MONTEREY BAY NATIONAL MARINE SANCTUARY ADVISORY COUNCIL

Final Meeting Minutes December 14, 2018 Monterey Conference Center, Monterey, CA

VOTING MEMBERS

Agriculture: Sarah Lopez CA State Parks: Eric Abma

AMBAG: absent

At Large: Dan Haifley

At Large: Gary Hoffmann

At Large: Gray Hoffmann

At Large: Christing McCinnia

Commercial Fishing: Kathy Fosmark

Conservation: Katherine O'Dea

Diving: Brian Nelson

At Large: Christina McGinnis Education: Tucker Hirsch Business & Industry: Al Budris Harbors: John Haynes CA Coastal Commission: absent Recreation: Gary Pezzi

CA Dept. of Fish & Wildlife: Paul Reilly Recreational Fishing: Rich Hughett

CA EPA: absent Research: Dr. John Hunt CA Resources Agency: absent Tourism: Mike Bekker

NON-VOTING MEMBERS

Channel Islands NMS: absent College: Jacob Winnikoff Cordell Banks NMS: absent

Elkhorn Slough NERR: Dr. Dan Brumbaugh Greater Farallones NMS: Max Delaney Monterey Bay NMS: Paul Michel

National Marine Fisheries Service: Dr. Steve Lindley

U.S. Coast Guard: CDR Jason Brand

Alternates present in audience:

Carol Maehr – At-Large

Tom Rowley – Business & Industry

Jim Moser – Commercial Fishing

Keith Rootsaert - Diving

Bart Selby – Recreation

Jose Montes – Recreational Fishing

Dr. Steve Haddock - Research

Dawn Hayes – Monterey Bay NMS

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 Monterey Mayor Clyde Roberson welcomed the Advisory Council to the Monterey Conference Center. He mentioned the work the city has done on banning single-use plastics and the impact it should have on the community. He talked about the work being done to reduce the city's

carbon footprint. He also mentioned the \$42 million education center Monterey Bay Aquarium is currently constructing on Cannery Row. Lastly, he recognized John Haynes and the city sponsoring the meeting at the conference center.

Nichole Rodriguez mentioned recruitment closed for the College seat alternate and Education seat primary on November 30th. A council nomination sub-committee was established: Al Budris, Christina McGinnis, Katherine O'Dea and Keith Rootsaert.

APPROVAL OF MEETING MINUTES

Approval of October 19, 2018 DRAFT Meeting Minutes

Dan Haifley introduced a motion to approve the October meeting minutes. Seconded by Katherine O'Dea.

MOTION: Passed

(Vote: 11 in favor, 0 opposed, 3 abstentions)

II. STANDING ITEM: Superintendent Report

Paul Michel introduced Robert Behl to the council. Has had a few conversations with Robert regarding marine science and innovation. He will be acting as an informal science and innovation advisor to MBNMS under the newly formed Monterey Marine Innovation Project (M²IP). Robert mentioned he will be working on ways to stimulate change in marine science. He plans to report out to the AC with his findings.

Paul introduced Ginaia Kelly, the newly hired chapter director for the Monterey Chapter of the National Marine Sanctuary Foundation (NMSF). Ginaia mentioned there is now backing of the National Foundation and there is a great board of directors. Many on the board were instrumental in creating the sanctuary. Ginaia's goal is to raise funds for and public awareness of the sanctuary. She welcomed AC members to connect her with people and organizations to increase exposure of the foundation and sanctuary.

As part of Paul's Superintendent's Report, Dr. Andrew DeVogelaere gave a presentation on recent deep-sea research cruises within MBNMS. Two research cruises occurred in October, EV *Nautilus* at David Seamount and FSV *Bell M. Shimada* at Sur Canyon and La Cruz Canyon. A research cruise also occurred in December on RV *Western Flyer* at Sur Ridge. For more information: https://nmsmontereybay.blob.core.windows.net/montereybay-prod/media/sac/2018/181214/181214cruises-ppt.pdf

It was asked if the Monterey Bay National Marine Sanctuary Foundation will work to gain funding for more time for research cruises. Paul responded the chapter board has already established priorities for funding this year: whale rescue/disentanglement, Bay Net, Team Ocean and education/outreach.

III. PUBLIC COMMENT FOR ITEMS NOT ON THE AGENDA

Geoff Shester, Oceana regarding whale/sea turtle entanglement – Thank you for MBNMS participation in CA Dungeness Crab Fishing Gear Working Group and support for testing "ropeless" trap fishing technologies.

IV. ACTION ITEM: Advisory Council 2019 calendar and work plan

Nichole Rodriguez proposed the 2019 Advisory Council calendar. She pointed out there will be six meetings in 2019. The February 15th meeting will be in Santa Cruz. The April 19th meeting will be in Moss Landing. The June 21st meeting will be in Cambria. The August 15th meeting will be in Half Moon Bay and will be joint with GFNMS AC. The October 18th meeting will be in Marina. The December 13th meeting will be in Monterey.

Gary Pezzi introduced a motion to approve the MBNMS Advisory Council 2019 calendar. Seconded by Al Budris.

MOTION: Passed

(Vote: 14 in favor, 0 opposed, 0 abstentions)

Nichole also discussed drafting a work plan for 2019 meetings. Annual work plans outline issues and projects for the Advisory Council to focus on. The Executive Committee will convene prior to the first Advisory Council meeting of 2019 to determine potential topics for the Advisory Council to rank/prioritize prior to the first meeting in 2019 where the work plan will be presented. Advisory Council members shared their topics of interest for the Executive Committee to consider.

V. STANDING ITEM: AC Member Announcements

Paul Reilly, CA Department of Fish & Wildlife primary: The Department enacted new regulations to reduce the risk of marine life entanglements in commercial Dungeness crab fishing gear. These regulations became effective on October 30, 2018 and will be in place for the upcoming 2018-19 commercial Dungeness crab season.

The new regulations allow no more than two trailer buoys to be used at the surface and establish a maximum distance between the front end of the main buoy to the tail end of the last trailer buoy depending on the depth that a trap is deployed.

The recreational fishery for Dungeness crab opened in most areas of the state on November 3 under a health warning issued by CA Department if Public Health for Dungeness crab caught in Sonoma County.

The commercial Dungeness crab fishery south of Bodega Head, Sonoma County opened on November 15. In other parts of the state, openers were delayed due to either poor crab meat quality or domoic acid concerns.

The majority of landings of coastal pelagic species in Monterey and Moss landing harbors have transitioned from anchovy to squid. Larger squid (9-12 count per pound) are being caught in this area, and a large portion of the seiner fleet has come here from the Ventura & San Pedro area where squid sizes are much smaller (16-18 count per pound). However, the amount of squid in southern California combined with calmer ocean conditions compared to Monterey Bay may draw some of the fleet south. As of December 7, 24% of the statewide market squid quota has been landed, and 69% of the statewide anchovy quota has been landed.

On January 1 the recreational groundfish fishing season will close for 3 months in the management area that includes the Sanctuary.

Regarding unusual events, California Halibut continued to be available to commercial fishermen and sport anglers in November. A significant number of Ocean Whitefish continued to be caught in Monterey Bay. This area was previously considered to be the northern-most range for this species. A "tsunami fish", a Barred Knifejaw, has been observed near the Monterey breakwater and is likely a transplant from the 2011 tsunami in Japan, where it is native to the area. A similar fish was also observed there in 2014 and 2015.

In October Keith Rootsaert reported that divers are seeing much more bull kelp. The large swells associated with the first major storm of the season in late November appeared to have removed much of this and deposited it along the southern shore of Monterey Bay.

CDR Jason Brand, US Coast Guard primary: participated in whale surge operation, Operation Whale Warden, to protect from harassment and provide education and outreach. The operation included 280 hours of patrols with 87-foot patrol boats. There were no signs of harassment. Completed 33 boardings with 33 safety violations and 1 fishing violation. Also participated in joint meeting with NOAA's Office of Law Enforcement and multiple state partners. They will work together with a focus on joint efforts along coast of CA for whale and Magnuson Stevenson Fisheries surge operations. Lastly, the whale working group continues to work together with fishermen to ensure best options with Dungeness crab gear and entanglements.

Rich Hughett, Recreational Fishing primary: Monterey County Fish & Game Commission is accepting applications for grant funds. The deadline is January 15. Last year the commission gave over \$45,000 in grant funding.

Dr. Steve Lindley, NMFS primary: mentioned whale entanglement in North Atlantic: right whales and American lobster fishery. They are proposing some sort of action because the issue is even worse there. Offered to bring additional information to future meeting

Dan Haifley, At-Large primary: Thanked and paid tribute to Stephany Aguilar, the AMBAG rep, who has concluded her long service on the Scotts Valley City Council and therefore on AMBAG. Not only has she served MBNMS, but also the League of California Cities Monterey Bay Chapter, AMBAG, and a variety of regional environmental projects. A wonderful career of service.

Mike Bekker, Tourism primary: no announcements

Eric Abma, CA State Parks alternate: CA State Parks hired a 1,500-hour position with funding from MPA fund. This position will focus on education and outreach on MPAs. In collaboration with California Coastal Commission, will be hosting a free event at Asilomar on January 21st at 9:00AM highlighting high tides and sea level rise. Lastly, started a whale watching program in collaboration with Discovery Whale Watch at Monterey Historic Park. Classrooms can attend and receive presentations on whale and human interactions. The kickoff event will be with Seaside High School.

Tucker Hirsch, Education primary: Announced she is leaving Save Our Shores and MBNMS' Advisory Council. She is currently focusing on graduate school and family.

Al Budris, Business/Industry primary: Monterey Bay Economic Partnership, 2018 Annual State of the Region Summit on November 30th highlights:

- i. 49% of the population is 25-64 years, projected to be 47% by 2060
- ii. 30% of the population is 5-24 years, projected to be 24% by 2060
- iii. 6% of the population is 75+ years, projected to be 15% by 2060
- iv. Clearly, our population is aging and we are losing workforce
- v. Median home value in Monterey County is \$543,000; US average is \$217,000
- vi. Median rent in Monterey County is \$2,500; US average is \$1,400

vii. In 2008 in the Santa Cruz-Watsonville area, 20% of the housing was considered affordable; in 2018 it was 12%

viii. In 2008 in the Salinas Valley area, 26% of the housing was considered affordable; in 2018 it was 11%

ix. The definition of affordable is that not more than 30% of the gross household income goes to rent or mortgage

Gary Pezzi, Recreation primary: Surfrider Blue Water Task Force is working on water quality in Santa Cruz County beaches. Giant swells coming this weekend and next week so be cautious.

Brian Nelson, Diving primary: Dive newsletter is out. 2871 active emails with 41 new ones since last AC meeting. Diving Equipment and Manufacturing Association (DEMA) show happened in November. It was well attended. Dive industry here is on plateau of growth. Currently there are three dive shops and three dive boats in Monterey. There used to be six of each. Seeing an age increase in divers. Not seeing an interest in diving from younger generations. US Army is pursuing an idea to provide free SCUBA to veterans. They are working with a Monterey dive shop. Also, Frank Degan is working with disabled veterans to get them diving.

Paul Michel, MBNMS primary: Second Annual Sustainable Hospitality Summit scheduled for January 10-11 at Portola Hotel and Spa. Encouraged AC members to attend. For more information: https://mbetr.org/

Christina McGinnis, At-Large alternate: excited to be back and attending AC meetings. Recently changed jobs and is now managing the Long Range Planning Program with Monterey County's Planning Department. There is focus on climate change, Moss Landing community plan, Big Sur plan and a joint land use study with Fort Hunter Liggett.

Katherine O'Dea, Conservation primary: Save Our Shores rolled out a plastic pollution mitigation campaign targeting six single use plastic items. It is going well in Santa Cruz County. They are looking to roll out in Monterey County but need additional partners supporting work on these issues. In addition, in less than 3 months' time they had their first win in Santa Cruz County on an initiative banning single use plastic toiletry bottles in hotel industry.

Gary Hoffmann, At-Large primary: Bravo to US Coast Guard and their effort to patrol and the effects from their presence on the water, as well as their continued work with the crab gear working group. It is also great to hear there is a focus on education and outreach as well. In November, he was appointed to the Monterey Peninsula Regional Water District Board of Directors and will serve through 2020.

Dr. John Hunt, Research primary: picked up the newest Monterey County Weekly. There is an informative brochure from Monterey Regional Waste Management District on recycling and plastics.

John Haynes, Harbors – Monterey: <u>San Mateo County Harbor District</u> – there is a new interim manager, John Moren. On December 19, they will have a meeting. MPWCs and zone 1 will be on the agenda.

Santa Cruz Harbor District - dredging has started.

Moss Landing Harbor District - working through permits to do inter-harbor dredging.

<u>Monterey Harbor</u> – currently many squid boats in the area but may be moving south for squid. Had lighted boat parade and there was a great turnout. *Lady Washington* ship was in town nearly the entire month of November. Kids out on vessel with full sail, two charters per day. *Hawaiian Chieftain* ship coming up in February.

Jacob Winnikoff, College primary: Monterey Area Research Institutions' Network for Education (MARINE), a student organization connecting students at higher education institutions, is moving its home base from Center for Ocean Solutions at Hopkins to the Coastal Sustainability Initiative at UC Santa Cruz. This may change the representation but will hopefully result in more outreach.

Kathy Fosmark, Commercial Fishing primary: fishermen are the first to see problem and first to address it. There are thirty oil companies that crab fishermen in CA and OR have petitioned to sue over climate change due to their reporting. In groundfish, stocks have even rebuilt and allocations/quotas will be increased by up to 100%. In offshore aquaculture, offshore wind energy is a concern for fishermen. Keeping an eye on that process.

Dr. Steve Haddock, Research alternate: Whale Fest scheduled for January 26-27. He will be giving a talk about bioluminescence.

Keith Rootsaert, Diving alternate: CDFW abalone fishery is closed for another two years. Not much habitat left for abalone. Fishermen will start travelling to south coast more. Started recon on the purple urchin project near Lover's Point with Monterey Bay Aquarium and Monterey Abalone Co. The Diving Newsletter survey added urchin questions. Results showed unanimous support to address urchins.

Jim Moser, Commercial Fishing alternate: crab fishing is slow in Monterey Bay. It is better near San Francisco. Crab population looks better even further north but the fishery has not opened because of domoic acid and percentage of meat. Salmon fishery only had three weeks of fishing time in Monterey Bay. Fish look good from rivers and hatcheries but if one run/river is not good, the fishery is regulated on that one run/river. Good results in barging fish from hatcheries.

Dr. Dan Brumbaugh, ESNERR alternate: in late October, Elkhorn Slough held a community work event/ceremony out-transplanting Olympia oysters into the slough in partnership with Moss Landing Marine Laboratories. There was a fair amount of high profile help including Assembly member Mark Stone.

The construction phase of sixty-six acre marsh restoration was completed in August and have since planted over 20,000 marsh plants in the upper portion.

Recently partnered with Pam Krone to host the third workshop with the Healthy Soils Initiative Project which included a farm visit to Sarah Lopez's farm.

Carol Maehr, At-Large alternate: no announcements

Jose Moser, Recreational Fishing alternate: no announcements

Bart Selby, Recreation alternate: mentioned a large crowd of pelicans in the Pillar Point area that are now moving south.

VI. STANDING ITEM: Working Group updates

Conservation Working Group (CWG): have not met since August. Dwindling number of attendees. Difficult finding topic of broad support. Making commitment to schedule meeting in January and create calendar for rest of year. Invites anyone in AC or anybody they can recommend to participate in the CWG. May look at getting a new co-chair.

Research Activity Panel (RAP): met in November. The meeting focus was ocean acoustics. There were six presenters from five or six institutions. There is a tremendous amount of interesting data collected by hydrophones. Computer power needed to make sense of all these data is impressive. The RAP will be meeting in January and focusing on the Central and Northern California Ocean Observing System (CeNCOOS). Hoping to get Andrew DeVogelaere and Jen Brown give an update on monitoring work with Marine Biodiversity Observation Network and others. Also, kelp and urchins are still on the RAP's radar.

Sanctuary Tourism and Recreation Working Group (STAR): met in November at ONMS West Coast Regional Office. Presented the proposed Friends to the Sanctuary program. Waiting to hear on funding/resources available for this program.

Recreation and Tourism newsletter is out. It has great readership, but there isn't the same organic growth as the Diving Newsletter. Requested assistance from AC members to share emails for businesses owners/managers.

VIII. INFORMATION ITEM: State MPA Monitoring Action Plan overview

Sara Worden, CA Department of Fish & Wildlife Environmental Scientist gave a presentation on California's Marine Protected Area Monitoring Action Plan. She gave an overview of how the Marine Protected Area (MPA) Networks in California began, the MPA Management Program and the MPA Monitoring Action Plan. For more information:

https://nmsmontereybay.blob.core.windows.net/montereybay-prod/media/sac/2018/181214/181214ca-mpa-ppt.pdf

Advisory Council Member Discussion:

There were questions and discussion regarding the spillover effect on MPAs, the effects of highly migratory species predation within MPAs and the tiers of monitoring.

IX. ACTION ITEM: Marine Personal Watercraft (MPWC) proposed zone change

Max Delaney gave a presentation on the possible changes GFNMS are proposing to MBNMS' regulations for MPWC zone 1 in the northern management area. He gave an overview of the current zones at Pillar Point and the data used to assess the usage of the zones. He reviewed the possible regulatory change to zone 1 of eliminating the zone through MBNMS' Management Plan Review process based on the following considerations: 1) lack of MPWC use; 2) improved enforceability of zone 5; 3) difficulty and cost of maintaining buoys. Max also reviewed the recommendations by GFNMS' Advisory Council and the additional outreach GFNMS staff did after the initial presentation at the October MBNMS AC meeting. For more information:

https://nmsmontereybay.blob.core.windows.net/montereybay-prod/media/sac/2018/181214/181214regulation-ppt.pdf

Brian Nelson expressed concern regarding lack of outreach and cost outlined in Max's original presentation in October. Brian contacted Pillar Point Harbor staff, the general manager and Harbor

District Board of Commissioner's president. The general manager and president were not aware of this proposal. The commission president added this topic to the agenda for their December 19th meeting and notified the public for input. Brian also expressed concern about the information presented regarded buoy maintenance. Being experienced with buoy maintenance, Brian stated buoys should be maintained more often and therefore should never be lost. He offered to advise staff on reducing maintenance load and stock. He also discussed technology changes on MPWCs and the use of drop cameras to document violations. For more information see Appendix A. Gary Pezzi mentioned during the two years the MBNMS MPWC sub-committee was convened, this concern was not raised. Max Delaney was involved with this sub-committee and the GFNMS Advisory Council was aware of the sub-committee. Max was part of the MPWC sub-committee and GFNMS AC knew that. Gary suggested zone one be moved, not lost. He also mentioned the lack of outreach. He spoke with a big wave surfer who was not aware of the proposal. Gary believes this discussion opens the potential to redefine the zones and how they are regulated.

John Haynes mentioned harbors don't want to lose recreational opportunities. He asked if the MPWC sub-committee could reconvene to re-examine the zones. He also expressed concern regarding the lack of stakeholder input. He raised the question of getting stakeholder input later if the Advisory Council is requested to make a recommendation today. He would like Pillar Point Harbor to have more time to give input on losing their zone.

Paul Michel reminded the AC of the current MBNMS Management Plan Review. There is a whole section on the issue of re-examining the MPWC zones, how they are demarcated and their use. He said the AC has three options to consider on the proposed recommendation: 1) close zone 1; 2) keep zone 1; 3) fold this issue back into the Management Plan Review process so it can be reviewed after the new action plan is implemented.

Advisory Council Member Discussion:

Dan Haifley: agree with the comments by Brian, Gary and John. We want stakeholder involvement before we make a recommendation to close a zone. Was involved in MPWC task force for first MPR in 2003. Remember this was a very complicated and controversial topic. Many stakeholders were involved. Urges caution in area that is rapidly evolving and many passionate stakeholders.

Paul Reilly: why is this agenda item listed as a change to the zone, not closure of a zone? Why is there no public input at this meeting?

Gary Pezzi: the public was not well informed. There was no outreach.

Rich Hughett: this needs to be a transparent process with the public.

Mike Bekker: does zone 5 become larger if we lose zone 1?

Max Delaney: No.

Eric Abma: in his experience as a lifeguard, MPWCs are not used in zone 1 because the zone is not designed for recreational use. It is an undesirable location.

Tucker Hirsch: the expense of maintaining the zone seems to be the biggest concern here. There should be a better and more affordable way to maintain the zones. Seems to be a non-issue aside from the financials.

Gary Pezzi: most of the date collected by Beach Watch was during weekend observations. Weekends are the least desirable times to use MPWCs. There are too many people on the water to use MPWCs. Mentioned a hydrofoil distributor that takes people out on MPWCs but suspects it's not done on the weekends.

Paul Michel: the MPWC zones were created to prevent wildlife disturbance and protect wildlife. They may be undesirable recreation locations because we don't want them close to shore to disturb wildlife. We could do a better job demarcating them.

Christina McGinnis: concerned with level of disturbance these MPWCs can have on pinnipeds. If there is a motion to move forward with this, hope it will be an adaptive management approach.

Katherine O'Dea: agrees with Christina. Concerned about wildlife not recreation. Ok with there being no MPWC zones.

Gary Hoffmann: focus on wildlife disturbance and concerned about the process and people not getting to weigh in. There is an existing problem of wildlife disturbance. Should not wait for the Management Plan Review (MPR) update to address this issue.

John Hunt: Brian, Gary, John and Dan have given enough reasons for AC not to take action; to instead follow the MPR update.

Jacob Winnikoff: the lack of outreach is a clear concern. Buoy operation should be streamlined.

Sarah Lopez: thanked GFNMS for being thoughtful about efficient management. Also in interest in conservation and education for sanctuary to interact with public. Public process and outreach are very important. Stakeholders need robust opportunity to provide input.

Kathy Fosmark: same question about outreach. Did GFNMS do outreach? What are consequences if there is no action?

Brian Nelson: Max's slideshow shows outreach they did. Consequences of doing nothing is nothing. The MPR will address the MPWC zones. Let the public process occur.

Gary Hoffmann: the major consequence is wildlife disturbance. We should not wait until the Management Plan Review process to address this issue.

Brian Nelson: that can happen in or out of a zone. Bigger issue in the slough than from MPWCs. MPWCs are still subject to the regulations.

Dr. John Hunt: suggested the Advisory Council not take action now and instead follow the Management Plan Review process.

Sarah Lopez: thanked GFNMS staff for being efficient and wanting to trim off unnecessary costs. However, in the interest of conservation and education to maintain opportunities to interact with the sanctuary. Public process and outreach are very important. Stakeholders need robust opportunity to give input.

Kathy Fosmark: CDFW can ticket people for these offenses. Its not just on OLE. They have to be deputized.

Scott Kathey confirmed CDFW wardens have been deputized by OLE.

Steve Haddock: Gary and Eric spoke for him. Concerned with taking away an area of recreation. Maybe there could be a trade from zone one for more relevant use in zone five. Mentioned the Beach Watch observations can't account for all MPWC users.

Bart Selby: did outreach. Jeff Clark uses zone one to teach in and it would be a big loss for him. Another man Bart knows of uses it for foil boards but he has been in Hawaii. That is the only MPWC Bart has seen to leave the harbor at 5 miles per hour. Mentioned the only place to launch a MPWC in that area is in the harbor. There is a sign at the launch ramp describing where the zones are. Believe the buoys are not necessary. Mentioned the MPWC coming out of the harbor are going too fast and flush marine mammals and seabirds

Public Comment:

Ginaia Kelly, Monterey Bay National Marine Sanctuary Foundation Director: suggested creating ambassadors within the hierarchy of local surfers. They appreciate these sensitivities and can help regulate the rest of the community. Surfers need this zone in order to train.

Maura Twomey, AMBAG: suggested to continue following the Management Plan Review process.

Gary Pezzi introduced a motion to reject GFNMS AC resolution and adhere to the Management Plan update currently underway. Seconded by Rich Hughett. **MOTION: Passed**

(Vote: 16 in favor, 0 opposed, 0 abstentions)

INFORMATION ITEM: Status of sea star wasting disease

Dr. Monica Moritsch gave a presentation on sea star wasting disease. She gave an overview of sea star wasting disease, the species impacted by it, potential causes, status and future of effected sea star populations and ecological impacts. For more information:

https://nmsmontereybay.blob.core.windows.net/montereybayprod/media/sac/2018/181214/181214seastar-ppt.pdf

Advisory Council Member Discussion:

There were questions and discussion around the geographic progression of the disease, the effected species and insensitive species, historical trends and environmental impacts, as well as sea star genetics.

INFORMATION ITEM: Recovery effort status of black abalone at Mud Creek XI.

Dr. Steve Lonhart gave a presentation on the recovery effort of black abalone at Mud Creek after a land slide in May 2017. This was the biggest slide in Big Sur history and created fifteen acres of new land. Dr. Lonhart discussed the intertidal zone before and after the slide. He then discussed the black abalone population at this site and the impact of the land slide. Dr. Lonhart reviewed the rescue effort including collection, tagging, sampling and translocating black abalone. Finally, Dr. Lonhart described next steps which included on-going monitoring at Mud Creek and the translocation site as well as future rescues if necessary. For more information:

https://nmsmontereybay.blob.core.windows.net/montereybay-prod/media/sac/2018/181214/181214abalone-ppt.pdf

Advisory Council Member Discussion:

There were questions and discussion regarding movement of black abalone, the overall population status of the species, captive breeding, and tagging options.

Meeting adjourned at 4:00 PM.