

Sanctuary Advisory Council Meeting

FINAL Meeting Outcomes

Friday, July 20, 2012

Poinsettia Pavilion

3451 Foothill Road · Ventura, CA

*Note: This document will be posted on line at <http://channelislands.noaa.gov/sac/minutes.html>.
Audio recordings of Council meetings are available upon request to michael.murray@noaa.gov.*

Attendance: 15 voting seats were represented at roll call. At peak, 16 of the Council's 21 voting seats were present (see attached attendance roster). Five seats were absent for the day: NOAA Fisheries, California Dept. of Fish and Game, California Natural Resources Agency, Bureau of Ocean Energy Management, and Ventura County. Public attendance varied from 8-14 people.

Administrative Business and Announcements

New Member Introductions

The following new council representatives introduced themselves: Richard Block (public at large alternate), Michael Cohen (business seat alternate), LCDR Brad Soule (US Coast Guard member), Mati Waiya (Chumash Community seat alternate).

Meeting Notes

The draft key outcomes for the May 18, 2012 council meeting were adopted as final, with one correction.

Sanctuary Superintendent's Report

Chris Mobley provided highlights about the ongoing "Sanctuary Classic" fishing and photo contest (see sanctuaryclassic.org). Chris also mentioned that a new tomol *Xax' Aolk'oy* was launched in May. He also reported that the new UCSB building construction has been halted because of issues with the contractor, but staff expect to be able to move in to the new office space by the end of the year or early next year. Chris mentioned that the Channel Islands Boating Center is progressing very well, with construction expected to be completed as early as October 2012. Chris reported that the budget outlook for fiscal year 2013 (starting this October) is expected to be tight, and he explained that staff are managing to squeak by this year because of soft funding that has been brought in. Chris also acknowledged the council for their important role in sanctuary accomplishments.

Council Member Announcements

A variety of announcements were made by council members, including whale sightings, shipping and fishing conditions in and around the sanctuary, various community events coming up, and agency planning processes. Audio recording files are available upon request.

Artificial Reefs

Introduction and Sanctuary System Context

Brief introduction to the topic as it relates to the sanctuary, past considerations by the advisory council, additional sources of information from the Office of National Marine Sanctuaries, and purpose of hearing from today's guests.

Sara Hutto provided a summary of the council's history including presentations by California Department of Fish and Game and Office of National Marine Sanctuaries, a draft letter presented by the Recreational Fishing Seat that was tabled by the council until such time as a project had been proposed. Sara clarified that the project Chris Goldblatt will discuss is not within the sanctuary and no council action is requested; the presentation is informational only.

Fish Reef Project Presentation (slides available upon request)

Mr. Chris Goldblatt, Founder and CEO of the Fish Reef Project (www.fishreef.org), described the motivation for artificial reefs, reef ball construction technology, and the history of artificial reefs in California, and described some of the existing artificial reefs on the west coast. Mr. Goldblatt described and showed images of reef ball installations in other areas, and explained some of the proposed benefits. He showed a video of the installation of two reef balls associated with an existing aquaculture facility 1,000 about feet from shore at Arroyo Burro Beach in June 2012.

Dr. Robert Abbot, Senior Principal Marine Biologist at ENVIRON International Corporation, described the use of a Net Environmental Benefit Analysis to analyze the pros and cons of using artificial reefs. Dr. Abbot explained that some benefits include short trips to fishing and diving sites, and increasing habitat. Dr. Abbott has been building three artificial reefs in the San Francisco Bay area. Some of the need for building these reefs is because of removal of vertical structure (as hazards of navigation) that has caused a loss of hard structure of organisms, and a lack of habitat complexity. The risks include factors such as whether the reefs will be ecologically successful. Dr. Abbott described the installation of oyster mounds in an intertidal location using volunteers, and characterized the benefits as including eelgrass growth, herring eggs, goby eggs, and increased catch per unit effort near the reef. Dr. Abbott also explained that one of the reef projects is designed to protect shoreline against sea level rise.

Council members asked questions about the permitting process for the pilot project at Arroyo Burro. Mr. Goldblatt explained that the pilot project was conducted under another existing permit granted to an aquaculture facility, and that the reef balls installed were being used as anchors for that permitted structure. Still, he explained, they have decided to apply for agency permits for the full reef project. Linda Krop encouraged full environmental review to be conducted. Mr. Goldblatt explained that the project is funded through private donations. Luhui Isha Ward asked about the analysis of potential impacts to ancient Chumash villages and artifacts, now submerged, encouraging that this be taken seriously. Mati Waiya cautioned that there are Chumash remains in the area. Phyllis Grifman said that she had some hesitation about some of the claims Mr. Goldblatt had in his presentation, such as regarding how flat habitat is not living habitat. Phyllis also pointed out that that this is different than restoration. Mark Steele said that some claims sound overstated, noting that even the SONGS artificial reef near San Clemente does not succeed in "100%" mimicking natural reefs. Mark also suggested that they think carefully about using reef balls, noting that the Wheeler North artificial reef does not and it is the only reef that consistently supports giant kelp. Jonna Engel asked if the reef balls have been used to create a kelp forest of macrocystis and encouraged Mr. Goldblatt to talk to the SONGS scientists. Jonna also mentioned that there will need to be careful consideration of soft bottom habitat. Bruce asked what the intended benefit of the reef is –for public fishing, diving, aquaculture? Chris Mobley added that some projects require mitigation measures and he could see how artificial reefs might be identified as such. Jonna Engel explained that the Coastal Commission will be doing a lot of biological review on this. Capt. David Bacon said that the concerns that have been raised are good to know about, that the recreational fishing community is strongly behind this, and that he hopes people can help work through the issues rather than create road blocks.

Ocean Acidification Updates

New 30-second Public Service Announcement (PSA) on Ocean Acidification

Linda Krop reminded the council about the PSA, which was shown at the last council meeting. Now they are working towards distribution of the video. Kristi Birney said that she had asked for SAC members to contact her if they were interested in helping but she had not gotten many volunteers. Now she has created email text and links that she can provide to make it easy for SAC members to distribute to their counterpart members on other SACs. Maria Petueli thanked Kristi for putting the template together which made it easy for her to customize her email and send it out to her contacts. Phyllis Grifman agreed and added that as they have been working with Annenberg, JPL, and NASA on communicating climate change she has found these types of tools to be very helpful. Kristi encouraged SAC members to distribute the video, which is available online at acidocean.org.

Additional announcements on ocean acidification

Bruce Steele showed a website called trillionthtonne.org that estimated how many billion tons of carbon have been released into the atmosphere from the cumulative emissions of fossil fuel use, cement production and land-use change since industrialization began (560 billion tons and climbing), and when the trillionth ton would be emitted (approx. 2043), at which time the increase in global temperatures is expected to be 2 degrees Celsius. The site also estimates that we could avoid reaching the point of releasing the trillionth ton if we now began reducing emissions by 2.41 percent per year (and rising)

Bruce also shared and commented on a recent paper that models ocean acidification on the west coast into the future, concluding that by 2050, surface waters of the California Current System will be undersaturated for half of the year. (See: *A Rising Tide of Acid Off California*, <http://news.sciencemag.org/sciencenow/2012/06/a-rising-tide-of-acid-off-califo.html?ref=hp>)

Bruce also shared and discussed a New York Times article that highlighted the decline of coral reefs predicted as a result of ocean acidification. (See “A World Without Coral Reefs” by Roger Bradbury, http://www.nytimes.com/2012/07/14/opinion/a-world-without-coral-reefs.html?_r=2)

Council discussion focused on: the fact that most of the sand bottom environments around the islands are made up of shell fragments, which will eventually dissolve at a certain level and duration of acidic conditions; the importance of telling stories about this issue that aren't based on predictions that are too far off into the future; the futility of selling false hope on some aspects of this; the need to put a human face on this in order to increase visibility; and interest in Bruce Steele participating with teaching kids what they can do in their own lives.

Increasing Sanctuary Visibility and Marketability: Possible New Council Focal Topic

Mike Murray described to the council that a lot of interest had been coming forward on how to help the sanctuary boost its visibility in the community. Suggestions have come from SAC members in response to the explanation at the last meeting of the “Campaign of Engagement” for national marine sanctuaries, from several individuals that applied for advisory council membership, and from new council members. Mike asked the council if they would want to take on the issue of making recommendations on how to increase the visibility and marketability of the sanctuary in a manner that could help sustain some core CINMS programs and be helpful to local businesses as well. Chris Mobley added that we could

Learn about what other sanctuaries are doing along these lines, and what we've been doing at CINMS as well. Council member comments touched on: Santa Barbara needing to market itself as a natural resource destination, how the Zoo ties into that, and how CINMS could as well; sustainable sanctuary seafood; the importance of increased links to the sanctuary throughout our communities; the Zoo becoming more of a launch pad for visitors to go experience the sanctuary; a new promotional film by Islands Packers; importance of coupling the rise in tourism with goals of marine protection. A motion to create the Subcommittee was offered, seconded, and passed unanimously. Members that volunteered to be on the Subcommittee were: Eric Kett, Phyllis Grifman, Rich Block, Luhui Isha Ward, Maria Petueli, Michael Cohen, Andrea Mills, and Susan Curtis. Mike will follow-up to schedule a first meeting and the group will report back in September.

Informational Presentation: Biogeographical Variation in Trophic Interactions on Temperate Reefs of the Southern California Bight

As part of the advisory council's 2012 science speaker series, Ryan Jenkinson with San Diego State University provided a presentation on his work observing patterns of predation on sea urchins on rocky reefs from Point Conception south to central Baja California, including the California Channel Islands (slides available upon request).

Ryan began by explaining that his research interest is in predator-prey interactions, specifically how predators can change what an ecosystem looks like. Sea otters provide a pronounced example, which is rare. There is almost always multiple prey species and predator species. It is actually much more complicated than the otter example. His work tries to simplify this, but in reality it is complex.

Ryan explained that there is spatial variability in species interactions, for example as one moves from north to south. For his work, Ryan studied near shore rocky reefs from south of Pt. Conception to Baja – the range of giant kelp (*macrocystis*). Ryan has 22 study sites in the region, about 6 in CINMS. Some sites are in MPAs, some are not. In the absence of otters, it has been suggested that a suite of predators may be the main consumers of urchins: sheephead, lobster, pycnophidia. This has been the focus of his work.

Ryan measured and compared sea urchin (red and purple) abundance at all 22 sites. Very few urchins are at the southern end. Abiotic conditions at Punta Eugenia probably explain why so few urchins. Lobsters are dominant. After describing various results from his studies, he summarized his talk with these points:

- There is a lot of site variation, including among MPA sites.
- There is a predator-prey correlation, particularly with lobster
- Trophic effects are not necessarily stronger in marine reserves

Council members asked questions about interactions between the predator prey species, and the overriding effects of El Nino and episodic recruitment events.

Whale Ship Strike Updates

United States proposal to the International Maritime Organization

Sean Hastings provided a progress update on the U.S. proposals sent to the International Maritime Organization's (IMO) Navigation Subcommittee requesting approval for changes to the Santa Barbara Channel traffic separation scheme as well as adjustments to the approaches to San Francisco Bay. Sean

shared the presentation that NOAA recently gave at an IMO meeting in London, showing graphics of current and proposed traffic schemes and current shipping traffic patterns. Sean explained that the proposal to the IMO is backed by agreement from a U.S. delegation of 5 agencies: NOAA, EPA, Navy, USCG, and Dept. of State. The proposal for the Santa Barbara Channel is to move the southbound lane one mile north, reducing the traffic separation zone from 2 miles wide to 1 mile (an internationally accepted width). The IMO's Navigation Subcommittee accepted the Santa Barbara and SF Bay area proposals and will consider them again in November at an IMO Marine Safety Committee meeting. The U.S. Coast Guard will soon start a domestic rule-making process that will include public review and comment, environmental review and documents, etc. Looking ahead, Sean mentioned that the soonest the proposed lane change could take effect might be July 2013.

Joint Working Group Recommendations for GFNMS and CBNMS.

Ship strike recommendations created by a joint working group were recently approved by the sanctuary advisory councils of the Cordell Bank and Gulf of the Farallones national marine sanctuaries (CBNMS and GFNMS). (The adopted report and recommendations are online at http://farallones.noaa.gov/manage/pdf/sac/12_06/jwg_strikes.pdf). CINMS Sea Grant Fellow Sara Hutto described the make-up of the joint working group (handout available upon request). The recommendations came forward with unanimous support from working group members. There are some similarities to these recommendations with the CINMS advisory council ship strike reduction recommendations adopted a few years ago. A major recommendation was modification of the shipping lanes, which was in progress at the time. A real backbone of their recommendations is the setup of a DMA – Dynamic Management Area. Monitoring of whales in the area could prompt asking for slower speeds within whichever approach lane has the most whale ship strike risk, encouraging ships to use the other available approaches. This is suggested to be a voluntary program at first, but if it is not working then the recommendations call for making it mandatory. In order for this to work, more whale data collection is needed and so it is recommended that ships become new platforms of observation. Another recommendation calls for the development of a regional education and outreach program. Sanctuary superintendents are considering these recommendations and what can be done next. All west coast superintendents have been briefed.

Sean Hastings showed the latest map of a newly modified Whale Advisory Zone, which is now larger to reflect the area where whales are known to distribute along the coast in our region, and a slightly smaller recommended slow speed zone within the SB Channel. This tow-part zone is in effect now with Local Notice to Mariners and a broadcast message. The smaller slow speed zone is 65 nm long, extending from Sandy Point on Santa Rosa Island to Point Hueneme. This map product will be shared with the Marine Exchange and the shipping industry, and with the California Air Resources Board (CARB) marine list-serv (4000 recipients), and be on the sanctuary's web site. We will also be writing directly to shipping lines this year with this information. This speed zone will be left in effect until we don't have whales in the area.

Public Comment

Chris Cohen from Southern California Ocean Observing Systems (SCOOS). SCOOS gets the majority of their funding from NOAA, and their goal is to design and maintain a network of ocean observing systems for many users. There might be some areas where we could work together. Would love to give a presentation to the SAC at a future meeting, if there is interest.

Working Group Reports

Channel Islands Technical Advisory Committee (TAC) on Enforcement. Bill Struble, (NOAA Office of Law Enforcement) reported that there are a few enforcement cases going on right now, but nothing to share in the meeting today about those. He mentioned that there was a helpful meeting last week that brought together CINMS staff and NOAA General Counsel.

Chumash Community Working Group. Luhui Isha Ward reported that the Wishtoyo Foundation's Chumash Discovery Village in Malibu will soon host again their annual Tribal Wave youth camp. She is looking forward to working with Maria Petueli on some new approaches. Luhui also announced that from September 6-9 there will be the annual tomol crossing event. Luhui and Mati Waiya will be kitchen crew out at the island. This year there could be 3 or 4 tomols crossing! And then in the Fall there will be construction of another new tomol.

Sanctuary Education Team (SET). Maria Petueli reported that two abstracts were submitted for the California Islands Symposium. One is about how the SAC and SET's work on ocean acidification has moved forward and is being used. Another abstract will be about the upcoming Ocean Acidification Workshop in Monterey, and the results from that. Kevin Flint, advisor to the Youth Steward Council group from Oxnard High School, and involved students are looking forward to their group presenting to the SAC when they are ready.

Recreational Fishing Working Group. Capt. David Bacon mentioned that most of the discussions lately have been about ideal placement of artificial reefs, which are preferred to be close to harbors.

Conservation Working Group (CWG). Linda Krop reported that at their July 18th meeting they heard an update from UCSB Bren School students regarding their project studying MPAs and use of the sanctuary. The CWG also talked about how the North American Emission Control Area [requiring cleaner fuel use by ships operating within the US and Canadian exclusive economic zones, out to 200 nm from the coast] is supposed to start coming into effect next month, and it will be interesting to see if that has an effect on shipping industry patterns. Linda also commented that the CWG is glad to see the whale zone notices going out and to know that the shipping industry has been engaged, but would like to see the notices go out sooner.

Schedule for Remaining 2012 Meetings:

- Friday September 21, 2012 (Santa Barbara)
- Friday November 16, 2012 (Ventura)

Meeting Attendance Roster (July 20, 2012):

Andrea Mills	Tourism	Present
Capt. Matthew Curto	Tourism - Alternate	Absent
Debra Herring	Non-Consumptive Recreation	Present
vacant	Non-Consumptive Recreation - Alternate	--
Capt. Richard McKenna	Business	Present
Michael Cohen	Business - Alternate	Present
Linda Krop	Conservation	Present
Greg Helms	Conservation - Alternate	Present
Bruce Steele	Commercial Fishing	Present
Stephanie Mutz	Commercial Fishing - Alternate	Absent
Capt. David Bacon	Recreational Fishing	Present
Merit McCrea	Recreational Fishing - Alternate	Present
Maria Petueli	Education	Present
Amanda Hendrickson	Education - Alternate	Present
Dr. Robert Warner	Research	Absent
Dr. Mark Steele	Research - Alternate	Present
Phyllis Grifman [Council Secretary]	Public At Large #1	Present
Victor Cox	Public At Large #1 - Alternate	Present
Eric Kett [Council Chair]	Public At Large #2	Present
Rich Block	Public At Large #2 - Alternate	Present
Luhui Isha Ward	Chumash Community	Present
Mati Waiya	Chumash Community - Alternate	Present
Vacant	NOAA Fisheries	--
Elizabeth Petras	NOAA Fisheries - Alternate	Absent
Russell Galipeau	National Park Service	Present
Dan Richards	National Park Service - Alternate	Present
CDR Christina Davidson	US Coast Guard	Present
LCDR Brad Soule	US Coast Guard - Alternate	Present
Donna Schroeder	BOEM	Absent
Dr. Ann Bull	BOEM - Alternate	Absent
John Ugoretz	Dept. of Defense	Absent
Walt Schobel	Dept. of Defense - Alternate	Present
Paul Hamdorf	CA Dept. of Fish & Game	Absent
Kristine Barsky	CA Dept. of Fish & Game - Alternate	Absent
Vacant	CA Natural Resources Agency	--
Amy Vierra	CA Natural Resources Agency - Alternate	Absent
Dr. Jonna Engel	CA Coastal Commission	Present
Steve Hudson	CA Coastal Commission - Alternate	Absent
Dianne Black	Santa Barbara County	Absent
Susan Curtis	Santa Barbara County - Alternate	Present
Lyn Krieger	Ventura County	Absent
vacant	Ventura County - Alternate	--
Chris Mobley	Channel Islands NMS [non-voting]	Present
Paul Michel	Monterey Bay NMS [non-voting]	Absent
Karen Grimmer	Monterey Bay NMS - Alternate [non-voting]	Absent
Maria Brown	Gulf of the Farallones NMS [non-voting]	Absent
Brian Johnson	Gulf of the Farallones NMS [non-voting]	Absent