

CHANNEL ISLANDS NATIONAL MARINE SANCTUARY

Sanctuary Advisory Council Meeting

FINAL Key Meeting Outcomes

Friday, September 21, 2018

Santa Barbara Zoo Discovery Pavilion, Santa Barbara, CA 93103

This summary will be posted [online](#). Audio recordings are available upon request from lindsay.marks@noaa.gov.

Administrative Business and Announcements

Fifteen council representatives attended the September meeting representing ten voting seats (see Appendix 1). Public attendance included approximately 8 individuals in the morning and 2 in the afternoon. Council secretary Dr. Robert (Bob) Warner called the meeting to order and thanked the Santa Barbara Zoo for hosting.

Thank You to Eric Kett

Chris Mobley announced that sanctuary public at-large member Eric Kett will not be seeking reappointment at the end of his term this year. Eric has served for sixteen years on the council, including two terms as chair and one as vice chair. Chris acknowledged Eric's dedication, commitment and hard work, and noted that he received the National Sanctuary Advisory Council Leadership award in 2010. Chris thanked Eric for his committed service to the sanctuary community and advisory council, and commended his creativity and passion. Deputy Superintendent for Programs Mike Murray added his appreciation for Eric's service, and presented him with a gift of a framed photo collage of the Channel Islands National Marine Sanctuary and islands.

Eric made a few remarks to the council, beginning by sharing that he is stepping down because he is unable to attend meetings as often as he would like. Eric shared some opportunities and memories of his time as a member of the council, including visiting other national marine sanctuary sites for national council chairs meetings. In particular, he was inspired by the community of the Thunder Bay advisory council and their sense of support of one another, which he tried to bring that sense of support back to the Channel Islands council. He also appreciated the opportunity to attend Capitol Hill Ocean Week in Washington, D.C., where he spoke on behalf of the Channel Islands National Marine Sanctuary. Eric closed by acknowledging the Channel Islands advisory council for the great and important work they do in helping to manage the sanctuary by sharing their perspectives.

July 20, 2018 Draft Key Outcomes

The council unanimously voted to approve the key outcomes from the July 20, 2018 meeting, noting one typographical error in need of correction. Copies of these documents will be posted on the sanctuary's website and are available upon request from lindsay.marks@noaa.gov.

Sanctuary Superintendent's Report

Sanctuary superintendent Chris Mobley began his report by announcing that applications are being accepted through the end of the month for three open seats on the council: Education member, Tourism alternate, and Public At-Large alternate. Chris shared that the sanctuary

Condition Report is now available online, adding that the report will be highlighted at the next advisory council meeting to prime the council for thinking about the management plan review process that will be coming up next year. He added that the feedback received from members of the research activities panel was helpful in guiding how this report was prepared, and thanked those members for their contributions. Chris also highlighted some sanctuary events that have taken place, including Get Into Your Sanctuary events like Vet Into Your Sanctuary and the national photo contest, which featured several winners from the Channel Islands, and two Santa Cruz Island shoreline cleanups that were led by sanctuary staff. Deputy superintendent for programs Mike Murray described the beautiful experience of the recent Chumash Tomol crossing to “Limuw” (Santa Cruz Island), for which the sanctuary and National Park Service provide logistical support, along with others. Chris added some highlights about ongoing research in the sanctuary, including a research cruise with the Southern California Coastal Water Research Project (SCCWRP) and the development of an anchor recovery system for research equipment moorings deployed in the sanctuary.

Council Member Brief Announcements

Council members shared news and announcements about recent events in their sectors. Audio recordings are available upon request from lindsay.marks@noaa.gov.

Council Meeting Dates Approved for 2019

Potential dates for meetings of the advisory council in 2019 were proposed by superintendent Chris Mobley. The proposed dates were approved unanimously by the council by a vote: Friday, January 25 (Santa Barbara); Friday, March 15 (Ventura); Friday, May 17 (Santa Barbara); Friday, July 19 (Oxnard); Friday, September 20 (Santa Barbara); and Friday, November 15 (Ventura).

Local Seafood Marketing, FishSB and Commercial Fishermen of Santa Barbara, Inc.

Council secretary Dr. Bob Warner introduced guest speaker Dr. Kim Selkoe, who came to share with the council some current projects and activities related to the sustainability of the local fishing community. Among several roles she has in academia, Kim is the executive director of Commercial Fishermen of Santa Barbara (CFSB). This non-profit commercial fishing association has existed for over 40 years in the Santa Barbara port, and represents all fisheries landings. The primary missions of CFSB are education and outreach around local fisheries, and to protect the long-term resiliency and strength of local fishing. A recent grant awarded by the chamber of commerce, issued in response to decreased demand for local seafood following the Refugio Beach oil spill, has allowed CFSB to expand its activities and capacity.

Kim began by sharing the value of local Santa Barbara port fisheries over the past five years. In 2017, the value of all Santa Barbara fisheries combined was estimated at \$13 million to the fishing community, and \$30 million to the overall local seafood industry (i.e., the distributors, processors, fuel suppliers, infrastructure supporting fishing activities, etc.). She noted that landings are decreasing, however, and this trend is driven by declines in the largest local fishery, sea urchins, related to reductions in their food supply.

For the remainder of her presentation, Kim highlighted some activities of the Commercial Fishermen of Santa Barbara. She described some advocacy and outreach efforts to protect the economic health of fisheries. These efforts included domoic acid monitoring and mitigation, focusing on dungeness and rock crab fisheries, which may have different levels of risk for human

consumption. Other efforts relate to the evaluation of successful limited-access and permit transferability policies in Alaska to inform the development of similar policies in California, which are lacking. Kim mentioned some ways the CFSB is working to increase patronage at the Saturday Fishermen's Market (6 am - 11 am, Santa Barbara Harbor) where fishermen can directly sell their catch. These efforts include creating a board and an application process to make the market a more reliable and predictable environment for the fishermen to work in. She also mentioned some shoreline cleanups done in partnership with The Nature Conservancy and the Channel Islands National Marine Sanctuary to remove lost fishing gear and other trash from local beaches following storm events. Kim described AB944, a bill that the CFSB helped promote to create a Spiny Lobster Marketing Commission. AB944 mirrors a bill that exists for the urchin fishery and would create a mandatory 10% fee on landings per pound, money that would go into a fund to promote fisheries advocacy and promotion. The bill was signed by Governor Brown but has not yet been voted in by the fishermen. Kim mentioned a proposed groundfish quota and permit bank, designed to keep access to this fishery local by requiring it be fished south of Morro Bay. CFSB is also working with The Nature Conservancy on digital fisheries-dependent data collection. Researchers are using computer programs to size the length of lobster to develop a library of sized distribution to be used in the management of the fishery. Finally, Kim described restarting a community supported fishery (CSF) program called Get Hooked in partnership with Reel Good Fish, a CSF out of Moss Landing that serves the bay area. The launch of Get Hooked in Santa Barbara will serve as a pilot to help other ports across the state develop their own programs, and link them with port associations to create a revenue stream.

Cruise Ship Visits to Northern Channel Islands

Deputy superintendent for programs Mike Murray opened this session by introducing this issue of cruise ship visits to the sanctuary and the Park. He reminded the council the sanctuary had its first visit from a cruise ship earlier this year, spending half a day at Santa Cruz Island, and that the experience was well managed. Communication between the sanctuary, the park and the company before the visit ensured the vessel anchored in a proper location and worked with an approved concessionaire to get its visitors ashore without exceeding the park capacity. In addition, members of the sanctuary staff and a naturalist corps member went aboard the visiting ship at anchor to make sure the captain was aware of sanctuary and park regulations.

The National Geographic company Lindblad Expeditions has two cruises planned for this fall to visit the sanctuary, and sent their local representative Rich Reid to share some details about the company and their operations to help council members understand the implications of their visit. Rich began by sharing the history of Lindblad Expeditions, which claims to have provided the first ecotourism cruise. Lindblad was started in 1979, and was purchased by National Geographic in 2004. The Lindblad fleet has eight expedition vessels, including four in their US fleet that hope to be operating in southern California and Baja California, Mexico. The upcoming two visits will be aboard the National Geographic Sea Lion, which has a capacity of 62 guests and 30 crew and weighs 99 gross registered tons.

Rich proceeded to share some examples of wildlife viewing Lindblad provides aboard their expeditions, highlighting safety features of their operations and emphasizing the value of nature and wildlife to their trips. He also mentioned some scientific experiences they provide, including expedition divers bringing samples aboard, doing plankton tows, listening to underwater noise using hydrophones, and contributing photographs of wildlife to online databases. Rich

highlighted a sustainable seafood program onboard that helps sell regional foods, as well as supporting the Grosvenor Teacher Fellow Program, hosting over 180 teachers on board to bring their experiences back to their classrooms. He also mentioned the LEX NG fund, which helps guests make donations to be used to fund programs to preserve the environment in destinations where Lindblad visits. To date, over \$15 million has been raised and disbursed.

Rich closed his presentation by detailing the itinerary for two expeditions of the National Geographic Sea Lion planned for October (18-20 and 25-27). The vessel will be spending several days in the sanctuary, including Anacapa Landing, Smugglers Cove and Scorpion at Santa Cruz Island, and Betchers Bay at Santa Rosa Island. Rich also introduced the crew of the ship, including Captain David Sinclair and Chief Mate Gus, and emphasized that Lindblad wants to work with the resource managers to make this a good experience and set a good example for how ecotourism can be applied to the Channel Islands.

Following Rich's presentation, Channel Islands National Park's Chief of Natural Resource Management Ken Convery made a few comments about the park's perspective on this visit and issue. Ken stated that he views cruise ships as an opportunity to bring a new group to the islands, but that it must be done sustainably and meet regulations. He shared that the park approved this visit as a trial through a Commercial Use Authorization agreement for 100 people or less and approved Lindblad to conduct their own water activities (e.g. kayaking) in places other than the Scorpion area. If Lindblad wants to do activities in the Scorpion area, Ken encouraged them to work with existing concessionaires. The permit parameters ensure that the park's island visitation carrying capacities are not exceeded with this visit when combined with existing concessionaires, which will have priority. This permit will expire on December 8, 2018, and with regard to possible future trips the park will revisit this issue after assessing how the 2018 trips went, and what could be done better.

Public Comment (# 1 of 2) None.

Restoration efforts for white abalone (*Haliotis sorenseni*) in the Southern California Bight
California Sea Grant resource protection fellow Lindsay Marks introduced Dr. Melissa Neuman, the NOAA Fisheries Abalone Recovery Coordinator, who spoke to the council about endangered white abalone. In her presentation, Melissa shared the historic importance and current status of white abalone in southern California, the steps for recovering white abalone in southern California, an overview of the captive propagation program, details about habitat use, and the development of long term monitoring and outplanting methods.

Melissa began her presentation by providing several reasons why abalone are a valuable resource. She pointed to the historic importance of abalone in southern California, both cultural and economic. Indigenous people depended upon abalone as a stable source of protein as well as currency for inland trade. Recreational fishing for abalone was also culturally important in contemporary times but has been lost as abalone have declined. Abalone have historically been an economically important commercial fishery, bringing in multi-millions of dollars into the southern California economy. Abalone also have important ecological effects in kelp forests, helping to maintain a healthy balance between urchins and kelp.

Melissa described the population decline of white abalone following the peak of the commercial fishery in 1972. By 1979, the population had decreased by 99.9% and NOAA listed the species as endangered in 2001. During the review process, low density was identified as the largest threat to the species; individuals appeared to be too few and far between to reproduce on their own. In response to a high risk of extinction, a recovery plan was developed and finalized in 2008. The broad strategies of this recovery plan included: captive spawning and rearing, long term monitoring to track the status of wild populations, determining habitat use and needs, and development of effective outplanting methods.

The captive spawning and rearing program is currently based out of UC Davis's Bodega Marine Lab, led by Dr. Kristin Aquilino, and has been highly successful. To date, tens of thousands of white abalone have been bred there. Broodstock for this program came from 20-30 individuals from Farnsworth Bank and Yellowbanks, Santa Cruz Island. These abalone are used for experimentation, and will supply reintroduction efforts through outplanting in the future.

Efforts have been made to learn about remnant populations of white abalone and the habitat that they depend on. Initially, Remotely Operated Vehicles (ROVs) were used to find white abalone in deep waters (i.e., over 30 meter depths) and to characterize the habitat where they are found. ROV surveys were focused at Tanner Bank and revealed dramatic declines of ~ 75% between 2002 and 2014. At the same time, however, divers began reporting white abalone along the mainland coast in Palos Verdes and Point Loma. More formal dive survey methods were developed and have been implemented on shallow (i.e., under 30 meter depths) reefs to document where abalone and the physical and biological characteristics where they *are* and where they *are not* found. Based on surveys in Los Angeles, San Diego and San Clemente Island, some broad-scale habitat use and demographics have emerged. Melissa emphasized that additional surveys like these, for example those planned for Santa Barbara Island aboard the *R/V Shearwater* this October, are essential to continue to generate this information and develop a baseline for future monitoring.

Additional data are being collected to learn about white abalone behavior. For example, time lapse cameras are being used to assess movement and feeding patterns. According to this footage, the animals do not move much and feed primarily on drift kelp during the day as well as night. Pinto abalone, which are often found in association with white abalone in San Diego, can be considered surrogate species and used to ask questions about fine-scale movement and habitat use. Acoustic tags placed on Pinto abalone showed no movement for some animals, but others traveled between 6 to 40 meters. A lack of food due to the El Nino was thought to prompt the movement observed. Based on this information, it is thought that outplanting should be done in areas that are more resilient to warming and the kelp forest (i.e., food supply) is more stable, for example where water tends to be colder and rich in nutrients.

Disease is a major threat to the recovery of white abalone, and an active health monitoring program is being led by Dr. Jim Moore at Bodega Marine Lab and Dr. Carolyn Freedman at University of Washington. Water samples collected near a wild white abalone is filtered to look for bacteria that causes withering syndrome in an effort to understand the dynamics of withering syndrome bacteria, including seasonal and annual trends. Researchers are also exploring techniques of collecting fecal material from wild abalone to understand infection rates.

Outplanting is the next phase of the recovery plan, and one major challenge of outplanting is assessing the survival of animals. Often, abalone outplanting efforts are declared a failure when

monitoring takes place for only one or two years, but it is likely that the animals are too small and cryptic to be detected in that time. The success of an outplanting effort in the San Juan Islands to restore Pinto abalone is credited to repeated stocking and continued annual monitoring; individuals were not found until 5 - 7 years following their release. Hence, the intention of the white abalone outplanting project is to continue to survey sites for many years until the abalone grow large enough to be detected again.

When outplanting white abalone in southern California, researchers will use Short-Term Abalone Fixed Enclosures (SAFES) that allow the animals time to acclimate to their new environment by keeping out most predators. The SAFES have a concrete base with a concave bottom, and will be stocked with rocks and food in addition to 40-60 animals. In aquarium tests, the animals all stayed inside the modules for four weeks. Following a period of acclimation, the SAFES will be opened and the abalone allowed to exit. Twenty SAFES were recently set out at Point Loma and will be stocked initially with juvenile red abalone as a surrogate species to test their efficacy.

Following Melissa's presentation, a discussion ensued about the role that Channel Islands National Marine Sanctuary could play in the white abalone recovery effort, and the potential for recreational and commercial divers to help. Melissa encouraged council members to consider how their constituents could become involved. In particular, a campaign among citizen scientists to look for and report white abalone in and around the sanctuary will further understanding about habitat use and may even help to identify sites for future outplanting efforts.

Public Comment (#2 of 2) None.

CINMS Research Project Updates: Giant Sea Bass Tracking and Seafloor Mapping Operations

Ryan Freedman, a contracted research specialist with the sanctuary, gave an overview of a new project tagging and tracking Giant Sea Bass in the sanctuary. Giant Sea Bass were once overfished, but have been recovering according to reports from around the channel islands. The sanctuary is collaborating with other groups to study populations at Santa Barbara Island and Anacapa Island. Ryan shared how population numbers are being assessed using photo-identification, as individual fish can be distinguished by their unique spotting patterns. He also described some methods being used to tag fishes and track their movements using acoustic receivers around the sanctuary and elsewhere in the Southern California Bight. Up to thirty-one fishes will be tagged, and the telemetry data will be downloaded twice per year over the next three years, spanning the expected lifetime of the tags.

Ryan ended his presentation by highlighting some other sanctuary research activities happening this fall. Two cruises are planned for the West Coast Deep Sea Coral Initiative to characterize deep sea coral habitat from Newport, Oregon to San Diego, California. Essential Fish Habitat will be characterized in these deep sea coral sites. Some long-term monitoring sites will also be visited. In addition, throughout the month of October 2018 another cruise is planned to do more seafloor mapping aboard the NOAA Ship *Rainier* to close some data gaps in the sanctuary.

Working Group Reports

Council members shared updates on Working Groups and Subcommittee activities and plans:

Chumash Community Working Group: No report as neither member was present.

Research Activities Panel: Bob Warner said there is nothing to report at this time.

Marketing Subcommittee: Mike Murray presented some slides on behalf of Michael Cohen, highlighting recent Facebook posts on the sanctuary account that others may want to like or share, and showing recent posts about results from the Office of National Marine Sanctuaries' Get Into Your Sanctuary photo contest. Mike thanked Anna Jacobson from Channel Islands Adventure Company for watching for and giving notice about sanctuary-related social media posts that we can all share.

Sanctuary Education Team: No report as neither member was present.

Recreational Fishing Working Group: Capt. David Bacon had nothing new to report, but did inquire about the sanctuary's official response to the letter submitted by the Coastal Conservation Association of California at the July 2018 council meeting requesting that federal waters of three marine reserves within the sanctuary be opened to pelagic fishing. Sanctuary superintendent Chris Mobley responded by saying the letter would be taken under consideration during the upcoming sanctuary management plan update process.

Commercial Fishing Working Group: No report as neither member was present.

Conservation Working Group: Earlier in the meeting, Greg Helms shared some highlights from the last meeting of the conservation working group, including: a Remotely Operated Vehicle (ROV) that is available for education and outreach purposes; some outreach products being prepared for distribution to harbors related to controlling the spread of marine invasive species; and an upcoming funding opportunity that will be available through the Ocean Protection Council to support enforcement, education and outreach, research, and restoration in California's Marine Protected Areas. Greg also announced the Friendship Paddle, an event designed to raise money for a member of the community in need of support for medical expenses associated with serious illness. Participants will spend the night at Santa Rosa Island on Saturday, September 22, and then paddle from Bechers Bay to Santa Barbara the following day.

Meeting Close Out

Sanctuary superintendent Chris Mobley closed the meeting by thanking the council members and public for attending, and thanking the Santa Barbara Zoo for hosting.

Chris also announced that the next advisory council public meeting, scheduled for November 16, 2018, will be at the Channel Islands National Park Visitor Center in Ventura.

Meeting adjourned.

Appendix 1. Attendance roster for September 21, 2018 council meeting.

Name	Advisory Council Seat	Present
Andrea Mills	Tourism	No
<i>Vacant</i>	Tourism - Alternate	--
Ben Pitterle	Non-Consumptive Recreation	No
Dr. Tony Knight	Non-Consumptive Recreation - Alternate	No
Michael Cohen	Business	No
Capt. Kip Louttit	Business - Alternate	No
Kristen Hislop	Conservation	No
Greg Helms	Conservation - Alternate	Yes
Stephanie Mutz	Commercial Fishing	No
John Hoadley	Commercial Fishing - Alternate	No
Capt. David Bacon	Recreational Fishing	Yes
Merit McCrea	Recreational Fishing - Alternate	No
<i>Vacant</i>	Education	--
Cliff Rodrigues	Education - Alternate	No
Dr. Robert Warner	Research	Yes
Dr. Mark Steele	Research - Alternate	Yes
Phyllis Grifman	Public at Large #1	No
Judy Willens	Public at Large #1 - Alternate	Yes
Richard Block	Public at Large #2	Yes
Eric Kett	Public at Large #2 - Alternate	Yes
Luhui Isha Ward	Chumash Community	No
Alicia Cordero	Chumash Community - Alternate	No
Laura McCue	NOAA Fisheries	No
<i>Vacant</i>	NOAA Fisheries - Alternate	--
<i>Vacant</i>	National Park Service	--
Ken Convery	National Park Service - Alternate	Yes
CDR Lushan Hannah	US Coast Guard	No
LCDR Jason Brand	US Coast Guard - Alternate	No
Donna Schroeder	BOEM	No
Jeremy Potter	BOEM - Alternate	No
Walt Schobel	Dept. of Defense	Yes
<i>Vacant</i>	Dept. of Defense - Alternate	--
Dr. Julia Coates	CA Dept. of Fish & Wildlife	No
John Ugoretz	CA Dept. of Fish & Wildlife - Alternate	No
Jenn Eckerle	CA Natural Resources Agency	No
Paige Berube	CA Natural Resources Agency - Alternate	No
Dr. Jonna Engel	CA Coastal Commission	No
Jacqueline Phelps	CA Coastal Commission - Alternate	Yes
Errin Briggs	Santa Barbara County	Yes
David Villalobos	Santa Barbara County - Alternate	Yes
Danielle Tarr	Ventura County	Yes
<i>Vacant</i>	Ventura County - Alternate	--
Chris Mobley	Channel Islands NMS [non-voting]	Yes
Mike Murray	Channel Islands NMS - Alternate [non-voting]	Yes
Paul Michel	Monterey Bay NMS [non-voting]	No
Karen Grimmer	Monterey Bay NMS - Alternate [non-voting]	No
Maria Brown	Greater Farallones NMS [non-voting]	No
Brian Johnson	Greater Farallones NMS - Alternate [non-voting]	No