, 2 abstentions)

#### **II. STANDING ITEM: SUPERINTENDENT'S REPORT**

MBNMS was able to backfill the Education & Outreach Coordinator position. Amity Wood, currently serving as the Camp SEA Lab Director, will be stepping into the role in early September.

Office of Law Enforcement (OLE) Supervisory agent Brian Lee will be working up north soon. OLE is currently recruiting for the NOAA OLE uniformed officer stationed in Monterey (Bob Yrena's replacement).

Get Into Your Sanctuary day, an annual summer event, highlights how the public can take advantage of their sanctuary. Events are held at both MBNMS visitor centers. Next year Paul would like to challenge MBNMS staff and SAC members to reach out more to constituencies. He would like to increase involvement for this event and suggested a possible subcommittee for next year's planning.

Research Vessel *Nautilus*, operate by Dr. Robert Ballard's Ocean Exploration Trust, is currently exploring USS *Independence* in the northern region of MBNMS. Dive exploration progress can be followed on *Nautilus* Live: <http://www.nautiluslive.org/>.

Monterey Beach Sportsfest will be held September 24<sup>th</sup> and 25<sup>th</sup>. There will be various beach and ocean competitions including beach volleyball, open-water swims and stand-up paddleboard races. There will also be an ocean and health wellness expo.

NOAA Headquarters is still working on a response to MBNMS' Advisory Council regarding the letter requesting legal and jurisdictional issues of the CEMEX sand mine in Marina to be addressed. There should be more information on this topic at the next Advisory Council meeting.

#### Advisory Council Member Discussion:

There was further discussion regarding the CEMEX sand mine issue. It was requested to receive an update on the issue from California Coastal Commission at the next Advisory Council meeting.

It was requested that there be coordination between MBNMS and Monterey Harbor during Monterey Beach Sportsfest.

Clarification was given regarding the Carmel River and its potential breach this time of year. The last action taken was to close the mouth of the river. The natural berm was having trouble reforming due to the erosion from heavy storms.

There was discussion regarding the socioeconomic survey for wildlife viewing operations. The survey went out to fifty different operators and about 25 operators responded. A conservation series report will be available and survey results can be made available.

A request was made to include a section in the MBNMS Office Report highlighting Advisory Council members and their volunteer activities.

### **III. West Coast Regional Updates Affecting MBNMS**

California Current and World Heritage Proposal:

Bill Douros gave a presentation on the California Current Conservation Complex (CCCC) nomination as a World Heritage site. Becoming a World Heritage site is the highest level of international recognition. There are currently 1,052 inscribed sites: 814 cultural, 203 natural, 35 mixed. Of the 1,052 sites only 47 sites include a marine component. To become a World Heritage site, a country must develop a tentative list of important natural and cultural heritage sites within its boundaries, a nomination must be submitted to World Heritage Center, the nomination must be reviewed by advisory bodies including the International Union for Conservation of Nature (IUCN), and lastly the World Heritage Committee meets to determine new World Heritage sites. In July 2016, NOAA forwarded four sites to be considered. In the fall of 2016, expert panels will convene to evaluate the potential sites, the public will be able to review the list of potential sites, and US National Parks Service will send the tentative list to the United Nations Educational, Scientific and Cultural Organization (UNESCO) for consideration.

The CCCC includes three national marine sanctuaries (MBNMS, GFNMS and CINMS), two national parks, one wildlife refuge, one coastal monument and numerous state parks including state-designated marine protected areas. Benefits of being designated as a World Heritage site include increased tourism, facilitated partnerships with private sector, non-governmental organizations (NGOs) and governmental agencies and promote local, regional and national pride in conservation programs, natural resources and the locations themselves.

#### Public comment

Dr. Barbara Block – Stanford University professor  
Endorse World Heritage Site

Dr. James Lindholm – Institute for Applied Marine Ecology, CSUMB  
I am here to support the SAC in writing a letter of support for the potential designation of a World Heritage Area on the Central Coast of California.

Mary Alice Cerrito Fettis – President, Fisherman's Wharf Association and Chair, Whalefest Monterey  
Support benefit of UNESCO site for tourism of Monterey.

#### Advisory Council Member Discussion:

Q: Would this remain a wet-side proposal? It would not include a shore-based side?

A: That's correct. It would remain wet-side.

Q: Would this create any limitations on human activity within the sanctuary?

A: No new limitations would be created by MBNMS or internationally.

Q: What can the Advisory Council do to support this?

A: A letter of support could be written or a resolution could be passed.

Q: Is there a sufficient management plan in place with this potential high increase in tourism?

A: That can be part of the current Management Plan Review. We can address the status of World Heritage while also addressing management and resource issues. This does not require a new layer of management. Furthermore, there must be an existing structure for management in order to be considered a World Heritage site.

Q: Who pays for stationery, brochure, website, etc. for World Heritage recognition to be included for MBNMS?

A: UNESCO has its own website. It would also just be referenced on our existing websites. For example, Yosemite doesn't have a separate World Heritage site website.

Q: Can UNESCO offer more support than just a designation such as enforcement or funding? What would the public expectations be with this recognition?

A: There can be funding for various programs but the US has not focused on that as a reason to designate a site. There could be increased public expectation which could require funding.

Q: Has there been contact with superintendents of national parks on the pros and cons of World Heritage site designation?

A: Yes, there have been no communicated downsides to designation.

Q: Will enforcement be an issue? We don't have enforcement resources like the national parks.

A: There is existing enforcement. US Coast Guard provides enforcement. There are also agreements with California Department of State Parks and California Department of Fish & Wildlife.

Q: Would this designation increase response in emergency situations?

A: Probably not but it would increase the community's response and concern.

Q: Would this help to get federal funding?

A: Possibly.

A motion was made to consider a letter of support for World Heritage site nomination at our next meeting. The letter will be drafted and edited by PJ Webb, Tucker Hirsch, Dan Haifley and John Hunt prior to the next meeting.

#### **MOTION: Dan Haifley, Tucker Hirsch seconded.**

(Vote: 12 in favor, 1 opposed, 3 abstentions)

#### **IV. PUBLIC COMMENT FOR ITEMS NOT ON THE AGENDA**

Hebard Olsen

I don't trust the fresh water board to ask for reasonable requirement about desalination outfall. I would like the sanctuary to provide guidance as to the issues of saline settling killing sanctuary life!

#### **V. Continuation of West Coast Regional Updates Affecting MBNMS**

Offshore Wind Energy Proposal:

Trident Winds has requested an unsolicited lease to build a floating offshore farm of wind turbines. Existing turbines have blade lengths of about 42 meters. Trident Winds is proposing to use 100 meter long blades. The proposed site is located just outside the southwest edge of MBNMS. This site was chosen because it is purported to be cost effective. Although it may not be the windiest area off the coast of California, the adjacent coast is populated and there are existing transmission lines. This location would also help to avoid any shipping lane traffic. It has been unclear if a wind farm could be built within a national marine sanctuary. Concerns of building a wind farm include the effect on

low flying birds that far offshore. There would need to be a great distance between the turbines and the sea surface in order to accommodate flight path of most birds.

If other companies show interest in this area as a wind farm, there will be a bid between Trident Winds and the other companies. If no other company shows interest, Trident Winds will be given five years to conduct impact studies.

Advisory Council Member Discussion:

Q: How much power would the wind farm generate?

A: Approximately 750 megawatts. Nuclear power plants produce approximately 1,000 megawatts.

Q: At a recent presentation, Trident Winds claimed the Bureau of Ocean Energy Management (BOEM) would not let them place a wind farm inside a sanctuary. Is this correct?

A: BOEM cannot issue permits inside a sanctuary, they do not have lease authority inside the sanctuary.

Q: What would be the length of the lease?

A: 20-30 years

Q: What is the timeline for this project?

A: If no other companies are interested, it would take 2-3 years from now for Trident Winds to get the lease.

Q: Wind farms are ugly. How will this affect the sanctuary? Could this have an impact on being designated as a World Heritage site based on potential visibility of the wind farm?

A: There is a juxtaposition between these two proposals but one should not affect the other.

Q: How many turbines would be included in this site?

A: Up to 100.

**V. INFO ITEM: Management Plan Review Staff update – Artificial Reefs**

In early June Dawn attended an artificial reef workshop in Alexandria, VA. The vast majority of artificial reefs are a widely used but highly varied fisheries management tool. Recreation is a very small representation of artificial reefs nationwide. Artificial reefs are not well understood, studied or monitored due to the challenges researchers face with monitoring design (lack of controls), variability of reef type and resources to implement. Maintenance of these artificial reefs is almost nonexistent. There is a great need for a national database and some level of federal oversight. Participants identified a need for a federal “convener” to bring the state/local processes together to streamline and coordinate as well as develop best management practices. Stakeholder involvement needs to happen from the beginning of the establishment of an artificial reef. Communication and transparency is crucial. Currently, stakeholders are not always well represented.

In regards to the desire to have artificial reefs in MBNMS, the state of CA does have an Artificial Reef Plan. It was one of the first developed plans. The State's current focus is on MPAs, so staff who might normally address this plan have been reassigned. The current issue is not that artificial reefs cannot be permitted. The Artificial Reef Plan guidelines state the materials used for reefing must mimic the natural habitat substrate to the maximum extent practicable. This precludes permitting the sinking of a ship/aircraft/rail car for artificial reefs purposes (fishing or recreational). The plan is focused on habitat restoration, mitigation and stock enhancement and does not consider recreational use. The plan is currently unfunded, efforts are unfinished and needs a science plan. To implement, California Department of Fish & Wildlife (CDFW) would need funding,

a science plan for artificial reefs and some policy guidance. CDFW is looking to have a white paper out this winter on future implementation of artificial reefs.

Addendum to Management Plan Review Staff update – See attached Document A

Advisory Council Member Discussion:

Q: What is the next step for MBNMS?

A: We will need to wait for the results on the white paper before any decisions, if any, can be made by MBNMS.

Public comment

Keith Rootsart – Reef Check California

Artificial reefs are of great benefit to fish recruitment and take pressure off other sites.

**VI. ACTION ITEM: Management Plan Review Council Workshop – Climate Change**

Sara Hutto gave a presentation on the development and progress of GFNMS's Ocean Climate Program. The Ocean Climate Initiative was founded in 2008 and designated as an ONMS Collaborative Center in 2015 with three focal areas: Climate-Smart Conservation, national and regional partnerships, international leadership. In order to integrate climate change into GFNMS management, staff focused on mitigation, science, monitoring, adaptation and communication. A GFNMS working group developed over 130 strategies to reduce the sanctuary's carbon footprint. 75% of GFNMS output was from staff commutes. Per capita, GFNMS staff emissions have dropped by 2.08 megatons CO<sub>2</sub> equivalent since 2008. A Climate Change Impacts Report and Ocean Climate Indicators Monitoring Plan were also developed by the working group. The intentions of the report are to educate the community, mitigate impacts and obtain the best available information on changing and future conditions. The monitoring plan was developed to provide a comprehensive monitoring inventory and plan for physical and biological indicators of climate change.

Two workshops were created under the Climate-Adaptation Project: Focal Resources Workshop, Vulnerability Assessment Workshop. The Focal Resources Workshop recommended 53 species, 9 ecosystem services and 10 habitats to be the resources used in vulnerability assessments. The Vulnerability Assessment Workshop assessed the sensitivity, exposure and adaptive capacity of those resources. The resources were narrowed to 18 species, 10 species post-workshop, 6 ecosystem services and 8 habitats. A working group was also created under the Climate-Adaptation Project. It included federal, state and local agencies, NGOs and academic institutions. The working group's final outcome was the Climate-Smart Adaptation Report which outlined 78 strategies approved by the GFNMS Advisory Council.

GFNMS will now focus on a Climate Action Plan which includes a modified selection of the adaptation strategies, implementation details: timeline, cost, resources, participating partners, and funding to begin conceptual plans.

Advisory Council Member Discussion:

There was discussion to clarify aspects of the various reports. After discussion about MBNMS's next steps, it was suggested to have marine experts convene to review the GFNMS Vulnerability Assessment and Climate-Smart Adaptation Report and determine how MBNMS can move forward using GFNMS data as a basis.

**VII. STANDING ITEM: Member Announcements/Reports**

Dan Haifley, At-Large primary: On Friday August 26<sup>th</sup>, West Marine will be hosting a Charity Night to raise funds for local organizations – including O’Neill Sea Odyssey – during the grand opening of their new store location at 2400 17<sup>th</sup> Avenue in Santa Cruz. There will be food, beverages, live music, fun and entertainment, including a VW bus photo booth and Hawaiian Dancers! I am selling \$10 tickets to the event to raise funds for O’Neill Sea Odyssey, and we will have a table at the event. To buy a ticket and to learn more, visit our blog: <http://oneillseaodyssey.org/blog/> or contact me directly. You can also learn more at West Marine’s web page about the event: <http://www.westmarine.com/santacruz>.

Steve McShane, AMBAG alternate: no new announcements

LT Kip Hutchinson, USCG alternate: no new announcements

John Hunt, Research primary: Monterey Bay Community Power is a regional project looking to lower energy costs to residents and businesses using clean-source power. PG&E would retain its role in maintaining power lines and providing customer service. For more information, visit: <http://montereybaycca.org/>.

Gary Pezzi, Recreation primary: no new announcements

Bart Selby, Recreation alternate: Monterey Bay is full of life right now. There has been a lot of fishing including squid fishing but it seems to be slowing down. There are also many whales present.

Al Budris, Business/Industry primary: The Monterey Peninsula Chamber of Commerce has a new keystone initiative. They will be holding an ecotourism/eco-recreation symposium in the spring covering Costa Rica, Guatemala and Panama. Exchange programs with these three countries and CSUMB will start soon. Monterey Bay Economic Partnership is partnering with Silicon Valley Housing Trust to fund \$10 million in a housing trust fund to finance affordable housing. Monterey Bay Economic Partnership also created a workforce development initiative partnering with many local employers to create internships for students throughout the region. Monterey County Business Council is holding an informational luncheon at Seaside Bayonet on September the 12<sup>th</sup> at 11:45AM to talk about the fracking ban bill. The Monterey County Business Council also reported they lost a vineyard to the Soberanes Fire, a \$185 million profit. Lastly, Old Monterey Business Association is collaborating with the Rotary Club of Monterey to restore the Lower Presidio Historic Park, a twenty-one acre park.

Clifton Herrmann, College primary: no new announcements

Katherine O’Dea, Conservation primary: The 2016 Annual Coastal Cleanup Day is scheduled for September 17<sup>th</sup>. Over eighty sites will be cleaned up that day. Most of the sites already have a site captain but they still need more. No prior experience is necessary.

Steve Lindley, NMFS primary: Today, NMFS released for public comment the Ecosystem-based Fisheries Management Policy and Roadmap, a guide to implementation of the Ecosystem-based Fisheries Management Policy over the next five years.

Gary Hoffmann, At-Large primary: Crab season ended as of July 4<sup>th</sup> but there have been at least four confirmed whale entanglements in the past couple of weeks.

PJ Webb, Citizen At-Large primary: There will be a SAC and Staff reception the night before the next SAC meeting on Thursday evening October 20th. Directions and invitations will be sent via email. Appetizers and beverages will be provided.

Fires in the region have made the air very smoky and caused some closures during the high time for tourism.

In San Simeon, we celebrated “Get Into Your Sanctuary” with kayaks and some outreach to the chambers of commerce and there was a slew of activities for kids. It was a very busy day with many visitors to the park. I encourage SAC members to participate in these activities because it helps with your outreach and it is fun!

Paul Michel, MBNMS primary: no new announcements

Mike Bekker, Tourism primary: Cannery Row Company is currently busy with car show events.

Paul Reilly, CDFW primary: The Pacific Fishery Management Council adopted recommendations for sport and commercial fishing regulation changes for 2017-18. These included an allowance of one canary rockfish per day for sport anglers (previously 0), and an increase in the maximum depth of sport fishing to 50 fathoms (previously 40 fathoms) for the Central Groundfish Management Area, which includes the Monterey Bay area. In addition, the maximum allowable depth of sport fishing in the San Francisco Groundfish Management Area increased from 30 to 40 fathoms; this includes the area from Pigeon Point north to Point Arena. Additional changes to the recreational bag limit regulations will be as follows: 1) within the overall limit of 10 rockfish/greenling/cabezon, an increase in bocaccio to 10 fish, and a reduction in black rockfish from 5 to 3; and 2) the lingcod bag limit will be decreased from 3 to 2 fish. A key change in the commercial fishery will be to allow limited retention of canary rockfish.

Central Coast beach anglers found a relatively high abundance of striped bass, many of them sublegal-sized, even for anglers targeting surfperch (for which they use smaller hooks).

California halibut fishing was excellent in San Francisco Bay and nearshore ocean waters but about average for the Monterey Bay area. CDFW staff attended a 2-day meeting of the Dungeness Crab Gear Working Group in Santa Rosa on July 13-14. Specific gear modifications and an example of spatial monitoring of effort in Monterey Bay were presented as two approaches to reduce whale entanglements. In 2016, an estimated 22,100 Chinook salmon were harvested by sport anglers through July. Catch in the Monterey areas and south came in well below preseason forecasts. In 2015 an estimated 11,400 Chinook salmon were harvested.

The Department is coordinating the development of four new signs related to MPAs and fisheries at five harbors: Richmond, Berkeley, Santa Cruz, Morro Bay and Ventura. The Department shipped new MPA guides to CDFW offices, other government offices, sporting goods stores, non-profit businesses, commercial fishing enterprises, harbors, scuba/ecotourism groups, and individuals. The Department expects the Fish and Game Commission to adopt the *2016 Final Draft Master Plan for MPAs* at their August 24-25, 2016 meeting in Folsom. The regulatory season started for squid on April 1. In the Monterey area (Moss Landing and Monterey ports), consistent landings began on July 11, and preliminary landings to date are 6,058 metric tons (mt). Additionally, 346 mt have been landed in Half Moon Bay and San Francisco ports. To date 17,869 mt have been landed statewide (as

of 8-18-2016). Due to the recent El Niño event, it is thought that squid landings this season will be nowhere near the record season of 2014-15 for central California.

Maria de la Paz Carpio-Obeso, California EPA primary: Once-Through Cooling (OTC) Policy/Implementation-Interim Mitigation requirements - The OTC Policy requires owners or operators of existing power plants to implement measures to mitigate the interim impingement and entrainment impacts resulting from their cooling water intake structures. Interim mitigation requirements became effective on October 1, 2015 and are in place until the owner or operator achieves final compliance with Policy requirements. The Policy provides the options for power plant owners and operators to demonstrate compliance with interim mitigation requirements. Most of the power plant owners or operators will provide funding to the California State Coastal Conservancy, working with Ocean Protection Council to fund an appropriate mitigation project. Resolution 2015-0057 includes fee calculation procedures for power plants that have been selected to provide funding to mitigation projects. All draft determinations of the Executive Director on mitigation measures are posted for a 20 day public comment period and circulated to persons who have requested public notice on matters related to the Policy. The State Water Board has released a draft determination to approve mitigation measures for Encina Power Station to comply with the Policy. Written comments must be received by 12:00 PM noon on September 23, 2016. You may visit

[http://www.waterboards.ca.gov/water\\_issues/programs/ocean/cwa316/](http://www.waterboards.ca.gov/water_issues/programs/ocean/cwa316/)

Trash Water Quality Control Plan Amendments Implementation-Approved Treatment Control devices and systems - On January 12, 2016, U.S. EPA approved the State Water Board Trash Water Quality Control Plan Amendments. Requirements in the Amendment include: State Water Board staff development of a list of approved treatment control devices and systems that meet the requirements for certification as "full capture systems" as defined in the Trash Water Quality Control Plan Amendments, will be available to the public on the State Water Board Municipal Storm Water website in late September 2016.

Tucker Hirsch, Education primary: There will be a forum with local candidates on October 20<sup>th</sup> at CSUMB. Agenda items include ocean conservation and climate change. Also at CSUMB, there will be a Climate Summit hosted by the Climate Action Compact on October 27<sup>th</sup>.

Brian Nelson, Diving primary: August Newsletter is out. There are 2,430 active contacts. 583 contacts opened the newsletter, a 28% open rate. The click-through winner was You Tube Whale Shark – Go pro Winner at 55%.

Upcoming major events include Monterey Shoot Out August 26-28, 2016 and the Diving Equipment & Marketing Association (DEMA) Show in Las Vegas November 16-19, 2016.

Letise LaFeir, Conservation alternate: Monterey Bay Aquarium (MBA) is currently ramping up their marketing. State legislature will be adjourning at the end of August. MBA is working to support Proposition 67 to uphold the statewide plastic bag ban. Julie Packard is the primary signer on the official voter guide for Proposition 67. John Laird, California State Assembly member is a cosigner as well as Scott Smithline, director of Calrecycle. MBA will be paying for an intern to coordinate volunteers for the Proposition 67 initiative. Also, MBA launched webpages [www.montereybayaquarium.org/climate](http://www.montereybayaquarium.org/climate) and [www.montereybayaquarium.org/plastics](http://www.montereybayaquarium.org/plastics)

Deb Wilson-Vandenberg, CDFW alternate: no new announcements

Bart Selby, Recreation alternate: no new announcements

Christina McGinnis, At-Large alternate: no new announcements

### **VIII. STANDING ITEM: Working Group and Subcommittee Reports**

Conservation Working Group (CWG): The CWG held their first meeting since Katherine became the Chair. CWG members did a look back of what the CWG has done so far for MBNMS. They also talked about the Management Plan Review and how the CWG can benefit from the process as well as provide impactful input.

Sanctuary Education Panel (SEP):

Want to agendize having an Educations Program presentation for the SAC

Would like to see if we can get the Currents Symposium up and running for 2017 or 2018?

Growing list of interested SEP members. Sent minutes out. Next meeting is either August or November.

Looking forward to the announcement of the new Education and Outreach Coordinator

Fishermen in the Classroom discussions have not really progressed since the last report in June due to summer holidays.

Research Activity Panel (RAP):

The Research Activity Panel did not meet in July.

Interested RAP members have continued to develop concepts for the MBNMS Management Plan update, particularly for Action Plans related to research.

In general, the current Management Plan contains issue-based action plans, many of which incorporate a research component. It may be useful to have a stand-alone Research Action Plan that sets out a program for most efficiently gathering and organizing information relevant to sanctuary management. The RAP has discussed the role of long-term monitoring as a central focus for the research program. Long-term monitoring provides a consistent approach to identifying resource conditions in need of management action, as well as creating a system to quickly compile specific information when urgent issues arise.

The sanctuary research program has experience with organizing monitoring information through its SIMoN website, and has communication links through the RAP to high quality partner monitoring programs. The core of the effort the RAP is discussing is to have the MBNMS take the initiative to formulate specific management questions to drive cooperative monitoring design, data acquisition and interpretation. This would not require the development of new monitoring programs, data bases or web-based assessment tools, but instead would take advantage of existing efforts to make partners' tools most useful for resource management. We're currently working with the following three assumptions:

1. MBNMS management questions should come from the issues identified in the Management Plan update. The research team and RAP should shape these into specifically-worded management questions that can be answered with monitoring data.

2 This effort can be considered as three overlapping approaches: (a) the research team (and RAP) efforts to address very specific MBNMS issues as they come up or as identified in the Management Plan; (b) the coordination effort with partners to generate common assessment questions that can drive collaborative monitoring; and (c) the major partner-driven effort to combine data sets, identify benchmarks of ecosystem health, and deliver report cards and other immediately useful information to managers through web portals.

3. This approach does not propose any new monitoring programs or new database/portal systems, but is focused on leveraging and adapting existing efforts so the combined monitoring efforts of many partners will deliver monitoring results in formats most useful to resource managers. In other news, RAP vice-chair Steven Haddock compiled these additional updates from local research institutions:

Katie Lage is the new librarian at MLML. She will be around most of the day Friday if you want to encourage people to stop by and introduce themselves!

Amanda Whitmire is the new librarian at Hopkins Marine Station. Like Katie, she also has an open-door policy for visitors to their beautiful facility.

Dave Clague (MBARI) did an ROV dive on Guide Seamount on their way back from their northern expedition. It is one of the sites included in legislation introduced by Sam Farr to place a number of seamounts and ridges offshore California under some level of Marine Protection. Pioneer, Guide, and Gumdrop Seamounts are likely to be considered for addition to the MBNMS. Guide was the least well characterized of all the sites listed in the legislation, so the new dive provides a more extensive look at the animal communities on the seamount. Lonny Lundsten wrote a piece in their daily blog about the dive (<http://www.mbari.org/northern-2016-aug-15/>).

Several institutions including MBARI, UCSC, MBNMS, NPS, and MLML are collaborating on a passive acoustic station (microphone) attached to the MARS cabled observatory in the Sanctuary. Moss Landing's Mercury in Fog study lead by Kenneth Coale: The purpose of this research is to understand the processes responsible for the unusually high concentrations of methyl mercury (a neurotoxin) in coastal fog. Members of the team have shown that fog-water contains many times more methyl mercury than does rain-water, and animals (including spiders and mountain lions) that live in foggy areas (redwood forests and maritime chaparral complexes) have greater body burdens of mercury than the same animals from non-foggy areas. With scientists from the California State University at Monterey Bay and the University of California at Santa Cruz, a fog-water sampling network was established from Big Sur to Eureka, California. Our group at Moss Landing Marine Laboratories set to sea on four research cruises and sampled the coastal sea waters, fog, plankton and sediments between Southern California and Central Oregon to locate the source of this mercury. They found that the methyl mercury is concentrated more than 40 times at the very surface of the ocean in the surface microlayer, a film about as thick as a hair is wide. Bubbles bursting through this layer can carry mercury into both fog and sea-spray. Further studies are needed to understand the broader impacts to these systems and how to manage this impact.

#### Recreation and Tourism Subcommittee (RATS):

The August RATS Newsletter is out. There are 583 active contacts. 143 contacts opened the newsletter, a 28.9% open rate. The click-through winner was Seasons of the Sea at 39% followed by Fishline at 26% and the NOAA Calendar at 22%.

#### Motorized Personal Watercraft Subcommittee (MPWC):

Our last meeting included an in depth review of that proposal with a couple of big wave surfers (Shawn Dollar and Ed Guzmann) who were to then bring it to the handful of big wave surfers that these regulations most directly affect. The momentum dropped off at that point. Shawn, in the next couple of months, sustained an almost fatal neck injury while surfing in Big Sur. It was his understanding that the Titans of Mavericks (organizational group for the 1 Day Big Wave Surfing contest) received the draft and were acting on it. Apparently, that did not happen.

It would be nice to say 'case closed' but it really is not closed. There will still be giant surf on the horizon, as happens most every winter. It was pointed out by one of the first persons to surf Maverick's, that the ad hoc water patrol surfers used from 1994 to 2010 was instrumental in protecting the big wave surfers at Maverick's. We have made progress that should not be lost and archived.

The Sub Committee generally feels that Staff should consider being considerate of the safety issues, open to changing interpretation of current regulation and especially keeping 'the door open' to ever-changing efforts on both sides. It might entail a dedicated 'hotline' that deals specifically with the issues presented. There are still many who want to see the progress made continue into an acceptable solution. Maverick's is not going away.

#### GFNMS Overflight Working Group:

There will be a meeting on Monday, the 22<sup>nd</sup>. There will probably be a couple more meetings then the working group will be wrapped up.

Wildlife Disturbance – Approach Issues Working Group: The first meeting was held on July 13<sup>th</sup>. All following working group meetings were scheduled. The next meeting will be held on August 31<sup>st</sup> at the MBNMS office in Monterey. CDFW Captain Bob Puccinelli will be there to talk about enforcement issues.

Wildlife Disturbance – Ocean Noise Working Group: The first meeting was held in July but most of the planning will happen at the next meeting in September. They did receive a presentation at last meeting on the MBARI Monterey Accelerated Research System (MARS) hydrophone and acoustics.

Meeting adjourned at 4:08 PM