

**MBNMS Research Activity Panel  
Meeting Summary  
January 11, 2008**

**Host:** Chris Harrold – Marine Conservation Biology (Monterey Bay Aquarium)

**Location:** Ocean View Conference Room  
Monterey Bay Aquarium

**Date:** Friday, January 11<sup>th</sup>, 2008; 8:45 am to 12 pm

**Members:**

	<b>Discipline</b>	<b>Primary/ Alternate</b>	<b>Name</b>	<b>Institution</b>
X	Research Coordinator		DeVogelaere, Andrew	Monterey Bay National Marine Sanctuary
X	Biological Oceanography	primary	Chavez, Francisco	Monterey Bay Aquarium Research Institute
	Biological Oceanography	alternate	Kudela, Raphael	University of California, Santa Cruz
X	Deep Sea Ecology	primary	Cailliet, Greg	Moss Landing Marine Laboratories
	Deep-sea Ecology	alternate		
	Estuarine Ecology	primary	Wasson, Kerstin	Elkhorn Slough NERR and Foundation
X	Estuarine Ecology	alternate	Van Dyke, Eric	Elkhorn Slough NERR and Foundation
X	Fisheries	primary	Grimes, Churchill	NOAA Fisheries Service
X	Fisheries	alternate	Coulston, Pat	California Department of Fish & Game
X	Marine & Coastal Geology	primary	Storlazzi, Curt	United States Geological Survey
	Marine & Coastal Geology	alternate	Paull, Charles	Monterey Bay Aquarium Research Institute
X	Marine Conservation Biology	primary	<b>Harrold, Chris*</b>	Monterey Bay Aquarium
	Marine Conservation Biology	alternate	Micheli, Fiorenza	Hopkins Marine Station
	Marine Policy	primary	Faurot-Daniels, Ellen	California Coastal Commission
X	Marine Policy	alternate	Sharp, Gary	Center for Climate/Ocean Resources Study
	Nearshore Ecology	primary		
	Nearshore Ecology	alternate	Carr, Mark	University of California, Santa Cruz
X	Physical Oceanography	primary	McPhee-Shaw, Erika	Moss Landing Marine Laboratories
X	Physical Oceanography	alternate	<b>Breaker, Laurence†</b>	Moss Landing Marine Laboratories
X	Shelf & Slope Ecology	primary	Yoklavich, Mary	NOAA Fisheries Service
	Shelf & Slope Ecology	alternate	Starr, Rick	California Sea Grant Extension Program
X	Social Sciences	primary	Pomeroy, Caroline	California Sea Grant Extension Program
X	Social Sciences	alternate	Kildow, Judith	Monterey Bay Aquarium Research Institute
	Water Quality	primary	Epel, David	Hopkins Marine Station
	Water Quality	alternate	Hunt, John	University of California, Davis

\*Sanctuary Advisory Council Member: Research (Primary)

†Sanctuary Advisory Council Member: Research (Alternate)

**GUESTS:**

	<b>Name</b>	<b>Institution</b>
X	Burton, Erica	Monterey Bay National Marine Sanctuary
X	deMarignac, Jean	Monterey Bay National Marine Sanctuary
X	Ezcurra, Manny	Monterey Bay Aquarium
X	Ramp, Steve	CeNCOOS
X	Selbie, Hugo	Monterey Bay National Marine Sanctuary

**CONSENT ITEMS****Introductions/modifications to the agenda (Chris Harrold)**

- Cancellation –Linking SIMoN to Management (Amber Szoboszlai/Sea Grant Fellow)
- Addition – Pat Coulston – Scientific Collecting Permits update

**PRESENTATIONS****Captive feeding and growth of a juvenile white shark, *Carcharodon carcharias*, at the Monterey Bay Aquarium (Manny Ezcurra)**

- Feeding (<1kg/d)
- Growth rates (large portion of calories went to growth); similar to tuna
- Criteria for release: avoid secondary infection, no eating other animals on display, size they can handle for safe release
- MBA feels that they can educate the public best if they have a shark on display

**Central & Northern California Ocean Observing System (CeNCOOS; Steve Ramp)**

- Office at MBARI, Building G (above Phil's Fish Market)
  - Steve Ramp-Executive Director
  - Heather Kerkering-Coordinator
  - Tom Wadsworth-Programmer (website and Ocean Obs sector)
- Will have open house soon, will invite RAP
- 1 of 11 regional associations of IOOS
- CeNCOOS
  - Observing systems for ocean health
  - We provide the facts
  - The National Weather service for the ocean
  - Data clearinghouse for the entire region
  - Observe, integrate, model, predict, serve
  - Days to Decades
- Local Activities
  - Proposal submitted for 2008-10 (~3.5 million/yr)
  - Protected Marine Area Focus
    - National Marine Sanctuaries
    - California State MPAs
  - Two Elements for Implementation
    - Pan-Regional Backbone (PRB); entire region
    - Regions of Special Interest (ROSI); denser observations to answer ecosystem based questions (e.g. Point Reyes, Monterey Bay, Morro Bay)
  - Observations, Modeling, DMAC, Products
- Impacts

- Establish climatologies and trends for ocean variables such as temperature, sea level, currents, ocean color, pH, PCO<sub>2</sub>, chlorophyll, nutrients, dissolved oxygen
- Which potentially impact
  - Global warming
  - Coastal inundation
  - Weather
  - Harmful Algal Blooms
  - Ecosystem based management
  - Carbon budget
  - Maritime safety
  - Pollution/water quality
  - Homeland security
- [www.cencoos.org](http://www.cencoos.org)

### **CDFG Scientific Collecting Permits Update (Pat Coulston)**

- Applicants hesitate to fill-in application completely; “What are you going to collect?” section not getting filled-in
- Applicants are being asked to answer as best they can; please try
- CDFG will not renew permit without report; agency trying to clean-up process, make more efficient

### **STAFF/SAC REQUESTS TO RAP**

#### **Creation of Historical Source Database for the MBNMS and Central California Region (Hugo Selbie/Sea Grant Fellow)**

- To build a picture of the natural history or historical ecology of the marine environment within the MBNMS and the surrounding area ranging 1500s – 1950s
- Phase I
  - Database identifying historical data sources
  - Examine efficacy and limitations of data sources
- Phase II
  - Data will be used to reconstruct ecological history of region
- Data Sources (1500s – 1950s)
  - Native American Midden Sites
  - Explorer Journals
  - Maps and Charts
  - Naturalist Accounts
  - Whaling Fisheries Landings
  - Newspapers
  - Oceanographic Records
  - Finfish Fisheries Landings
  - Maritime Industry Interviews
- Uses of database
  - Facilitate future historical analyses
  - Creation of timeline of events
  - Glean critical historical info
  - Characterization of environmental time periods

- Any sources of data the RAP may know about let Hugo know
- [Hugo.Selbie@noaa.gov](mailto:Hugo.Selbie@noaa.gov); 647-4228
- RAP suggested numerous sources to explore

## **DISCUSSION ITEMS**

### **December SAC Meeting (Chris Harrold)**

- 2-day SAC meeting in December 2007
  - Day 1: Should MBNMS move forward with evaluating use of new MPAs in federal waters? Presentations by:
    - Research – Chris Harrold
    - Fisheries – Steve Scheiblaue & Richard Parrish
    - Conservation – Kaitilin Gaffney
  - Day 1 (evening) - public comment (~45; 32 favored, 7 against, 4 neutral)
  - Day 2 – SAC discussion
    - A majority of SAC in favor of moving forward with MPAs.
    - MBNMS response will be presented at February SAC meeting
    - Chris will provide comments to Paul Michel (Chris will make available to RAP); encourage other RAP members to comment
- Harrold emailed two draft manuscripts to RAP from Steve Scheiblaue (SAC Member representing Harbors)
  - Ray Hilborn and Carl Walters, “Ecosystem consequences of MPAs for the Monterey Bay National Marine Sanctuary”
  - Richard Parrish, “MPA Needs Assessment Monterey Bay National Marine Sanctuary”
- Additional Manuscripts will be packaged by Alliance of Communities for Sustainable Fisheries (post-meeting: emailed to RAP by Pomeroy)
  - Doyle Hannon, “MPAs and Research Needs within the Monterey Bay National Marine Sanctuary”
  - Barbara Walker, “Alternative Analysis of the Need for Additional MPAs within the MBNMS”
  - Bud Walsh, “Consideration of Marine Protected Areas by the Monterey Bay National Marine Sanctuary: Can Fishing Activity be Regulated by the Sanctuary And, If So, How?”
- Harrold summarized his SAC presentation
  - How can science inform this decision
    - What are the ecosystem protection goals of the NMSA, as related to MBNMS, in measurable terms
    - Evidence in literature
- Deadline for comment; written SAC comments by January 14<sup>th</sup>, SAC meeting on Feb 15<sup>th</sup>

### **Sanctuary Currents Symposium planning update (Chris Harrold)**

- Oceans of Change: Our Climate, Our Sanctuary, Our Future
  - Lisa Sloan (UCSC) – Overview of global climate change
  - Doug Smith (CSUMB) – Sea level change and implications
  - Nick Welschmeyer (MLML) – CO<sub>2</sub> in the ocean

- Bill Sydeman (Farallon Institute for Advanced Ecosystem Research) – Climate change and ecosystem change in central CA
- Kenneth Coale (MLML) – Open ocean iron fertilization: carbon sequestration
- Will Travis (San Francisco Bay Conservation and Development Commission) – Developing a Regional Climate Change Strategy
- Laura Strohm (Sustainability Academy) – Mitigation
- Curt Storlazzi mentioned new publication
  - Kleypas, J.A., R.A. Feely, V.J. Fabry, C. Langdon, C.L. Sabine, and L.L. Robbins. 2006. Impacts of Ocean Acidification on Coral Reefs and Other Marine Calcifiers: A Guide for Future Research, report of a workshop held 18–20 April 2005, St. Petersburg, FL, sponsored by NSF, NOAA, and the U.S. Geological Survey, 88 pp.
  - Curt will send to RAP via listserv

### **Voting Results: Ed Ricketts Memorial Award/Lecture & Sanctuary Currents Reflection Science Award (Erica Burton/MBNMS)**

- Due to low number of votes received, voting deadline extended to Monday January 14<sup>th</sup>
- Post-meeting results (January 15, 2008)
  - Ricketts Award – Jim Barry (MBARI)
  - Reflection Science Award – Jeff Paduan (NPS)

### **SUGGESTED FUTURE AGENDA ITEMS**

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#### **Future Agenda Items:**

- Water Quality
  - Findings on tracking pathogens in sea otters and connection to FW flows (CDFG, UC Davis?)
  - Critical coastal areas presentation (ASBS, areas water quality impaired, areas in good state; Ross Clark)
- Food Safety Measures and Affected Wildlife (requested by Mary Yoklavich)
- SIMoN: future monitoring (JMPP or beyond)
- SIMoN Special Status Species Project (Jennifer Brown)
- Coastal armoring and coastal erosion (Ed Thornton)
- Linking SIMoN to management (Amber Szoboszlai; March 2008)
- Communication Partnership for Science and the Sea (COMPASS)
- Wave Model Development and Implementation (Paul Wittmann/Fleet Numerical)
- CINMS MPA evaluation (Mark Carr/NCEAS)
- Coastal Long-range Development Plan (CLDP) for Long Marine Lab (Gary Griggs)
- Center for Ocean Solutions (Meg Caldwell)
- MPA Social Science (Carrie Pomeroy)
- Western Groundfish Conference debrief (Mary Yoklavich)
- MPA science synthesis – MLPA (Mark Carr)
- MPA monitoring projects (Jason Vasquez)
- MLML expansion, Sustainable Seafood Process Plant (Kenneth Coale)

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**RAP Meeting Location (11/16/07):**

Monterey Bay Aquarium  
886 Cannery Row  
Monterey, CA 93940

**Driving Directions to RAP meeting:**

[http://www.montereybayaquarium.org/vi/vi\\_tips/directions.asp](http://www.montereybayaquarium.org/vi/vi_tips/directions.asp)

The aquarium is remodeling the second floor exhibit galleries so access to the Ocean View Conference Room through the exhibits is no longer available. The Aquarium does not open until 10 am. Therefore, please meet at the main entrance to the Aquarium by 8:45 am. Someone will be there to greet you and escort you to the conference room.

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**2008 RAP Meeting Schedule and Locations**

**NOTE: HOSTS/LOCATIONS REVISED FOR JULY AND NOVEMBER MEETINGS**

<b>Date</b>	<b>Host</b>	<b>Location</b>
January 11	Harrold	Monterey Bay Aquarium
March 14	Carr	Long Marine Lab, UCSC, Santa Cruz
May 9	Wasson	Elkhorn Slough NERR
July 11	Cailliet	Moss Landing Marine Laboratories
September 12	Coulston	CDFG, Monterey
November 14	Storlazzi	USGS, Santa Cruz

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