

**Channel Islands National Marine Sanctuary
Sanctuary Advisory Council**

Research Activities Panel

**FINAL Key Meeting Outcomes
March 2, 2012
Marine Science Institute, UCSB**

Attendance:

Robert Warner	Kristi Birney	David Kushner	Michael Murray
Dave Siegel	Kevin Lafferty	Steve Katz	Chris Mobley
Jonna Engel	Mark Steele	Dani Lipski	
Jenn Caselle	Dan Reed	Sara Hutto	

Public attendance: Jim Marshall, Armand Kuris, Darcy Bradley.

CINMS Announcements:

Chris Mobley announced that the move-in date for the Channel Islands National Marine Sanctuary (CINMS) staff office on UCSB campus is now expected to be summer 2012. Chris reported that the sanctuary program continues to be faced with a very tight budget. Both Chris and Steve Katz discussed Shearwater use and funding. Chris reported that CINMS is working with procurement staff at UCSB to develop ways to transfer research funds for vessel use and they will continue to explore alternative pathways such as using the sanctuary foundation to help with this. Chris also spoke about the increase in illegal panga activity around the islands and urged everyone to keep a sharp look out for this activity when conducting research. Sanctuary staff are working with enforcement partners on the issue and will provide updates to the RAP and recommendations to boaters.

Research Activity Updates

Dave Siegel is continuing his work on the Plumes and Blooms project to understand ocean color variability and is providing support for the time series sampling of harmful algal blooms (the funding for which, provided by NSF, is up in August). Dave also asked members to consider areas for stable platforms in deep water for instrumentation used by NOAA satellites. Dave described a current project with Rachel Simons and Bruce Kendall on the mesoscale connectivity of larval stages across the Southern California Bight. Dave also mentioned the LTER glider that collects and transmits data in real time; it looks like a yellow torpedo and communicates with satellites via radio antenna.

Jenn Caselle reported that PISCO is getting smaller every year, with some monitoring programs continuing through 2012: community surveys in kelp forests to evaluate MPAs, fish larval recruitment, and physical oceanography modeling. Jenn is working on two manuscripts: hot spots for recruitment in the Channel Islands and the importance of monitoring recruitment to evaluate changes in MPAs. Jenn described a new project that is funded by BOEM to better understand fish-habitat relationships for stock assessment by using benthic habitat maps and

predictive modeling. Jenn also proposed that the RAP discuss the option for conducting a 10-year review in 2013 of the Channel Island MPAs using the data that is already collected. Various members offered comments that the state has no plans for a review, and that perhaps a workshop should be developed to discuss conducting a full synthesis with funding through a multi-agency project. David Kushner indicated that some data analysis has already occurred (sea cucumbers, for example). Bob Warner agreed that it would be good for the RAP to continue to discuss how they could support a 10-year review.

Kevin Lafferty is working on food web software modeling with Mark Carr on the CAMEO project. Kevin also discussed a project by a Lenihan student on the exposure of wild black abalone to pathogens found in the outflow from an abalone farm. Kevin is looking for funds to explore how far these pathogens may travel. Other projects include producing data papers from the kelp forest monitoring database at the northern Channel Islands and San Nicholas (funded by BOEM) and sea otter monitoring at Gaviota.

Dan Reed just submitted the proposal for the third round of the Santa Barbara Coastal (SBC) LTER monitoring funded by NSF. Funding comes in 6-year increments and has been provided for twelve years so far. The focus of this work is land-shore processes and the impact on kelp ecosystems. SBC LTER is also managing Steve Schroeters's larval settlement work with 3 sites in Santa Barbara and 1 at Anacapa. With NASA and NSF funding SBC LTER is using LANDSAT to get surface biomass of kelp. The kelp imaging has been ongoing since 1984. A new satellite will be launched in January 2013. Dave Siegel and Dan hope to secure funding to modify methods and calibration.

Jonna Engel received a grant to investigate the ecological value of beaches. The coastal commission receives many project proposals that would impact beaches so this funding will allow for the development of a model to determine their ecological value in order to mitigate for these projects. She is working with a coastal engineer and will be contracting ecologists and economists.

Kristi Birney is partnering with the sanctuary to host a Bren group project investigating private boat use of the Channel Islands using data from former CINMS Socioeconomic Coordinator Chris LaFranchi. She also described the current EDC project of investigating the impacts of wind and wave energy and producing a report to evaluate these impacts and existing regulations and policy. Kristi is looking for information on all aspects of ocean energy from technology to impacts and asked the RAP members to contact her if they have information or know of a good contact for this.

Mark Steele reported that his work is mainly along the coast and at Catalina but not currently within Channel Islands National Marine Sanctuary.

David Kushner reported for Dan Richards and Stephen Whitaker on current Channel Islands National Park intertidal monitoring trends including rockweed declines and black abalone population changes on the Channel Islands. The monitoring shows that San Nicholas and Santa Cruz have recent increases in black abalone. David also reported that their spring sampling is hampered by not receiving Shearwater days this year. David is working on a paper that

addresses the abalone populations on San Nicholas and the presence of a virus that inhibits expression of a deadly pathogen. David also reported that NPS will be hiring four scientific divers for kelp forest monitoring and that two pH loggers were recently installed at the park pier and at Prisoner's Cove. He also mentioned that the Channel Islands Symposium call for abstracts will be released soon. The symposium will be held October 23-25, 2012.

Steve Katz discussed current research projects including: the impact the recession had on ocean noise in the channel, high-res mapping of the Santa Cruz Basin and south of Santa Rosa and San Miguel by the NOAA ship Okeanos Explorer, time-series analysis of wind patterns and climate models, AIS tracking and whale distribution and a funding proposal to develop a science plan for coordinating deep sea coral activities. He also discussed current partnerships and papers in review.

Dani Lipski reported for **Natalie Senyk** that the Sanctuary Aerial Monitoring Spatial Analysis Program (SAMSAP) is suffering from limited funds and availability of contract aircraft and no NOAA aircraft (Twin Otter), so surveys are very limited in the last year and will be this year. However, Natalie is working on publishing data and creating products. Also, Natalie has worked on revising the SAMSAP software which is now being used in other sanctuaries around the country. Natalie is still working with the Navy on survey flights to help Navy understand shipping patterns in their range but they have been very limited because of the unavailability of access to the sea range, aircraft availability and weather. Natalie continues to work on the Automated Information System project to track shipping patterns, and she continues to work on tracking whale sightings through the marine mammal sightings of the volunteers.

Dani Lipski reported that in addition to many coordination activities and some field work she is involved in the planning process for the 3rd year of a 3 year internal NOAA funding process for deep sea coral field work on the west coast. Dani reported they are in the process of developing the west coast deep sea coral science plan for 2012 so we may see some more work in southern CA. Dani reported that they hope to complete an analysis of the ROV images from the Okeanos Explorer opportunistic cruise in 2011.

Public Comment

- Armand Kuris, disease ecologist at UCSB, requested that the Research Activities Panel support streamlining the California Department of Fish and Game scientific collecting permitting process for research and teaching in the MPAs. With a lead time of 6 months, current permitting prohibits many undergraduate and visiting scientists from conducting research inside state MPAs.
- Jim Marshall is an urchin diver and former SAC member; he requests that the RAP re-examine the recommendations that they made about post-hoc stratified sampling for abalone from 5-6 years ago.

CINMS Advisory Council Marine Reserves Research Speaker Series

Dani reported that the Sanctuary Advisory Council consistently ranks learning about marine reserve research highly in their annual work plan and to facilitate this, the Executive Committee of the council suggested inviting scientists conducting MPA research to speak at SAC meetings throughout the year. On behalf of the Executive Committee Dani requested suggestions for

speakers and invited anyone interested to present their work at a SAC meeting in 2012. The SAC meetings for the remainder of 2012 are:

- Friday March 16, 2012 (Ventura)
- Friday May 18, 2012 (Santa Barbara)
- Friday July 20, 2012 (Ventura)
- Friday September 21, 2012 (Santa Barbara)
- Friday November 16, 2012 (Ventura)

If you are interested in speaking to the SAC, please contact Dani.

CINMS Research Program Prioritization

Steve Katz presented to the RAP the process by which CINMS research staff has prioritized research needs. He described factors that influence the particular need (e.g., mandates, information gaps, community support) and factors that limit the ability to address needs (e.g., capacity, expertise, ability to make a unique contribution, risk). Steve described the steps in the ranking process and the outcomes. Steve reported that the highest priority research needs were identified as climate change and human dimensions and the lowest were invasive species and historical ecology. RAP members discussed the methods and merit of this prioritization, but overall the RAP was pleased by the effort that went into this analysis. The RAP discussed how they could help support this effort and decided to draft a letter of support for the prioritization project and research efforts of CINMS. The RAP continued discussion of funding sources and limitations to address all research needs. Dr. Warner concluded this discussion with a plan to put together a letter of approval and support of this research prioritization to be shared with all RAP members.