



GREATER FARALLONES and MONTEREY BAY
NATIONAL MARINE SANCTUARIES JOINT ADVISORY COUNCIL
MEETING

Half Moon Bay Yacht Club
214 Princeton Ave. Half Moon Bay, CA 94019
Wednesday August 19, 2015

Note: The following notes are an account of discussions at the Sanctuary Advisory Council meeting and do not necessarily reflect the opinion or position of the Greater Farallones National Marine Sanctuary or the National Oceanic and Atmospheric Administration.

Copies to:

Bill Douros, ONMS West Coast Regional Office
Meeting called to order at: 9:08am

Review Agenda

Roll Call

Review Agenda

Swear-in new GFNMS Council Members: John Berge is only new GFNMS member present at this meeting.

Approve GFNMS May 20th, 2015 minutes

Motion: John L.

Second: George C.

Approve: 10

Object: 0

Abstain: 0

Approve MBNMS June 19th, 2015 minutes

Motion: Steve Scheiblauber

Second: Kirk Schmidt

Approve: 15

Object: 0

Abstain: 0

GFNMS Superintendent's Report

ACCESS Update

We had very high numbers of feeding blue and humpback whales on our July ACCESS cruise. On at least two days we counted upward in the 100-200 range, each day. Many were in or near the north Traffic Separation Scheme (TSS), over Bodega Canyon, north and east of Cordell Bank, and west of Pt Reyes. Vessel Traffic Service (VTS) was contacted several times by FULMAR crew, notifying the Coast Guard and the crew also contacted ships within the area. We saw at least one ship change course to avoid the concentration of whales (the ship was

north of the TSS). Net sampling recorded abundant small-sized krill. With the persistent warm water blob both north and south of our area, the sanctuaries may be one of few places where food is available, hence the higher than normal concentrations of whales.

Beach Watch

The Cassin's Auklet mortality event tapered off back in February. We are currently working with COASST (Coastal Observation and Seabird Survey Team) and University of Maine to look at the impacts of the persistent warm water blob, which started forming in 2014, and using the mortality event of Cassin's Auklets as an indicator of potential ecosystem impacts. The paper might appear in the journal *Science* later this year.

Barbara: is the Cassin's auklet die-off food related?

Jan Roletto: The majority of Cassin's Auklet deaths we saw in our region from October 2014-November 14 were probably food-related, but since then it's probably something else.

Strandings of live and dead northern fur seals and Guadalupe fur seals have leveled off since July. This mortality event started in December, coinciding with weaning of the fur seal pups, and lasted to July.

The Marine Debris monitoring project added two new sample sites, and includes protocols to remove trash after it has been documented. There are now 6 sampling sites, 2 accumulation and 4 standing stock. An annual report is now available, and the [web page](#) will soon be updated.

Permits

A permit was issued in late May 2015 to Grace Kato (State Lands Commission) to authorize the California State Lands Commission to implement the Tomales Bay Vessel Mooring Program, which was established as part of the Tomales Bay Vessel Management Plan developed by GFNMS in partnership with State Lands. The program sets a limit on the number of moorings and includes specific criteria for mooring locations, required specifications for mooring tackle, and requirements for the inspection and maintenance of moorings. The permit is effective from May 2015-May 2016 to coincide with the CSLC's 10-year lease period.

A permit was issued on July 7, 2015 to Shayle Masuda from the California Academy of Sciences to collect sediment samples in order to survey foraminifera at 13 different sampling sites in Bolinas Lagoon for educational purposes. This project occurred in July 2015 in Bolinas Lagoon. The project involved a field group of 2 faculty and 6-7 high school students conducting a 1-day trip to learn appropriate benthic micro invertebrate collection techniques and quantitative analysis and to collect data on species occurrence, distribution, diversity and abundance.

A permit was issued to Ted Grosholz from UC Davis to deploy crab traps at three (3) sites within Bolinas Lagoon to monitor invasive green crabs. Bolinas Lagoon is adjacent to a targeted site, Seadrift Lagoon, where efforts are being focused on trying to reduce green crabs. This is part of a larger eradication program involving several sites between Elkhorn Slough and Bodega Bay with data collected on green crab populations over an eight year period. Crabs will be sampled once a month at each site via trapping; each sampling event will last approximately 3-4 days and all traps will be removed by the end of the sampling period. Non-native species that are trapped

will be disposed of outside the sanctuary. This project will occur in Bolinas Lagoon from July 2015-October 2015.

A permit was issued to Melissa Kardish from UC Davis to uproot and collect 50 eelgrass shoots from the bed at Cypress Grove to examine and identify microbial communities on each. This is phase 1 of a research project that will ultimately involve transplanting eelgrass shoots from five (5) different sites along the coast to better understand the consequences of microbiome composition for host fitness, disease resistance, and ecosystem functioning. The goal of this work is to inform our ability to conserve and restore this key species. This work will occur in Cypress Grove, Tomales Bay, from July 2015-November 2015.

A permit was issued to Kirsten Gilardi from UC Davis to disturb the seabed for the purposes of recovering and removing lost fishing gear outside the window of the lawful fishing season. This is part of a project involving collaborative work with Dungeness crab fishermen in California to recover lost and abandoned crab pots. Commercial fishermen will lead lost gear recovery work on the water, and will realize financial gains and self-sustainability through a gear buy-back program run by the fishermen themselves. This project will occur between 2-100 fathoms in Cordell Bank, Greater Farallones, and Monterey Bay National Marine Sanctuaries during the period of July 2015-June 2017.

A permit was issued to Connor Dibble from UC Davis Bodega Marine Lab to examine the role of upwelling and near-shore oceanographic forces in regulating larval supply and productivity of intertidal organisms. The permittee will be testing this hypothesis by deploying small moorings with temperature loggers and other instrumentation at 7 different field sites throughout the sanctuary. These moorings will be in place during the months of May through September during the prime reproductive season. Each mooring will be marked with a 5-inches-in-diameter by four-inches-long PVC surface buoy. Also at each field site the permittee will establish 6 quadrats (using epoxy markers) to survey intertidal organisms. All markers will be removed upon the project's completion. This project will occur within GFNMS boundaries at Pinnacle Gulch, Bodega Head, Tomales Point, Fort Ross, Salmon Creek, Twin Coves, and Schoolhouse Beach from July 2015-September 2017.

A permit was issued to Barbara Block from Stanford University and Sal Jorgensen from Monterey Bay Aquarium to attract white sharks for research purposes in order to better understand population abundance and trends, migration patterns, genetic structure, and essential habitat of white sharks. Research activities include deploying acoustic, satellite (PAT), stomach tags and short-term clamp tags (which consist of a biologging package with a camera, accelerometer, gyroscope, and magnetometer) as well as collect biopsy samples and photo IDs. As they have done the last few seasons, researchers will continue to deploy and maintain eleven (11) moorings at strategic locations to detect acoustically-tagged sharks and will deploy one (1) new receiver near the Cement Ship in Santa Cruz to better understand the large number of sharks which have begun to aggregate there this summer. The project will occur within the boundaries of Greater Farallones and Monterey Bay National Marine Sanctuaries at the Farallon Islands, Point Reyes, Bodega Head, Ano Nuevo Island, the Cement Ship in Santa Cruz, and Piedras Blancas from Summer 2015-Summer 2016.

A permit is under review for Great White Adventures to attract white sharks for education purposes as part of ecotourism charters for the public. This activity would occur in the waters adjacent to the Farallon Islands from fall 2015-fall 2016.

A permit is under review for Cartel Management-Titans of Mavericks to allow the use of 15 Motorized Personal Watercraft (MPWC) by the contest sponsors during the Titans of Mavericks 2015 Surf Contest for surf rescue, transport of competitors, and other event management tasks and the deployment of temporary buoys to demarcate the contest area during the 1-day event. This activity would occur within Monterey Bay National Marine Sanctuary at the Mavericks surf break, offshore of Pillar Point in Half Moon Bay. The window in which this activity may occur is between November 1, 2015 and March 31, 2016.

A permit appeal was filed by Save Our Seashore (SOS) objecting to the education permit decision and requesting that active shark attraction for these educational tours not be allowed. The original permit issued to Jane Reifert of Incredible Adventures allowed the permittee to attract white sharks for education purposes as part of ecotourism charters for the public. The Superintendent's permit decision to deny the use of scent/chum was upheld by the Acting Assistant Administrator, Russell Calender, on April 23, 2015.

Kellyx Nelson asked for a clarification of acceptable attractants for white sharks, which Maria said stationary decoys in the shape of a seal or sea lion.

John Hunt asked if GFNMS received any feedback from Cartel Management in setting up surfer safety information at times other than the contest for Jet Ski use, and Maria said that it has been a quiet time for jet-ski related issues and inquiries.

Vessel Grounding in Half Moon Bay, near the Ritz-Carlton

A 51-foot wooden salmon trawler, *the F/V Denise*, was beached on the rocks directly offshore the Half Moon Bay Ritz-Carlton on Friday evening, June 5th. The U.S. Coast Guard responded and were able to remove 405 gallons of diesel fuel, 9 gallons of oil, and the batteries and generator, on Saturday and Sunday before the vessel was washed onto the beach with extensive damage to the hull. A small amount of diesel was released into the ocean prior to the USCG's response. Because the owner was uninsured, NOAA took possession of the vessel and contracted Parker Diving to complete the salvage operation. Due to the lack of access points to the beach in this area, Parker had to cut up the vessel by hand and then lift the pieces off the beach from the top of the bluff using an excavator and a large crane truck. Local members of the community affiliated with the sanctuary's Beach Watch program also contributed to the cleanup by manually collecting smaller scattered debris.

GFNMS Expansion Update

We expanded and the June 28th celebration went very well; the community is very excited to have us there; John Armor came out last week for a tour of the area as well.

Tomales Bay Update

The Tomales Bay Mooring Program was launched on August 10th. The Tomales Bay Mooring Program is a program built out from the guidance of the Tomales Bay Vessel Management Plan, which was finalized in 2013. The program is being administered jointly by the sanctuary and State Lands Commission because regulations of both agencies apply in Tomales Bay. While mooring lease applicants will only be dealing with State Lands Commission applications, the conditions that apply to mooring leases in Tomales Bay reflect requirements that were developed collaboratively, over many years, with input from numerous agencies and stakeholders. GFNMS tagged and surveyed all buoys in the bay, in collaboration with NOAA Office of Law Enforcement and the National Park Service. For the buoys that were deemed moorings, they were tagged and given instructions on next steps. Approximately 95 moorings were tagged. There will be an early opportunity for those owners to come in compliance with the Mooring Program Requirements. Beginning on August 10th all existing private mooring owners have an early opportunity for a three-month period to apply for a mooring lease. Within 6 months (ending on 2/10/2016), all private mooring holders must be in the process of obtaining a State Lands Commission lease.

In addition, we have initiated an outreach campaign directed at current mooring owners. The message is simple. Current mooring owners are being directed to check their tags because all the information they need is on their tags. Notifications have been sent out through various outlets including a letter to interested parties, press release, newspaper ad, fliers posted all around the Point Reyes/Tomales Bay area, an updated website that includes all relevant information, FAQs and a new interactive PDF map that helps people interested in applying for a mooring lease. This is being done in collaboration with State Lands Commission, who will be the lead agency for all mooring lease applications.

Dayna Matthews: OLE, I want to let you know that ~30 vessels on the bay have CF numbers and their owners will receive another letter urging compliance with the mooring plan; this also pertains to moorings without the numbers, we are trying to find their owners and contact them. If you or anyone speaks to you with questions or concerns about this please have them contact me.

PJ: Because this is an issue MBNMS AC will have as an emerging issue with the GW sharks, what is the difference between the programs who've appealed and those who have not? (Of the two educational tours)

MB: One of the educational tours was appealed because it was more venture tourism than education based on their mission and website information.

A brief discussion followed about the leadership of ONMS and John Armor.

MBNMS Superintendent's Report

Desalination Projects Update

Paul highlighted a few things that were in the MBNMS Office Report and MBNMS Permit Report. MBNMS staff is working on three desalination projects. There is a deep water

desalination project proposed to produce 25,000 acre feet of water in open ocean intakes. The desalination facility, data center and prime discharge will be in the Moss Landing area. A Notice of Intent was issued for scoping on this project and a joint NEPA CEQA document is being prepared with California State Lands Commission. There is also a CalAM project which proposed to produce 10 million gallons of fresh water per day. A Notice of Intent is being prepared and MBNMS plans on preparing a joint NEPA CEQA document with California Public Utilities Commission in the next six months. This project would utilize sub-surface intake drawing salt water underneath the floor of the sanctuary. There is a third desalination project that is less well defined. This project proposes to produce 15 million gallons of fresh water per day from open ocean intake. A field visit will occur soon with project. A CEQA document is being prepared by the Moss Landing Harbor District consultants.

Nautilus Expedition over USS Macon

Bob Ballard's expedition in the Nautilus was just in the news. The Nautilus has been out over the USS Macon, the dirigible that went down in 1935 off Big Sur. Bob Ballard is updating mapping, characterization of the debris field and may collect a couple samples.

MBNMS Events Update

A large crew from BBC is in Monterey in preparation for Big Blue Live. This is a huge event with PBS that will be broadcast live. MBNMS has been assisting BBC for the past six months to scout locations for wildlife viewing. Big Blue Live will air in the US on PBS August 31st through September 2nd.

June 27th and 28th was the annual event "Get Into Your Sanctuary" to celebrate and highlight recreating, swimming, boating, etc. in local sanctuaries. MBNMS helped facilitate some of the events including: the Elkhorn Slough Safari with children from the Boys and Girls Club of Monterey County; yoga on Del Monte beach in Monterey; a kayak trip in San Simeon through "Sea for Yourself Outfitters." This event is planned for next year and MBMNS plans to reach out through social media to encourage communities to join their national marine sanctuaries.

The Sanctuary Classic launched July 4th and will run through Labor Day. The Sanctuary Classic is a recreational photo fishing contest. Contestants can win prizes such as sunglasses, t-shirts and scholarships for kid contestants.

The Beneath the Waves Film Festival is scheduled for September 25th through 27th at the Sanctuary Exploration Center in Santa Cruz.

Discussion:

There was a brief discussion regarding the venue for the next Sanctuary Currents Symposium. A venue has not been confirmed yet for the event.

There was a brief discussion regarding the dates of Big Blue Live. The event will be broadcasted on BBC starting August 23rd and on PBS starting August 30th.

Public Comment

None

Ocean Guardian Program Presentation

Presentation available at:

http://farallones.noaa.gov/manage/pdf/sac/15_08/Ocean_Guardian_School_Presentation.pdf

A discussion between Seaberry and the GFNMS and MBNMS Education seats followed to determine if any data or evaluations of the families and students participating in the Ocean Guardian Program (OGS) is available to gauge the overall efficacy. Seaberry said that no formal data or evaluations are available, but the efficacy of the program is clear in how both parents and students have become involved both in the classroom and at home. Elizabeth Babcock praised the program and made some suggestions as to aligning the OGS program with local funding and Next Generation Science Standards.

Whales and Vulnerability to Ship Strikes Presentation

Presentation available at:

http://farallones.noaa.gov/manage/pdf/sac/15_08/SACWhalesPresentation_FINAL.pdf

The below is a dialogue of the Q&A session of the presentation. It is not abbreviated so the researchers have a comprehensive summary of relevant discussions, research suggestions, and management recommendations.

Kathy Fosmark made some recommendations to Angie about ship strikes to determine if the issue is due to the whales' behavior or the ships presence and suggested a closer look at mortality rates.

John Hunt: Are the areas north of the shipping lanes where the tagging occurred and the encounter occurred?

Angie: Yes, it was all in a very close area and you can see in other data I have that the whales did not move much post-tagging.

Steve Scheiblaue: Asked for clarification on the vessels considered during encounters, which Angie said included large commercial vessels, fishing vessels, passenger or private vessels. Future research may focus on determining the different effects of vessel types.

John Largier: Do you think avoidance behavior could be learned?

John Berge: I have the same question about the size of the vessel, since they are very different in size, speed and potential impacts; it'd be great if you could tease that out. Also mentioned the orientation of the northern shipping lane and the reduction of vessel speeds in that lane, so before we consider moving lanes again we definitely need advanced data. He also asked about the avoidance behavior and if it is a conundrum: avoiding stress or avoiding the ship? He also clarified that the draft of some of these vessels could be up to 50 feet on some of those larger vessels.

Michael Carver: Is the sampling frequency of barbed tags fines enough data?

A discussion followed about satellite tagging, the barbed tags, and a contact for Angie to follow up with on that.

Paul Reilly: Can ships avoid whales?

Angie: It depends and could be difficult, as you would need a spotter onboard to spot the whales.

John Berge: There is sonar and radar, but the sonar looks straight down and radar may be faulty to detect one whale with enough time and distance in time to minimize interaction.

Jackie Dragon: Do you have any data that looks at the distribution of prey when the whales are in the area, and are these encounters with ships impacting foraging and hunting post-encounter?

Angie: we did not have very exact data on the prey types in these areas; my estimates were based off basic sampling of the area. Second, the tagging is a work in progress; we've had greater luck in tagging blue whales with the barbed tags than we have with other whales.

Maria Brown: Something that would help us is if we could get longer-term data as to where the whales are moving.

Steve Scheiblauber made a comment about the birds in the area as well.

A brief discussion followed about the depth baseline for the studies and keeping track of the depths to which all whales are diving.

BREAK

MBNMS Management Plan Review and Condition Report

Presentation available at:

http://farallones.noaa.gov/manage/pdf/sac/15_08/MBNMS_Management_Plan_Review_Update_Presentation.pdf

Ann Morkill asked for clarification on nearshore vs. offshore. Paul Michel said that 30m or less is nearshore, while 30m or more is considered offshore.

Kellyx Nelson asked where the agricultural lands information is in the report, which Dawn clarified.

Paul clarified the management plan review and its inclusions for John Largier.

Steve Scheiblauber asked if the full report includes a self-assessment of the different management strategies in Monterey Bay NMS, which Paul confirmed and further clarified that all of the various habitats of the sanctuary are considered.

Dawn and Karen Grimmer talked about the management plan review, its impacts, and how it addresses SESAs and MPAs. Cyndi Dawson of the Ocean Protection Council requested that clarification.

Edwin Smith (AMBAG) asked about the flow of information throughout the management plan review process and how the Sanctuary will address their issues and the status of their opinions and statuses. Dawn clarified the public comment process and how records are kept and considered during public process.

A discussion followed about the management plan review process and how state and local agencies and officials are involved to identify what working groups are needed and what collaborations or partnerships are valuable. Steve Scheiblauber emphasized the need to make sure that this isn't a staff-driven process. PJ Webb encouraged the MBNMS AC to work with

their constituencies during scoping to really involve them. Elizabeth Babcock added to that.

John Largier expressed concern as to the emerging issues and prioritizing them. Kellyx Nelson appreciated the attention to the priority and expressed the need for MBNMS to work closely with partners when Sanctuary resources are involved.

Kathy Fosmark expressed concern over the schedule of the scoping meetings as they conflict with those of the Pacific Fisheries Management Council. She also questioned the definition of SESAs, which Dawn and Karen Grimmer clarified.

LUNCH

Advisory Councils' Roles in MBNMS Management Plan Review

Presentation available at:

http://farallones.noaa.gov/manage/pdf/sac/15_08/SAC_Roles_And_Input.pdf

A brief discussion included how marine debris, beach cleanups, and the measuring of plastic debris would be addressed through management plan review.

A brief discussion initiated by Steven Scheiblauber to clarify the terrestrial areas involved in management plan review followed. PJ Webb suggested the use of a GPS unit.

Brian Nelson asked about dredging and the MBNMS staff's view of using dredge material for beach nourishment. Paul Michel said there are several ways in which policy might address the issue, but that it hasn't been completely thought through and will likely emerge during the management plan review process.

Paul Reilly discussed wildlife disturbance and suggested that it be one of the primary topics, including acoustics, entanglements, drones, marine mammal approaching.

Christy Walker asked if the San Francisco-Pacifica Exclusion Area (colloquially referred to as the "donut hole") would be addressed during review, and Paul Michel stated that it could be since everything is on the table during scoping.

PJ Webb stated that wildlife disturbance is becoming a public health problem in the southern region of MBNMS.

Paul Michel requested that the MBNMS AC familiarize themselves with the 2008 Management Plan over the next six months and think about things that need changes; ideas for a more user-friendly, narrowly-focused document are ideal.

Steve Scheiblauber mentioned that many of the past problems within MBNMS were resolved by working groups, and asked if they will be used during management plan review. Paul Michel confirmed that working groups will be used in order to maintain consensus.

Tucker Hirsch mentioned the presentation shown during the June MBNMS AC meeting and said that clarifications on plans included in that presentation are needed. Dawn Hayes said that certain aspects of that plan have already been completed. She also said that the aforementioned presentation will go up on the web with the agenda.

John Hunt asked if there is adequate funding for the process and plan, and if there are any useful leverage point to bring in front of legislative bodies. Paul Michel said that members will help with that, and cost estimates are needed.

PJ Webb expressed concern that so many programs suffering or ended because of a lack of funding and she doesn't want that to continue. She also said that citizen science projects get community engaged and provide important data. Dawn Hayes encouraged PJ to share these opinions at the scoping meetings.

A discussion followed about user fees and their prospect as an alternate funding source. Paul Michel said that such a use of fees could be raised during scoping. Gary Prezzi pointed out that the public doesn't know enough about the Sanctuary for user fees to be an effective funding source; a discussion about elevating volunteer programs and clarifying wildlife disturbance followed.

BREAK

Member Reports

Michael Carver, Cordell Bank National Marine Sanctuary

Michael reported on upcoming projects in Cordell Bank, including diving, ROV and other data collection. CBNMS moved to Pt. Reyes National Seashore. CBNMS also successfully secured \$60,000 to deploy an oceanographic research station this fall that will be in the water for two years as part of a larger network of NOAA stations collecting data. He also mentioned that CBNMS is working on a project with John Largier that looks at anoxia events.

The vessel speed reduction trial is ongoing.

Anne Morkill, US Fish and Wildlife Service

As part of a collaborative effort between Farallon National Wildlife Refuge and GFNMS, two mooring buoys plus chains were replaced by an interagency team including a US Coast Guard dive to with ship support from the US Army Corps of Engineers vessel *Dillard*. The original plan was to remove the old chain from the seafloor, but this proved impossible. Follow-up is needed to discuss options for removing the old chain. The ownership and maintenance of these moorings is shared between Farallon National Wildlife Refuge and GFNMS.

John Berge, Maritime Activities- Commercial (Alternate)

John mentioned that two ships anchored offshore of MBNMS as a result of labor disputes at the Port of Oakland; there's also a shortage of longshoremen, so there is a back-up into the ports. The ships are drifting outside of the 100 fathoms mark.

Kellyx Nelson, Community-At-Large, San Francisco/San Mateo

The Resource Conservation District in San Mateo County is starting construction in the next few weeks on 12 restoration projects. Five are salmonid restoration projects targeting Steelhead and Coho salmon. The rest are Low Impact Development improvements on 7 private properties to improve water quality draining into the Fitzgerald Marine Reserve. The RCD is also partnering with John Largier, CA State Parks, the Regional Water Quality Control Board, US Fish and Wildlife Service, and others to develop decision tools for management and restoration in the Pescadero marsh and lagoon that might address such things as when to breach the sand bar and water quality.

John Largier, Research

John discussed the ongoing ACCESS and other research cruises in the sanctuary boundaries; findings include some hypoxia events and a warming anomaly in the sanctuary. The warming anomaly started last year, cooled down in March-June when upwelling really occurred but it's kicked back in again. An El Nino is coming, but it is still unclear if precipitation will be a major factor although warming will continue which could bring hypoxia and demoic acid issues with it.

LT Shannon Anthony, US Coast Guard (Alternate)

The USCG is participating in a teleconference next week to find out more about the ports and shipping issues John Berge mentioned. They are also doing work to raise awareness of the regulations and restrictions in the expansion area. They've gotten very involved with the whale entanglement issues especially in Monterey Bay. LT Anthony is attending a training related to entanglement in Oakland.

Jennifer Phillips, Ocean Protection Council (Alternate)

There is a symposium next week (week of 8/24/2015) where Jenn will be presenting some ocean acidification information on Monday and Tuesday in Sacramento.

Barbara Emley, Maritime Activities-Commercial

Zeke Grader is in hospice right now and if you'd like to visit or contact him let her know. The salmon season has been somewhat weak with smaller than normal fish and in unusual locations.

Abby Mohan, Maritime Activities-Recreational (Alternate)

The PR on the sanctuary expansion has done a lot of good and she encountered a lot of people who are excited about it.

Jackie Dragon, Conservation

The whale entanglement issue is on the radar for a lot of conservation groups. There is also an interest in taking a closer look at our whale/vessel strikes work.

Caleb Rosen, Youth

Caleb introduced himself to the MBNMS AC. He reported that during the most recent youth engagement subcommittee meeting, it was decided that a youth congress or group of students was a difficult task to create to keep up with the turnover rate of the seat. They are now working on a youth-related database to help with recruitment.

Christy Walker, Community-At-Large, San Francisco/San Mateo (Alternate)
None

Elizabeth Babcock, Education

Elizabeth mentioned that in September 2015 the working group will issue a set of recommendations to include environmental education in all K-12 classrooms in the state. The state's Next Generation Science Standards are out and these change how science is taught and includes science process skills and new concepts to incorporate more info and knowledge (citizen science, etc.) in learning environments. There is a regional 12-county environmental educational collaborative (called Change Scale) that offers trainings and creates a network of learning hubs to infuse environmental education into the classroom. The California Academy of Sciences is hiring 5-6 new curators related to biodiversity.

Kellyx Nelson asked how new science standards work together with common core (English, language, arts math) standards. Elizabeth clarified what those standards are, the NGSS and the cross-cutting concepts that integrate these areas. She also said it depends on a lot of factors as to how teachers are being trained to implement the frameworks.

Dominique Richard, Community-At-Large Marin and Sonoma Counties

Dominique stated that he had heard only positive comments from the West Marin community on the implementation of the mooring program in Tomales Bay.

On August 15, he participated with Bruce Bowser in the restoration of Kent Island; they picked up trash, pulled ice plants and watered other invasive plants with salt water. This was supposed to be a collective contribution from the SAC; unfortunately people must not have been available.

Dominique also announced three ongoing personal projects:

- a. A paper on the pathology of scientific arguments in environmental conflicts which he presented to the International conference of the National Environmental Communication Association in Uppsala, Sweden was included in the proceedings of the conference that were recently published. The paper's title is *The Ghost of Dr. Mesmer or the Illusionary World of Fantastic Claims* and it can be found in the proceeding at <https://theieca.org/conference/coce-2013-uppsala/conference-proceedings>
- b. He submitted an abstract for presentation at the American Geophysical Union conference this December in San Francisco. Specifically the panel to which he applied explores if and how science communication is a driver of landscape change, a question which can easily be considered in the context of ocean "landscape".
- c. For the past year Dominique worked on a paper concerned with science communication ethics which he plans to submit in October for publication as a chapter in a book. His focus in that instance will be on science communication ethics as it is manifested in the context of citizen science. He plans to use the work he do with Beach Watch, the NOAA marine debris survey, the

Oiled Wildlife Care Network and the Tomales Bay Watershed Council water quality program as illustrations.

Monterey Bay NMS Member Reports

Steve Scheiblauer, MBNMS – Harbors

The City of Monterey is pleased to accommodate the BBC film crew working on "Big Blue Live" for UK audiences. They will be filming at the Monterey Bay Aquarium and elsewhere around the City for nearly a month. It focuses on the sea life of Monterey Bay.

Steve represented California harbors (California Marina Affairs and Navigation Conference) in a meeting and panel discussion put on by the Oregon Ocean Policy Advisory Commission (OOPAC, reports to the Oregon Governor), on May 7. The topic was the pro's and con's of creating an Oregon coast NMS. OOPAC's report concluded there is no need for a NMS at this time.

Unusual ocean conditions appear to have caused a whale to enter Monterey Harbor for a period of time and become trapped against the Breakwater. It was freed through a joint effort by MBNMS staff, Monterey Fire Department, Harbor Staffs and the WET team. Later, a small scale anchovy kill, estimated at no more than ten tons of fish, occurred in Monterey Marina.

Brian Nelson – Diving

The Diving Newsletter continues to grow readership and the August issue is out.

Monterey Shootout photo competition was very exciting and well attended. The shootout was put on by Backscatter on Cannery Row. BBC and PBS filming has started. San Carlos Beach Park grass area will be closing shortly for 85 foot inflatable whale.

Brian will be speaking at Alacosta Divers on December 7th using the MBNMS presentation developed by Deirdre for the dive shows. He will also be speaking at the Monterey Bay Sea Otters August 26th meeting using the Sanctuary Presentation and including an overview of "Bikini Atoll and Back" program. DEMA – Dive Equipment Manufacture Association trade show is November 4-7, 2015 - Orange County Convention Center, Orlando, FL

Kirk Schmidt - Agriculture

Agriculture on the central coast is doing well. Lower Pajaro is using less water resulting in serious water conservation.

The annual farm bureau "Testicle Festival" fundraiser is next week.

Paul Reilly – CA Department of Fish and Wildlife

The Pacific Fishery Management Council (Council) is expected to decide final language for its definition of "directed" fishing as it pertains to unmanaged forage fish at its September 11 meeting in Sacramento. This is the last step in a multi-year effort by the Council to recognize the

importance of forage fish to the ecosystem and provide protection for Shared Ecosystem Component Species from the development of new directed fisheries, while continuing to allow existing activities occurring in federal waters (i.e., incidental landings in Pacific whiting fisheries, pink shrimp, and California halibut trawl fisheries). No new commercial fisheries on forage fish will be permitted. The Shared Ecosystem Component Species or groups affected by this action are: Round and Thread herring, mesopelagic fishes (Myctophids or lanternfish), Pacific sandlance, Pacific saury, Silversides, Osmerid (“true”) smelts and Pelagic squids (not including Humboldt squid). Next steps: NMFS will initiate a public review period of that language and the appropriate amendments to the four fishery management plans under Council responsibility.

On August 20 the Department will participate in a public meeting in Oakland with NMFS, NGOs and fishermen. The purpose of the meeting is to have an open exchange of information and ideas related to the topic of whale entanglements off California. Discussions will aim to capitalize on the expertise and knowledge of meeting participants by sharing information and exploring short- and long-term strategies to reduce the risk of entanglements in the California Dungeness crab fishery. Representatives from the Department, NMFS, the Whale Entanglement Team and the California Lost Gear Retrieval Program will make presentations.

Market Squid: As of August 14 preliminary estimates indicate a total of 19,126 ST (16 %) out of the 118,000 ST market squid quota have been landed in California. The majority of landings have occurred in Monterey and Santa Barbara area ports, though landings have also been made as far north as Bodega Bay and as far south as San Pedro.

Pacific Sardine: While the directed Pacific sardine fishery is closed for the 2015/16 season, vessels are still allowed to land sardine incidentally. Vessels are allowed to land 40% sardine in their coastal pelagic species loads until total incidental landings reach 1,500 MT. As of last Friday (August 14) combined preliminary estimates for CA, OR and WA indicate less than 1% of the 1,500 MT incidental allowance has been landed.

Summarized squid landings info is available to the public, is updated weekly and can be found here: <http://www.dfg.ca.gov/marine/cpshms/marketsquid.asp>

Sardine landings information can be found here:

http://www.westcoast.fisheries.noaa.gov/fisheries/pelagic/pacific_sardine_landings.html

At the August 4 Fish and Game Commission meeting in Fortuna, April Wakeman of the Sportfishing Conservancy asked the Commission if it *is possible to have digital fishing licenses like the Southwest Airlines Boarding Pass. This would allow a license to be displayed on an iPhone, Android, or other electronic device. Since the Department is moving toward electronic applications for fishing documents, Paul imagines this is something that will be considered in the future. At present electronic logbooks for CPFVs are in the developmental phase which has been well received by the industry; as of July 1, 76 CPFVs are participating.*

At the same Commission meeting, the two new Commissioners, Eric Sklar and Anthony Williams, were appointed to the Marine Resources Committee, replacing Michael Sutton and Richard

Rogers.

A discussion followed Paul's report to determine if public comment is part of the agenda at the OPC California Whale Entanglement (OPC, USFWS, and NOAA) discussion at 1515 Clay Street in Oakland. Cyndi clarified that for the SACs that this isn't a regular council meeting. An interest exists because of the potential impacts on fishing. <http://www.opc.ca.gov/>

John Hunt - Research

Beach COMBERS - funding RAP members represent constituents with numerous projects deserving funding support, and the RAP has not committed to advocating at the SAC for funding of any specific programs or projects. MBNMS Research Coordinator Andrew DeVogelaere has indicated Beach COMBERS will be funded next year by the Marine Biodiversity Observation Network, a cooperative program administered by NASA, NOAA and BOEM exploring ways the sanctuaries might serve as sentinel sites.

Ecosystem perspectives for conservation at the Monterey Bay Aquarium - At the July RAP meeting, a conservation science research update was given from Brendan Kelly of the Monterey Bay Aquarium. The discussion included prospects for an ecosystem-based focus to compliment current MBA wildlife conservation priorities covering sea otters, sharks and blue fin tuna. There may be opportunities to coordinate with the MBNMS on Sanctuary Ecologically Significant Areas, including cooperative reporting on conservation issues, providing information to decision makers and the media and giving presentations at the Sanctuary Currents Symposium.

Coordination with CeNCOOS - The RAP also received a July presentation from David Anderson, Director of the Central and Northern California Ocean Observing System (CeNCOOS). Dr. Anderson emphasized the current CeNCOOS focus on producing cost effective data that can be gathered and assessed quickly in response to management information needs. CeNCOOS has long been a sanctuary partner and is interested in exploring ways to address sanctuary management questions.

Trawl Study - In the coming year RAP Chair James Lindholm and partners will conduct a Collaborative Fisheries Research study on trawl impacts in northern Monterey Bay. Fieldwork starts this week. The study will focus on impacts and recovery associated with the deployment of different types of trawl gear in soft-bottom habitats.

Tucker Hirsch – Education

As the new SEP chair, she is trying to get a feel of what the needs are for the SEP. Amity Sandage and Tucker spoke recently about how to reinvigorate the SEP and move forward. Their plan is to get input from the Sanctuary education folks to see what they need, what has worked well in the past, what they would like to see the SEP do, etc. She had a phone call with Liz Love last week and to receive her input. Tucker hopes to schedule time to speak with Lisa Uttal, Dawn Hayes and Paul Michel one-on-one in the coming weeks to hear from them. After that, she would like to reach out to the existing SEP list and get input from individuals who have attended meetings in the past. It is still to be determined how she will contact these individuals; a survey, email, or an enticing meeting has been discussed.

The SEP should support the educational efforts of the SAC and the Visitor Centers. It should not be just another meeting to squeeze into people's calendars and it should not simply duplicate the efforts of the MBEE meetings. Tucker hops to work towards determining the SEPs best role in the next few weeks.

Maria de la Paz Carpio-Obeso – CA EPA

Maria is working with the US Air Force on Water Quality trash amendments - adopted by the board in April 2015. She is working to make the law and will go to EPA for effective date. Water Quality Control Plan regarding desal and brine discharge – adopted in May. She is working to get it through the law office. Recently, proposed forming a delegation to study Water Quality policy regarding power plants and cooling water. This policy was adopted in 2010, and of the existing 19 plants, only 6 are in compliance. This is a controversial item. She is working on implementation on ASBS – by September 20 the drop or compliance date.

Steve Lindley – NMFS

Construction – some major activity on the UC Santa Cruz coastal campus (on which NMFS is co-located) of the new coastal biology building – bringing the coastal ecology program to the coast. A new major is being created – Master's Degree in Coastal Policy.

NOAA Fisheries is working several agencies on the removal of the San Clemente Dam in Carmel. Removal is almost complete and will greatly benefit the steelhead – which is their concern.

Jim Mosier – Commercial Fishing (Alternate)

There is not much to report in Santa Cruz – the warm weather has affected the fishing. Salmon is sporadic. Many fishermen migrated to Oregon because salmon even as far north as Fort Bragg is pretty sparse. Crab fishing is migrating south while the salmon seem to be going north. El Nino will also affect fishing this upcoming season.

Tami Grove – California Coastal Commission

The Commission unanimously approved the Local Coastal Program Plan.

James Panetta – At Large

James was happy to say he hasn't had any issues related to MBNMS. Met Zeke Grader at the hospice and he's doing as best he can. At Carmel Beach – saw 7 whales and no fires (per new ordinances).

Kathy Fosmark – Commercial Fishing

There will be an OPC discussion in Oakland. She received calls from fishermen about the wilderness areas (no fishing zones) in the Farallones, which happened without scoping. There is concern about the new tunnels proposed by the governor and how they will affect already impacted water bodies and salmon populations. This will be voted on soon. Tim Sloane, Pac Fed Fishermen is replacing Zeke.

Bart Selby – Recreation (Alternate)

Great summer for recreation; whale boats are full and kayak shops are booked. There are issues with human interaction but basically a great year on the water.

Cyndi Dawson – CA Natural Resources Agency

OPC has been working on interpretive signage from Del Norte to San Diego Counties to install 119 interpretive signs for most of the new MPAs (installation should be completed by Oct 31, 2015). She talked to local planners (during the permit process).

Nov 5-8 WSN meeting will be held in Sacramento. This meeting will be interesting to management agencies because of the themes. More information is available at WSN-online.org

Sept 22 OPC meeting will include the MPA State wide leadership team presenting the state's MPA management plan. There will be a workshop prior to the OPC meeting focused on El Nino.

Letise LaFeir – Conservation (Alternate)

CWG – due to schedules, last meeting was rescheduled for Aug 28th. They will be working on everything from climate to fisheries.

Gary Prezzi – Recreation

No report but he mentioned that he is still working on obtaining updates from Cartel Management.

Maria de la Paz Carpio-Obeso – CA EPA

California Trash Amendments

On April 7, 2014, the State Water Board adopted an amendment to the Ocean Plan and Part 1, Trash Provisions, of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California. The provisions in the Trash Amendments include the following six elements: (1) narrative water quality objective, (2) applicability, (3) prohibition of discharge (4) implementation provisions, (5) time schedule, and (6) monitoring and reporting requirements. The project objective for the Trash Amendments is to provide statewide consistency for the Water Boards' regulatory approach to protect aquatic life and public health beneficial uses, and reduce environmental issues associated with trash in state waters, while focusing limited resources on high trash generating areas. Currently, staff is in the process of gathering information for the Office of Administrative Law (OAL) package.

California Ocean Plan Amendment to address Desalination Facilities and Brine Disposal

On May 6, 2015, State Water Boards adopted an amendment to the Ocean Plan to address desalination and brine discharges. The amendment includes the following elements: (1) provisions to minimize adverse impacts to aquatic life associated with the intakes and brine discharges from desalination facilities, (2) a narrative receiving water limitation for salinity to ensure the brine discharges from the facilities will not impact marine life, (3) implementation provisions, and (4) monitoring. Staff is currently preparing the administrative record for OAL approval.

Water Quality Control Policy on the use of Coastal and Estuarine Waters for Power Plant Cooling (Once Through Cooling Policy)

The OTC Policy establishes technology-based standards to implement the federal Clean Water Act Section 316(b) requirement that the location, design, construction, and capacity of cooling water intake



structures reflect best technology available for minimizing adverse environmental impact, and to otherwise reduce the harmful effects on marine and estuarine life that are associated with cooling water intake structures. The 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 structures. On August 18, 2015, the State Water Board agreed to delegate authority to the Executive Director of the State Water Board to approve, on a case-by-case basis, the measures that owners or operators of existing power plants utilizing cooling water intake structures shall undertake to comply with requirements of Policy regarding the interim mitigation.

Dana Matthews – NOAA Office of Law Enforcement

Dana enjoys being able to interact with the SACs. Reported about staffing issues – seeking 5 officers for CA – none have arrived just yet, but one is imminent and recruitment continues. Bob Yerena has retired; this vacancy will be recruited in the future. Working with Fish and Wildlife through the JEA to get proper response to sanctuary issues and very appreciative of the state and USCG for their support. On a positive note – a new director, Jim Landon is coming on line – formerly from general council. Jim has been with NOAA for 3 years, FBI for 10 years and Marine Corps. He has a lot of interest in habitat issues locally – the PFMC will be taking up the EFH package change involving MBNMS – a big consortium has collaborated on the proposal.

ADJOURN