

**MBNMS Research Activity Panel
Meeting Summary
January 10, 2020**

Host: Susan Sogard – Shelf & Slope Environment (NOAA Fisheries Service - retired)
John Hunt – Water Quality (University of California, Davis)

Location: Moss Landing Marine Laboratories (MLML)
Seminar Room
8272 Moss Landing Road
Moss Landing, CA

Date: Friday, January 10, 2020; 9:00 am to 12:00 pm

Members:

	Discipline	Primary/ Alternate	Name	Institution
X	Research Coordinator		DeVogelaere, Andrew	Monterey Bay National Marine Sanctuary
	Biological Oceanography	primary	Kudela, Raphael	University of California, Santa Cruz
	Biological Oceanography	alternate	Ruhl, Henry	Central and Northern California Ocean Observing System
X	Deep-Sea Environment	primary	Cailliet, Greg	Moss Landing Marine Laboratories (retired)
	Deep-Sea Environment	alternate	Haddock, Steve †	Monterey Bay Aquarium Research Institute
X	Estuarine Environment	primary	Clark, Ross	Central Coast Wetlands Group
	Estuarine Environment	alternate	Wasson, Kerstin	Elkhorn Slough NERR and Foundation
	Fisheries	primary	Lindley, Steve	NOAA Fisheries Service
X	Fisheries	alternate	Owens, Brian	California Department of Fish and Wildlife
	Marine & Coastal Geology	primary	Golden, Nadine	United States Geological Survey
	Marine & Coastal Geology	alternate		
	Marine Conservation Biology	primary	Goldbogen, Jeremy	Hopkins Marine Station
	Marine Conservation Biology	alternate	Micheli, Fiorenza	Hopkins Marine Station
X	Nearshore Environment	primary	Southall, Brandon	Southall Environmental Associates, Inc.
	Nearshore Environment	alternate	Carr, Mark	University of California, Santa Cruz
X	Physical Oceanography	primary	Cheriton, Olivia	United States Geological Survey
X	Physical Oceanography	alternate	Orescanin, Mara	Naval Postgraduate School
	Shelf & Slope Environment	primary	Lindholm, James	California State University Monterey Bay
X	Shelf & Slope Environment	alternate	Sogard, Susan	NOAA Fisheries Service (retired)
	Social Sciences	primary	Pomeroy, Carrie	California Sea Grant Extension Program
X	Social Sciences	alternate	Scorse, Jason	Middlebury Institute of International Studies
X	Water Quality	primary	Hunt, John *	University of California, Davis
X	Water Quality	alternate	Hoover, Bridget	Monterey Bay National Marine Sanctuary

*Sanctuary Advisory Council Member: Research (Primary)

†Sanctuary Advisory Council Member: Research (Alternate)

RAP Coordinator:

X	Burton, Erica	Monterey Bay National Marine Sanctuary
---	---------------	--

GUESTS

Hamilton, Scott	Moss Landing Marine Laboratories
Johanson, Alex	Central Coast Wetlands Group
O'Connor, Kevin	Central Coast Wetlands Group
Vavra, Maya	Central Coast Wetlands Group

CONSENT ITEMS

Introductions/Modifications to the Agenda (John Hunt)

HOST PRESENTATION AND DISCUSSION

Effects of Ocean Acidification and Hypoxia on Juvenile Rockfish (Scott Hamilton/MLML)

- Scott described experiments on Copper, Blue, and Gopher Rockfishes; manipulating pCO₂ and pH, and then measuring species responses including gene expression
- See Hamilton et al. 2017 (PLoS ONE):
<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0169670>

SANCTUARY ADVISORY COUNCIL UPDATE

Summary of December 13th Advisory Council Meeting in Monterey (John Hunt)

- For meeting minutes, see: <https://montereybay.noaa.gov/sac/sacma.html>

STAFF/SAC REQUESTS TO RAP

Draft Management Plan Schedule & Public Comment (John Hunt)

- Hunt reviewed draft list of Management Plan Strategies and upcoming public comment schedule
- Management Plan package (including Plan, Environmental Assessment, Proposed Rule) is expected to be released for public comment ~April 1st
- Upon release, there will be a 60-day public comment period, when the RAP can submit comments as an official working group of the MBNMS Advisory Council (likely at the April 17th Advisory Council meeting)
- In preparation for the release of Management Plan package, the RAP can re-familiarize themselves with the draft list of Management Plan Strategies
- **ACTION**: Erica will email RAP members working draft list of Plan strategies, any previous RAP comments, and draft schedule

SANCTUARY RESEARCH UPDATE

Streamlining Ecosystem Assessment: New Tools to Quickly Generate Management Information from Ocean Monitoring Data (Andrew DeVogelaere)

- Andrew provided overview of tools to assess MBNMS habitats and ecosystems including: Condition Reports, California Current Ecosystem Integrated Ecosystem Assessment (IEA), interactive infographics, Beach COMBERS (and others) monitoring, and CeNCOOS/MBON data portal
- This presentation was also recently given by Jennifer Brown at December CalCOFI meeting in San Diego

STAFF/SAC REQUESTS TO RAP

How Can MBNMS (office or Advisory Council) Support Research Community? (John Hunt)

- Hunt proposed the question to the RAP, and led RAP discussion
- RAP members made suggestions including:
 - prioritizing of annual research needs to share with the SAC and others;
 - making cruise ship inspection data public;
 - providing maps of MBNMS research permit locations;
 - writing annual letter of RAP member participation/public service;
 - writing letters of support for research grants
 - MBNMS supporting coastal sea level adaptation processes
 - Advertising a list of regional research seminars and lectures (e.g., links on MBNMS website)
 - communicating to keep research community connected (e.g., Constant Contact, email, webpage, newsletter)
- **ACTION**: Erica to develop a way to share information on regional seminars
- **ACTION**: Andrew and Erica to develop letters of appreciation to RAP member supervisors
- **ACTION**: Erica to meet with MBNMS permit team to assess the viability of sharing existing permit maps
- **ACTION**: Brandon Southall to share web links on cruise ship forums with RAP
- **ACTION**: MBNMS staff to continue writing letters of support for relevant grant applications
- **ACTION**: John to follow up with Steve Haddock on developing a MBNMS Research “Constant Contact”

QUICK UPDATES ON NEW HIRES AT INSTITUTIONS, AND FACILITY UPDATES

- **ACTION**: Erica will send email to RAP extending the Ricketts Award nomination process
- No other decisions or actions

SUGGESTED FUTURE AGENDA ITEMS

- March Meeting: RAP comments on Management Plan and process
- MPAs as monitors/buffers of climate change (e.g., recent OPC presentation at SAC; Micheli’s recent newspaper article)
- Microplastics research by Kyle Van Houtan and others; including watersheds (Hoover has preliminary data) and Davidson Seamount (MBNMS office)

Future Agenda Items (running list):

- Socioeconomic benefits of science (per Scorse)
- West Coast Regional Office update
- RAP Focus:
 - Long-term Monitoring
 - Coordinated water quality monitoring: lessons learned (Hunt/Hoover)
 - Consider interns to follow-up on RAP monitoring plan tasks (Hunt)
 - MBNMS Action Plans (Management Plan Review)
 - Draft Management Plan release for public comment (April 2020)

- RAP Membership:
 - Reinvigorate non-attending members
 - Constituent outreach (Hunt)
- Happy Whale App (Jeremy Goldbogen)
- California Collaborative Fisheries Research Program (CCFRP), and MPA monitoring and synthesis of historic data sets in MBNMS (Mark Carr and Rick Starr)
- Microplastics: How an under-funded marine science community deals with a significant new problem
 - Microplastics and seabirds (chemical cues; Matt Savoca/Hopkins Marine Station)
 - Choy et al (MBARI)
 - NOAA’s Marine Debris Program (Sherry Lippiatt)
- Invite research representative of GFNMS Advisory Council (John Largier)
- Link between MBNMS research needs and rapid funding and sanctuary foundation (Monterey Bay Chapter update); and how local RAP priorities get into ONMS West Coast Region and Foundation priorities (Clark)
- MBA’s Conservation and Science Program update (Kyle Van Houtan - **May 8th**)
- Deep-sea Coral WCR priority update (per Hunt)
- Pelican/fishery interactions (SAC discussed; per Hunt)

2020 RAP Meeting Schedule and Locations

Date	Hosts	Location
January 10	Sogard/Hunt	Moss Landing Marine Laboratories
March 13	Cheriton/Golden	US Geological Survey
May 8	Scorse	Middlebury Institute of International Studies
September 11	Owens	California Department of Fish and Wildlife
November 13	Haddock	Monterey Bay Aquarium Research Institute
