

**MBNMS Research Activity Panel
Meeting Summary
September 14, 2012**

Hosts: Jim Harvey – Interim Director, Moss Landing Marine Labs
 Greg Cailliet – Deep-Sea Ecology (Moss Landing Marine Labs)
 Erika McPhee-Shaw – Physical Oceanography (Moss Landing Marine Labs)
 Rick Starr – Shelf and Slope Ecology (California Sea Grant Extension)

Location: Moss Landing Marine Labs
 Dry Classroom, Rm 109
 8272 Moss Landing Road
 Moss Landing, CA 95039

Date: Friday, September 14th, 2012; 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	Chavez, Francisco	Monterey Bay Aquarium Research Institute
X	Deep-Sea Ecology	primary	Cailliet, Greg	Moss Landing Marine Laboratories
X	Deep-Sea Ecology	alternate	Haddock, Steve	Monterey Bay Aquarium Research Institute
	Estuarine Ecology	primary	Wasson, Kerstin	Elkhorn Slough NERR and Foundation
	Estuarine Ecology	alternate	Lindley, Steve	NOAA Fisheries Service
	Fisheries	primary	Grimes, Churchill	NOAA Fisheries Service
	Fisheries	alternate		
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	Harrold, Chris*	Monterey Bay Aquarium
	Marine Conservation Biology	alternate	Micheli, Fiorenza	Hopkins Marine Station
	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
	Physical Oceanography	primary	McPhee-Shaw, Erika	Moss Landing Marine Laboratories
X	Physical Oceanography	alternate	Ramp, Steve	Soliton Ocean Services, Inc.
	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
X	Social Sciences	alternate	Scorse, Jason	Monterey Institute of International Studies
X	Water Quality	primary	Hunt, John	University of California, Davis
	Water Quality	alternate	Epel, David	Hopkins Marine Station

*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:

Dunsmore, Rikki	Monterey Bay National Marine Sanctuary
Grimmer, Karen	Monterey Bay National Marine Sanctuary
Harvey, Jim	Moss Landing Marine Laboratories
King, Chad	Monterey Bay National Marine Sanctuary
Shester, Geoff	Oceana

CONSENT ITEMS

Introductions/Modifications to the Agenda (Harrold)

HOST PRESENTATION AND DISCUSSION

Moss Landing Marine Laboratories Update (Jim Harvey, Interim Director, Moss Landing Marine Laboratories)

- Harvey provided updates on personnel, research activities, and development plans
- Personnel:
 - Harvey is Interim Director, August 2012-August 2013
 - New Director search has begun; management position (not faculty)
- Research: Harvey noted various faculty projects, including:
 - DNA bar-coding of fouling communities to detect invasive species in Monterey Bay, including Tsunami species (Geller)
 - Autonomous Reef Monitoring Systems (ARMS; NSF-sponsored) to detect species presence (Geller)
 - Pacific Shark Research Center (Ebert, Cailliet): continue to seek funding; 20 new Chondrichthyan species described
 - Multiple cruises in Deep Sea Drilling Program (Aiello)
 - Developing methods for assessing effectiveness of ballast water treatment (Welschmeyer)
 - Fog as transport for mercury, mercury cycling in San Francisco Bay Delta (Coale)
 - Environmental monitoring and internal waves on the shelf (McPhee-Shaw)
 - Using kelp to uptake nutrients, clean runoff, and feed abalone (Graham)
 - Ecology of reef fishes in southern California and Palmyra, ocean warming and acidification in seaweed communities (Hamilton)
 - Biological and physical forces causing ship strikes of whales: a course in Monterey Bay (Harvey); multi-institutions developing classes
- Development Plans:
 - Various plans exist for property and facilities development, including:
 - Housing adjacent to the lab
 - Aquaculture facility at old shore lab
 - Del Mar Fisheries/Wharf area
 - Norte building, including CDFG
 - Old Pier (low priority)
 - Research Vessel(s)
 - R/V Point Sur will retire in 2014
 - NSF proposal with partners to design new Regional Class Research Vessel (~165 ft)

SANCTUARY ADVISORY COUNCIL UPDATE

April 2012 SAC Meeting in Santa Cruz (Harrold)

- Harrold provided highlights of the August SAC meeting in Santa Cruz, including:
 - Forage Species:
 - Informational presentations on management of forage species at federal and state level
 - Josh Lindsay: NMFS/SWFSC (federal) management
 - Deb Wilson-Vandenberg: CDFG (state), developing policy
 - David Crabbe: Pacific Fisheries Management Council
 - SAC members will share their views regarding if and/or how MBNMS management should engage in the forage species issue. SAC and CWG requested better process for RAP review of scientific white papers
 - CWG suggested CINMS review/commenting process to be used as model
 - Harrold suggested the following:
 - **ACTION**: Geoff Shester (CWG co-chair; Oceana) will request CINMS strawman from Mike Murray (CINMS);
 - **ACTION**: Andrew DeVogelaere will contact Steve Katz (Research Coordinator, CINMS);
 - **ACTION**: RAP will review CINMS model
 - **ACTION**: RAP will draft an outline of a preferred review process that would then be shared with the SAC for their review and comment
 - Motorized Personal Watercraft (MPWC):
 - Review of the rule, how we got to that rule, and use of MPWCs for search and rescue (Scott Kathey)
 - MBNMS Boundary Expansion (San Francisco-Pacific Exclusion Area) scoping meeting (GFNMS)
 - GFNMS staff leading effort to evaluate inclusion of the San Francisco-Pacific Exclusion Area (aka the “donut hole”), west of the Golden Gate, San Francisco, and San Mateo County, into the MBNMS
 - GFNMS seeking public comment (by 10/10/12)
 - For more info, see: http://farallones.noaa.gov/manage/exclusion_area.html
- For more info see: <http://montereybay.noaa.gov/sac/2012/120816/agenda.html>

PRESENTATION REQUESTED BY RAP

Climate Change: Results of May 2012 workshop “The Status of Knowledge on the Future of Sea Level and Storms on California’s Central Coast” (Storlazzi)

- Workshop organizers included:
 - Center for Ocean Solutions (Adina Abeles, Larry Crowder, Mike Fox)
 - Moss Landing Marine Laboratories (Larry Breaker)
 - US Geological Survey (Patrick Barnard, Curt Storlazzi)

- Storlazzi provided overview of workshop, including aspects of climate, waves, tides, circulation, and tectonics
- What is known:
 - Sea level will rise substantially along the central coast by the end of the century (new projections from NRC report)
 - Coastal inundation and erosion from wave-driven run-up will likely increase with rising sea levels
- Prioritized areas for research:
 - New predictions of winds and waves (which drive dynamic water levels and inundation) from new IPCC-AR5/CMIP5 global climate models
 - Active monitoring of coastal response (beaches, estuaries, sea cliffs)
 - Better understanding of local tectonics and drivers of regional sea-level rise (GPS surveys, adding GPS to tide gauges)
 - Utilizing existing data to gain better insights to future impacts
- Suggestions for how to apply in management:
 - Understanding, working with, and effectively communicating uncertainty
 - Incorporation into LCPs, climate adaptation plans, etc.
- Two upcoming products from workshop:
 - Briefing paper (on policy/management), in draft stage, by Center for Ocean Solutions
 - Science-based white paper (on needs) by scientists (contact: Curt Storlazzi), date unknown

ECOSYSTEM BASED MANAGEMENT

RAP Input on Ecologically Significant Areas (Karen Grimmer, Rikki Dunsmore, Chad King, Andrew DeVogelaere/MBNMS)

- MBNMS has identified Ecologically Significant Areas (ESAs) for a variety of current and future purposes
 - Better characterize MBNMS resources and special places
 - Research opportunities
 - Provide information to management processes such as:
 - Essential Fish Habitat (EFH) 5-yr review (federally managed groundfish)
 - Areas of Biological Significance
 - Shipping lanes
- MBNMS is currently engaged in the EFH 5-yr review process (benthic focus)
- Rikki Dunsmore provided overview presentation of EFH process and identification of ESAs
- Chad King provided overview of maps and GIS layers available
- MBNMS staff asked RAP for input on following:
 - Criteria for identifying benthic ESAs
 - GIS data layers available
 - Data relevant to research interests
 - MBNMS map of Ecologically Significant Areas (ESAs)
- **ACTION**: Mid-October, RAP will be polled by email, for input on the above

Future Agenda Items (running list):

- Desalination update:
 - Update on fresh water supply, desal, waste water management
 - Competing Moss Landing desal proposals (CalAm, DeepWater, People’s)
 - Including Cambria
- Ecosystem-Based Management Updates:
 - Integrated Ecosystem Assessment (IEA)
 - Natural Resources Assessment (NRA)
- Results of sand mining plant study (Scorse)
- Results of Pleasure Point Surf property value (Scorse)
- Trawling study report results (Lindholm; final due end Dec 2012)
- CeNCOOS update from Leslie Rosenfeld (Ramp)
- WQ monitoring web portals: Ocean Health for CA (Hunt; Fall 2012)

2012 RAP Meeting Schedule and Locations

Date	Host	Location
January 13	Lindholm	CSU Monterey Bay
March 9	Storlazzi	US Geological Survey, Santa Cruz
May 11	Scorse	Monterey Institute of International Studies
July 13	Grimes	NOAA Fisheries, Santa Cruz
September 14	McPhee-Shaw	Moss Landing Marine Laboratories
November 9	Pomeroy	Long Marine Lab, UC Santa Cruz
