

**MBNMS Research Activity Panel  
Meeting Summary  
September 9, 2016**

**Host:** Jim Harvey – Moss Landing Marine Laboratories

**Location:** Moss Landing Marine Laboratories  
Seminar Room  
8272 Moss Landing Road  
Moss Landing, CA 95039

**Date:** Friday, September 9<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
	Biological Oceanography	alternate	Chavez, Francisco	Monterey Bay Aquarium Research Institute
	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
	Estuarine Ecology	primary	Lindley, Steve	NOAA Fisheries Service
	Estuarine Ecology	alternate	Wasson, Kerstin	Elkhorn Slough NERR and Foundation
	Fisheries	primary	Sogard, Susan	NOAA Fisheries Service
X	Fisheries	alternate	Grimes, Churchill	NOAA Fisheries Service (retired)
X	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
	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:**

Boyle, Carrie	CSU Monterey Bay
Brown, Bonnie	Moss Landing Marine Laboratories
Harvey, Jim	Moss Landing Marine Laboratories
Herrmann, Clifton	CSU Monterey Bay
Lemon, Larissa	CSU Monterey Bay
Lonhart, Steve	Monterey Bay National Marine Sanctuary
Ross, Corinne	CSU Monterey Bay
Wasserman, Amanda	CSU Monterey Bay

**CONSENT ITEMS**

Introductions/Modifications to the Agenda (John Hunt)

**HOST PRESENTATION AND DISCUSSION**

Whatsup at Moss Landing Marine Laboratories (MLML; Jim Harvey)

- Harvey provided updates on various recent activities at MLML
- 50<sup>th</sup> anniversary (1966-2016) in August 2016
  - Celebration activities included: media day, VIP event, and alumni reunion
  - 50<sup>th</sup> quilt on display in seminar room
  - 50<sup>th</sup> blog online (<https://anniversary.mlml.calstate.edu/50th-anniversary-of-moss-landing-marine-laboratories/>)
- Nine faculty (including librarian)
  - 3 new this year:
    - Vertebrate Ecologist (and Physiologist): Gitte McDonald
    - Physical Oceanographer: Tom Connolly
    - Librarian: Katie Lage
- Research Faculty (soft money; mentor students; occasionally teach)
  - Rick Starr no longer with Sea Grant, but will stay at MLML as Research Faculty
- New Research Affiliates (soft money)
  - Tim Stanton (NPS): physical oceanographer
  - Iliana Ruiz-Cooley (UCSC): marine ecologist
- New Aquaculture facility
  - Goal to be eco-conscious
  - Goal to have certificate program
  - Will include training
  - Hybrid course will include online content and hands-on at CSU facilities
  - Will try to make it international
- Vessel: Point Sur (UNOLS)
  - Point Sur retired; sold, operating in Gulf of Mexico
  - Contemplating getting new vessel
  - In discussion with Scripps to co-manage new vessel (CSU and UC campuses)
  - Scripps losing two of their vessels
  - NSF working on building large vessels, not small coastal vessels (~120 ft; ~2 week trip capacity)
  - New vessel would be part of UNOLS fleet
  - Letter distributed to poll regional institutions for usage interests (to bolster support for funding);

- **ACTION:** Harvey will send letter to Burton to distribute to RAP (done);  
“Subject: Expression of interest in new California shared-use oceanographic research vessel”
- MLML’s administrative campus
  - Historically: San Jose State University
  - Rumor: to move to CSUMB
  - Ultimately chancellor’s decision
  - Both have foundations (SJSU larger); MLML contributes approximately 1/3 to SJSU foundation

### **SANCTUARY ADVISORY COUNCIL UPDATE**

Summary of June 17<sup>th</sup> (Monterey) and August 19<sup>th</sup> (Moss Landing) SAC Meetings (John Hunt)

- Hunt provided summary of key issues from two SAC meetings
- June meeting at Monterey Peninsula College, Monterey
  - Superintendent’s report: in April drafted letter to HQ requesting clarification of MBNMS jurisdiction over CEMEX plant; letter sent; no response (as of August meeting)
  - State of California and BOEM are standing a task force to look at Trident Winds lease proposal for wind farms off Morro Bay
  - Elections held for SAC officers:
    - Chair: PJ Webb (at-large)
    - Vice Chair: Garry Pezzi (recreation)
    - Secretary: Brian Nelson (diving)
  - Coastal Armoring and Sediment Management Plans: Resource Protection Coordinator (Karen Grimmer) presented information item
  - Management Plan Review update: Deputy Superintendent (Dawn Hayes) provided update, two new SAC workgroups:
    - Wildlife disturbance (approach)
    - Wildlife disturbance (acoustics; ADV helping with group)
  - RAP Vice-chair (Steve Haddock) summarized research cruises;
    - Meeting of the UNOLS Scientific Committee for Oceanographic Aircraft Research
    - Mapping AUV operations in SESA #6 (offshore Santa Cruz); new 1-meter resolution map
    - MiniROV operations in SESA #6 looking at rare and rebuilding species
    - Two research cruises on the Western Flyer (ROV dives) at Sur Ridge SESA
  - If RAP would like to report out, send to Hunt or Haddock
  - Cyndi Dawson (Ocean Protection Council) announced reports:
    - Statewide MPA monitoring plan completed; funding available
    - MPA master plan updated
  - Conservation Working Group: no report
  - Sanctuary Education Panel: reconvened in May
  - Recreation and Tourism Subcommittee: active with newsletter

- August meeting at MLML, Moss Landing
  - Superintendent's report: no response from HQ regarding CEMEX letter
  - Education and Outreach Coordinator filled: Amity Wood (previous director Camp SEA lab)
  - NOAA Enforcement: position vacant, in recruitment
  - CalAm draft EIS/EIR will be out for review, due in December
  - Deepwater Desal draft EIS/EIR: due in 2017
  - Bill Douros (NMS West Coast Region director): presentations
    - California Current (3 sanctuaries) proposed as World Heritage Site (UNESCO); question if SAC could write letter of support
    - Offshore wind energy (Trident Wind Farm): proposal to lease area at/near SW corner of MBNMS; Douros' Question to SAC: how much should MBNMS be involved?
    - RAP could get updates if interested; probably long process
  - Management Plan Review update: Artificial Reefs
    - Deputy Superintendent (Dawn Hayes) attended workshop on east coast;
    - In general there is great diversity of structure, few standards, and zero monitoring. Most are built for fisheries enhancement on Gulf and East Coast mud.
    - California has an artificial reef plan, a legacy from the 1970s that has been on the shelf. It is a robust plan, materials must mimic natural materials, no sunken ships. The plan is unfunded. CDFW is writing a white paper that is due in a few months.
    - Again, there is widespread and vocal support among divers.
  - Management Plan Review update: Climate change
    - Sara Hutto (GFNMS) presented summary of work done by GFNMS and their SAC on climate adaptation, vulnerability and resilience; they would like to engage our RAP
    - Vulnerability assessment for fish species, coming from NMFS
    - See GFNMS website for more information:  
<http://farallones.noaa.gov/manage/climate/adaptation.html>
  - Management Plan Review update: marine debris,
    - CWG focusing on marine debris
    - Would like input from RAP
    - They have been informed about process of RAP responding to requests from SAC rather than other working groups
  - Sanctuary Education Panel update
    - SEP Chair (Tucker Hirsch) wants to help revive the Sanctuary Currents Symposium
  - RAP update:
    - John mentioned our focus on a Research Program Action Plan with a long-term monitoring emphasis. Steve Haddock provided a number of updates on cruises and projects of interest, and on changes at MLML and Hopkins Libraries. The SAC was very interested in the methyl mercury in fog issue.

- Perhaps ask Deputy Superintendent (Dawn Hayes) to future RAP meeting for update on Management Plan, when available (won't be soon; HQ requested to slow down process/schedule)
- For official SAC minutes, see: <http://montereybay.noaa.gov/sac/sacma.html>

## **RAP RESEARCH PRIORITIES**

### RAP Action Plan for Long-term Monitoring (John Hunt)

- Draft letter/memo in process; Hunt shared with RAP (9/8/16)
  - Provides Framework
- Key changes from June memo
  - Rational text substituted for NMS Act; 2008 management plan action plan; WQ monitoring plan text
  - Funding for monitoring has decreased since 2008 plan
  - Much has been done by partners
  - OPC thru NCEAS has made progress on web portals; therefore don't need to reinvent the wheel
  - Differentiate work between in-house from partner priorities; identify overlap
- Today, get conceptual buy-in to work through management plan process
- Summary: Hunt to revise written statement from RAP to include text from the NMSA and previous management plan to make the case for increased sanctuary support for long-term monitoring. This statement will then reference points outlined in previous versions to describe what could be done by staff and partners to enhance monitoring and availability of critical information about resource status and trends, and about the consequences and costs of incidents or management actions.

## **STAFF REQUESTS TO RAP**

### Sanctuary Small Boat Mission Needs and Requirements (Steve Lonhart)

- DeVogelaere sent sent 6/27/16; including 2 questions for RAP:
  - If you had funding (from the MBNMS or grants), how would you use the boats described in the report?
  - What kinds of systems or equipment (e.g., CTD, ROV, camera sled) would make the boats more useful to you?
- Handout (attachments from June email) provided to RAP at meeting, including
  - R/V Fulmar overview
  - R4107 overview
  - Draft Report on the small boating needs of MBNMS, including:
    - Background
    - Existing Management Plan
    - Condition Report
    - Science Needs Assessment
    - Vessel staffing
    - Current MBNMS limitations
- RAP Discussion: Does RAP have things to add to outline, other feedback for report?
- **ACTION**: RAP respond to June email questions (Lonhart to resend)

**RAP MEMBERSHIP**

Changing RAP Member Disciplines? (John Hunt)

- Should we make membership more flexible by broadening disciplines? Environment vs Ecology
- Should we modify membership to reflect Management Plan needs?
- **ACTIONS:**
  - The word “Ecology” will be changed to “Environment” in four disciplines to allow more flexibility in recruitment and focus, including:
    - Deep-sea Ecology changes to Deep-sea Environment
    - Estuarine Ecology changes to Estuarine Environment
    - Nearshore Ecology changes to Nearshore Environment
    - Shelf & Slope Ecology changes to Shelf & Slope Environment
  - Hunt to report this change to SAC.
  - Membership committee will try to recruit, or shuffle, vacant seats, including:
    - Nearshore Environment (primary)
    - Shelf & Slope Environment (alternate)

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

- Storlazzi: USGS hired Dan Hoover (was PISCO), coast change; Cheriton permanent employee; USGS Center director retiring in December, call out this month
- Haddock: hired Kelly Benoit-Bird (active acoustics), new laws in California; new hires Andrea Fassbender and Yuichiro Takeshita (nominally to look at carbon flows); Peter Brewer retiring; trying to start using drones to do oceanographic research; “Inspect Tools” in Watsonville will conduct training to get people certified
- Hunt: Granite Canyon lab survived Soberanes fire
- Lindholm: Andrew Lawson is new dean of College of Science (from Fresno State; replaced Marsha Moroh); Permanent employees (Carrie Bretz, Pat Iampietro); Ocean Candidates Forum, Thursday Oct 20 (**ACTION:** Burton will share email from Lindholm).
- DeVogelaere: new Education and Outreach Coordinator (Amity Wood); new research coordinator at Olympic Coast NMS (Jenny Waddell from NCCOS); CINMS updating Condition Report (Jenn Brown); HQ director - waiting for announcement

**SUGGESTED FUTURE AGENDA ITEMS**

- Monitoring activities that staff and RAP members involved in (DeVogelaere/Hunt)
- If SAC to support World Heritage nomination, need RAP input? (Haddock)

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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)
- Recent boom in whale watching; more info needed on fish/whale correlation; prey/fishing/whale interactions; science; Speaker: Peggy Stapp or Scott Benson? (per Scorse)
- Seal bombs deployed off CA; Ask Scott Kathey (per Scorse)

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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	Harvey	Moss Landing Marine Laboratories
November 4	Wasson	Elkhorn Slough NERR

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