

**MBNMS Research Activity Panel  
Meeting Summary  
May 13, 2016**

**Host:** Tim Pennington – Monterey Bay Aquarium Research Institute

**Location:** Monterey Bay Aquarium Research Institute  
Pacific Forum  
7700 Sandholdt Road  
Moss Landing, CA

**Date:** Friday, May 13<sup>th</sup>, 2016; 9:00 am to 12:00 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
	Biological Oceanography	primary	Kudela, Raphael	University of California, Santa Cruz
X	Biological Oceanography	alternate	Chavez, Francisco	Monterey Bay Aquarium Research Institute
X	Deep-Sea Ecology	primary	Cailliet, Greg	Moss Landing Marine Laboratories (retired)
X	Deep-Sea Ecology	alternate	<b>Haddock, Steve</b> †	Monterey Bay Aquarium Research Institute
X	Estuarine Ecology	primary	Lindley, Steve	NOAA Fisheries Service
	Estuarine Ecology	alternate	Wasson, Kerstin	Elkhorn Slough NERR and Foundation
X	Fisheries	primary	Sogard, Susan	NOAA Fisheries Service
	Fisheries	alternate	Grimes, Churchill	NOAA Fisheries Service (retired)
	Marine & Coastal Geology	primary	Storlazzi, Curt	United States Geological Survey
	Marine & Coastal Geology	alternate	Paull, Charles	Monterey Bay Aquarium Research Institute
	Marine Conservation Biology	primary	Goldbogen, Jeremy	Hopkins Marine Station
	Marine Conservation Biology	alternate	Micheli, Fiorenza	Hopkins Marine Station
	Nearshore Ecology	primary		
	Nearshore Ecology	alternate	Carr, Mark	University of California, Santa Cruz
X	Physical Oceanography	primary	Ramp, Steve	Soliton Ocean Services, Inc.
X	Physical Oceanography	alternate	Cheriton, Olivia	United States Geological Survey
X	Shelf & Slope Ecology	primary	Lindholm, James	California State University Monterey Bay
	Shelf & Slope Ecology	alternate		
	Social Sciences	primary	Pomeroy, Caroline	California Sea Grant Extension Program
X	Social Sciences	alternate	Scorse, Jason	Middlebury Institute of International Studies
X	Water Quality	primary	<b>Hunt, John</b> *	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
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**GUESTS:**

Kirkwood, Bill	Monterey Bay Aquarium Research Institute
Pennington, Tim	Monterey Bay Aquarium Research Institute
Webb, Margaret (P.J.)	Sanctuary Advisory Council

**CONSENT ITEMS**

Introductions/Modifications to the Agenda (John Hunt)

- New member: Bridget Hoover (Water Quality, alternate)

**HOST PRESENTATION AND DISCUSSION**

MBARI Research update (Francisco Chavez)

- Francisco provided overview of recent events and selected projects at MBARI
- Research themes
  - Exploration & discovery
  - Ocean visualization
  - Ecosystem processes
  - Biogeochemical cycles
- Engineering initiatives (several)
- Development plans on properties thru 2020
- Western Flyer replacement >2020/2021
- Succession Planning
  - New positions filled
  - CFO: Basilio Martinez
  - DMO director: Mike Kelly
  - Research engineer: Mathieu Kemp
  - Bioacoustician: Kelly Benoit-Bird
  - Carbon cycle science: Andrea Fassbender and Yui Takeshita
- 2016 Selected Projects
  - Biogeochemical Cycles
    - Longest coastal pCO<sub>2</sub> time series in world in MBNMS
    - Blob and El Nino slowed rate of CO<sub>2</sub> increase
    - Wave glider is running transect to measure CO<sub>2</sub> more frequently than ship-based survey
  - MBON Demonstration project with MBNMS (many partners)
    - Integrate, synthesize and augment biodiversity data
    - Develop advanced methods for biodiversity assessments
      - eDNA and sample collection
    - Relate biodiversity with environmental info
    - Provide info rapidly to stakeholders
    - Build an operational system
  - Autonomous platforms for water column imaging
  - Station M instruments ready for year-long deployments
  - Integrating MBARI time series
  - Development of coastal profiling float is nearing fruition
  - Wave power harvesting for instruments
  - Sur Ridge Studies (MBARI/MBNMS): corals; mapping; feeding; POC

- Ocean Imaging Project: 2016
- Biodiversity and Bio-optics of Zooplankton

## MEETING UPDATES

### OCEANS 16 Monterey (Bill Kirkwood/MBARI)

- Kirkwood provided overview of upcoming OCEANS 16 meeting in Monterey, 19-23 September 2016
- Kirkwood is the co-chair, along with Jill Zande
- Meeting will be held at Portola/Marriott and Golden State Theater
- Meeting will include Technical Program, Tutorials on Technology and Science (6-7 courses), Student Poster Competition, K-12 Educator Workshop, In-Water Demos, and Exhibitors
- Ice Breaker will be at Custom House Plaza (9/19)
- Plenary Speakers will include:
  - Marcia McNutt: National Academy of Sciences
  - Jenifer Austin: Google's Ocean and Earth Outreach
  - Jon White: Consortium for Ocean Leadership
  - Jim Bellingham: Center for Marine Robotics
- Exhibitors (free to public)
- Technical and Science Sessions (9/22, 9/23)
  - Speakers and poster sessions (student competition)
- Expecting ~2000 attendees
- Great place for Masters and PhD students to give early talks
- Papers will be reviewed and get DOI number
- Panel Discussions: led by Richard Spinrad (NOAA)
- Gala Dinner at Aquarium (9/21)
- For more information see: <http://www.oceans16mmtsieeemonterey.org/>

### Ed Ricketts Award and Lecture (Erica Burton)

- Burton provided update on plans for Ricketts Award and Lecture
- Lecture will occur in the fall of 2016
- Location to be determined; possible venues include Sanctuary Exploration Center, Museum of Monterey, or other
- To date, two nominations have been received: Fiorenza Micheli and Steve Haddock; both RAP members

## RAP UPDATES

### RAP Chair appreciation (Andrew DeVogelaere)

- Outgoing RAP chair: James Lindholm
- Andrew presented statistics and summary of Lindholm's contributions, and presented appreciation award and MBNMS logo-wear to Lindholm
- PJ Webb presented Lindholm with SAC appreciation award

### New RAP Chair and Vice-Chair (Andrew DeVogelaere)

- Chair: John Hunt

- Vice-Chair: Steve Haddock
- Both will be sworn-in at June 17<sup>th</sup> SAC meeting

### **SANCTUARY ADVISORY COUNCIL UPDATE**

Summary of April 21<sup>st</sup> SAC Meeting at Santa Cruz (John Hunt)

- Superintendent's report
  - Desalination applicants have filed permit applications
  - Maria Brown (GFNMS): High numbers of beachcast Cassin's auklet, and fur seals (Guadalupe and Northern)
- SAC word-smithed letter to ONMS HQ regarding Cemex plant (requesting clarification on MBNMS authority over sand mining in Marina)
- Management Plan review: SAC addressed topics identified in public scoping comments, four categories to address:
  - Establish Working Groups
  - SAC workshops (during SAC meeting)
  - Outside workshops (organized by staff)
  - Staff lead process to address topic
- Outside Workshop on impacts of noise; DeVogelaere will be topic lead in office; will need a SAC lead (preferably with science background who could report back to SAC)

### **RAP RESEARCH PRIORITIES**

RAP Action Plan for long-term monitoring (John Hunt)

- John set-up the discussion from the last RAP meeting
- Perhaps RAP needs to rally for Research and Monitoring Action Plan (in Management Plan); Should there be an action plan?
- As a first step, MBNMS needs to state what we need to know (per Hunt)
- Hunt, DeVogelaere, Burton (maybe Haddock) will pull together draft language, and post on Google Docs for RAP input/review

### **QUICK UPDATES ON NEW HIRES AT INSTITUTIONS, AND FACILITY UPDATES**

- Haddock (MBARI): MBARI's Deep Sea Guide online; <http://dsg.mbari.org/dsg/home>
- Lindholm (CSUMB): CSUMB hosting ocean candidates forum Oct 20<sup>th</sup>: Panetta, Monning, Stone; John Laird will MC; free event; streaming; will be advertised
- Lindley (NMFS):
  - Western Regional Action Plan (WRAP; climate change) open for public comment; <https://www.st.nmfs.noaa.gov/ecosystems/climate/rap/western-regional-action-plan>
  - NMFS will hire the following: deputy director; 2 ecologists, facilities
- Scorse (MIIS): Valerie Termini (MIIS graduate) now Executive Director of Fish and Game Commission
- Cailliet (MLML): new librarian Katie Lage starts this summer
- DeVogelaere (MBNMS): Two positions recently opened/closed: MBNMS Education and Outreach Coordinator; ONMS Director

**SUGGESTED FUTURE AGENDA ITEMS**

- Scorse: recent boom in whale watching; more info needed on fish/whale correlation; prey/fishing/whale interactions; science; Peggy Stapp recommendation? Scott Benson?
- Scorse: Southall mentioned hundreds of seal bombs going off in CA; who could speak on that? Ask Scott Kathey;

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**Future Agenda Items (running list):**

- Water Quality:
  - Follow-up to Hunt’s WQ presentation (9/12/14), where does all the data go? Successful uses, shared capability, proper use of data (per Scorse); Roy Mendelson would be good speaker (per Lindley)
  - Elkhorn Slough Report Card:  
[http://www.elkhornslough.org/research/waterquality\\_reportcard.htm](http://www.elkhornslough.org/research/waterquality_reportcard.htm)
- RAP Membership:
  - Revisit RAP member policies including representation: discipline vs institution; available at: [http://montereybay.noaa.gov/sac/rap/history/rap\\_policies.html](http://montereybay.noaa.gov/sac/rap/history/rap_policies.html)
- SAC Charter revision
- Speaker series on science (Oceans Live; *Your Sanctuary* TV)
- Coastal Rivermouth Lagoon inventory for state and central coast (Central Coast Wetlands Group/Ross Clark)
- RAP feedback for SAC (per Hunt)
- Discussion of regional use of the Sanctuary Boat, Fulmar

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**2016 RAP Meeting Schedule and Locations**

<b>Date</b>	<b>Host</b>	<b>Location</b>
January 8	Lindholm	CSU Monterey Bay
March 11	DeVogelaere	Sanctuary Exploration Center
May 13	Pennington	Monterey Bay Aquarium Research Institute
July 8	Sogard	Moss Landing Marine Laboratories
September 9	Cailliet	Moss Landing Marine Laboratories
November 4	Wasson	Elkhorn Slough NERR