

**MBNMS Research Activity Panel
Meeting Summary
May 13, 2011**

Host: Steve Haddock – Deep-Sea Ecology (MBARI)

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

Date: Friday, May 13th, 2011; 9:00 am to 12:00 pm

MEMBERS:

	Discipline	Primary/ Alternate	Name	Institution
X	Research Coordinator		DeVogelaere, Andrew	Monterey Bay National Marine Sanctuary
X	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
X	Deep-Sea Ecology	alternate	Haddock, Steve	Monterey Bay Aquarium Research Institute
X	Estuarine Ecology	primary	Wasson, Kerstin	Elkhorn Slough NERR and Foundation
	Estuarine Ecology	alternate		
X	Fisheries	primary	Grimes, Churchill	NOAA Fisheries Service
X	Fisheries	alternate	Vasques, Jason	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
	Marine Conservation Biology	primary	Harrold, Chris*	Monterey Bay Aquarium
	Marine Conservation Biology	alternate	Micheli, Fiorenza	Hopkins Marine Station
X	Marine Policy	primary	Abeles, Adina	Center for Ocean Solutions
	Marine Policy	alternate	David, Aimee	Center for the Future of the Oceans, MBA
	Nearshore Ecology	primary	Lindholm, James	California State University Monterey Bay
	Nearshore Ecology	alternate	Carr, Mark	University of California, Santa Cruz
X	Physical Oceanography	primary	McPhee-Shaw, Erika	Moss Landing Marine Laboratories
	Physical Oceanography	alternate	Ramp, Steve	CeNCOOS/MBARI
	Shelf & Slope Ecology	primary		
	Shelf & Slope Ecology	alternate	Starr, Rick	California Sea Grant Extension Program
	Social Sciences	primary	Pomeroy, Caroline	California Sea Grant Extension Program
	Social Sciences	alternate	Scorse, Jason	Monterey Institute of International Studies
	Water Quality	primary		
	Water Quality	alternate	Epel, David	Hopkins Marine Station

*Sanctuary Advisory Council Member: Research (Primary)

†Sanctuary Advisory Council Member: Research (Alternate) - Vacant

RAP Coordinator:

X	Burton, Erica	Monterey Bay National Marine Sanctuary
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GUESTS:

	Name	Institution
X	Frey, Oren	Monterey Bay National Marine Sanctuary
X	Hunt, John	Monterey Bay National Marine Sanctuary
X	Nevins, Hannah	BeachCOMBERS, California Department of Fish and Game

CONSENT ITEMS

Introductions/Modifications to the Agenda (DeVogelaere)

- Curt Storlazzi shared video data models of tsunami effects in Monterey Bay, and Santa Cruz Harbor

HOST PRESENTATION AND DISCUSSION

MBARI Research Activities in the Sanctuary (Haddock)

- Haddock provided overview of MBARI as an institution
 - 220 employees
 - \$40 million/year (80% from Packard Foundation annual grant)
- Haddock provided overview of MBARI assets (ships, ROVs, AUVs); moorings; MARS; instruments; select research projects; gelatinous organism research (including temporal trends, taxonomy, bioluminescence)

RAP RESEARCH PRIORITIES: Ocean Acidification

Monterey Bay Climate Change Adaptation Workshop (Abeles)

- Abeles is working with MBNMS staff (Karen Grimmer) to reach out to local municipalities (Santa Cruz to Carmel) to ask about their plans for climate change
- Workshop December 7th to start discussion on climate change, and how to prepare for adaptation; e.g., salt water intrusion
- Will start to develop vision for central coast; 50 year plan
- Will synthesize info we have on climate change research (Brock Woodson will lead)
- **Action:** asked RAP to participate in upcoming meeting
- **Action:** asked RAP what papers/info can help with synthesis
- **Action:** MBNMS staff will provide list of local ocean acidification research to Abeles (and vice versa)

RAP RESEARCH PRIORITIES: Beach COMBERS

Program Update, Outcomes, Promotion, Funding (Hannah Nevins/Beach COMBERS)

- Nevins provided overview of program (objectives, methods, outcomes, funding need)
- Need 30-40k per year to fund Beach COMBERS
 - Mostly to fund graduate students for data entry
 - MBNMS handles volunteer aspects
 - CDFG covers Nevin's time
- RAP provided ideas on potential funding/grants:
 - NOAA funding: NOAA education or NOAA fisheries management
 - NSF Biology division grant, time-series monitoring; need 5-years data

- Science-engineering outreach technology grants (e.g., smartphone app)
- University of New Hampshire (CICEET)
- SJSU
- Provided RAP with 2-page Program Summary (PDF)

ECOSYSTEM-BASED MANAGEMENT INITIATIVE (EMBI)

Unique and Rare Features Workshop (John Hunt/MBNMS)

- John provided brief overview of EMBI and upcoming workshop
- EMBI Broad Objectives
 - Maintain/restore marine ecosystem health and function
 - Ensure protection of unique and rare features of the sanctuary
 - Facilitate research to differentiate between natural variation and human impacts
 - Facilitate ecologically and economically sustainable uses, including fisheries
- Workshop May 24th at NMFS Santa Cruz to identify unique and rare features in MBNMS
- Unique and Rare Features (URF) Workshop Goals
 - Gather information on biological, oceanographic, and geological features (and submerged cultural resources) that are unique and/or rare in MBNMS
 - Identify supporting data sources and information gaps
- Unique and Rare Features Workshop Objectives
 - Refine draft list of features
 - Characterize threats to features
 - Identify relevant data sources
 - Get input on process
- Potential workshop products
 - Vetted list of unique/rare features
 - Vetted list of attributes
 - Vetted list of data sources
 - List of data gaps
 - Feedback on process used by MBNMS
 - Preliminary information on threats to features
- After the Workshop
 - Identify best available data
 - Submit URF list for review
 - Assess threats to URF
 - Assess effectiveness of existing management actions
 - Prioritize URF list
 - Gain feedback from experts, agency partners and stakeholders
 - Generate potential strategies
- For more info on EMBI see <http://montereybay.noaa.gov/ebmi/welcome.html>

RAP MEMBERSHIP

Vacancies Recruitment (DeVogelaere)

- 3 RAP disciplines are vacant
 - Water Quality

- Shelf and Slope Ecology
- Estuarine Ecology
- RAP provided suggestions
- **Action:** member selection committee will consider RAP's suggestions

SANCTUARY CURRENTS SYMPOSIUM

Symposium Debrief - Ripple Effects: The Far-Reaching Impacts of Local Ocean Research (Burton/MBNMS)

- Burton provided information on the Currents Symposium held April 9th at CSUMB
- Well-attended, >300 participants
- Sponsored by: CSUMB, MBNMS, Monterey Bay Aquarium, NOAA Fisheries, Save the Earth Foundation
- Five presentations: white sharks, MBARI technology, Humboldt squid, Davidson Seamount, California ocean management
- Ricketts Memorial Award and Lecture: Dr. Mike Foster
- Research poster session
 - 54 submissions
 - 6 student awards in three categories: Graduate, Undergraduate, High School
- See program at <http://montereybay.noaa.gov/research/currsymp2011/welcome.html>

SANCTUARY RESEARCH UPDATE

None

SANCTUARY ADVISORY COUNCIL UPDATE

None

SUGGESTED FUTURE AGENDA ITEMS

- Desalination update (per Abeles); things have changed since Brad Damitz talked to the RAP; speaker: Carol Reeb (Hopkins)
- Priority topic from running list below: Climate Change
 - Speakers: Largier and Higgason; Dan Cayan or Dettinger/USGS; Lisa Slone (UCSC); TNC
 - NOAA Coastal Services Center putting together climate adaptation visualization tool (per Hunt)
 - State of the Science of climate change; adaptation plans (per Storlazzi)
 - Rather than MBNMS tackle all topics, perhaps let GFNMS/CBNMS continue as lead on climate change issues, and RAP ask Largier and Higgason to present their findings (per DeVogelaere)
 - Perhaps tackle what GFNMS/CBNMS not working on (e.g., low oxygen; per Kudela)
 - Storlazzi is willing to help organize a general meeting on climate change science

Future Agenda Items (running list):

- Communication Partnership for Science and the Sea (COMPASS)
- Data integration across monitoring programs (e.g., water quality, PISCO, MARINE, IOOS), and availability to the public
- Recent event: Supreme Court allows Navy Sonar (per John Hunt)
- Predicting sea level rise for the state of California (Larry Breaker, JPL, OPC)
- High-res climate models of CA (UCSC; or Dan Cayan or Dettinger/USGS)
- National Weather Service Forecast Office (Tom Evans, Warning Coordination Meteorologist)
- EBMI/IEA presentations
 - IEAs, including those that have been implemented (e.g., Phil Levin, Frank Schwing, John Stein; per Yoklavich)
- MPAs
 - State MPA monitoring projects (e.g., Jason Vasques)
- Ken Johnson work in Elkhorn Slough (per McPhee-Shaw)
- Marine Policy issues (Sacramento; D.C.) that may need science input (per Ramp; Aimee David volunteered; or Adina Abeles)
- Climate Change (dedicated meeting; per McPhee-Shaw)
 - Global view
 - CA coast (Lisa Sloan, UCSC; sea level rise, Breaker)
 - GFNMS/CBNMS Ocean Climate Initiative (e.g., GFNMS staff: Kelley Higgason or Maria Brown)
 - GFNMS/CBNMS Climate Change Impacts Report (e.g., Largier)
 - What differences MBNMS might observe (per Starr)
 - Local/MBNMS (who? Curt?)
 - Perhaps MBCORC hosts a 1 or 2 day science meeting (per Storlazzi)
- Beach COMBERS Program
 - How Beach COMBERS program linked to oil spill response (GFNMS) and how Beach COMBERS data fits into response (per Hunt)
- How is MBNMS and region involved and/or linked to NOAA's Coastal and Marine Spatial Planning effort (per Lindholm)
