MBNMS Research Activity Panel Meeting Summary March 11, 2016

Host: Andrew DeVogelaere – Research Coordinator (MBNMS)

Location: Sanctuary Exploration Center 35 Pacific Avenue Santa Cruz, CA 95060

Date: Friday, March 11th, 2016; 9:00 am to 12:00 pm

Members:

	Discipline	Primary/ Alternate	Name	Institution
X	Research Coordinator	Thernate	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)
	Deep-Sea Ecology	alternate	Haddock, Steve	Monterey Bay Aquarium Research Institute
	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)
Χ	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
	Marine Policy	primary		
	Marine Policy	alternate	David, Aimee	Monterey Bay Aquarium
	Nearshore Ecology	primary		
Χ	Nearshore Ecology	alternate	Carr, Mark	University of California, Santa Cruz
Χ	Physical Oceanography	primary	Ramp, Steve	Soliton Ocean Services, Inc.
Χ	Physical Oceanography	alternate	Cheriton, Olivia	United States Geological Survey
	Shelf & Slope Ecology	primary	Lindholm, James	California State University Monterey Bay
	Shelf & Slope Ecology	alternate		
Χ	Social Sciences	primary	Pomeroy, Caroline	California Sea Grant Extension Program
	Social Sciences	alternate	Scorse, Jason	Middlebury Institute of International Studies
Χ	Water Quality	primary	Hunt, John*	University of California, Davis
	Water Quality	alternate		

*Sanctuary Advisory Council Member: Research (Primary) †Sanctuary Advisory Council Member: Research (Alternate) - vacant

RAP Coordinator:

			Burton, Erica	Monterey Bay National Marine Sanctuary
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GUESTS:

Brown, Jennifer	Monterey Bay National Marine Sanctuary
Uttal, Lisa	Monterey Bay National Marine Sanctuary
Wooninck, Lisa	West Coast Region, National Marine Sanctuaries

CONSENT ITEMS

Introductions/Modifications to the Agenda (John Hunt)

SANCTUARY ADVISORY COUNCIL UPDATE

Summary of February 19th SAC Meeting at Watsonville (Andrew DeVogelaere)

- DeVogelaere provided presentation on the southern Monterey Bay shoreline, critical erosion areas, and the potential impact of the sand mining plant (CEMEX)
- DeVogelaere provided summary of the SAC's advice regarding public scoping items to be dropped from, or included in, Management Plan; and issues to be kept from 2008 Management Plan
- RAP will have opportunity to provide input on management plan
- For more information, see SAC minutes <u>http://montereybay.noaa.gov/sac/sacma.html</u>

SANCTUARY RESEARCH UPDATE

Bell M. Shimada Cruise Update: Fukushima Findings and Mesopelagic Fishes Survey (Erica Burton)

- Burton provided overview of Shimada fishes survey and Fukushima water sampling results
- Fishes Survey:
 - Goal of the fishes survey was to characterize mesopelagic fishes at Davidson Seamount (and other Sanctuary Ecologically Significant Areas, SESAs)
 - Thirteen mid-water trawls at six sites were conducted (8 tows at Davidson Seamount)
 - Depths of 500 meters were targeted with mid-water Tucker trawl (non-closing; 500 um net); each tow was approximately one-hour; operations occurred both day and night
 - More than 1000 fish were sampled, representing 19 families, 59 taxa
 - Most of the fishes were deposited at California Academy of Sciences, San Francisco; most larval fishes were deposited at NOAA Fisheries, La Jolla
 - SIMoN interactive map will be available soon
 - Manuscript will be submitted for publication
 - Representative fish images are available at: <u>http://www.sanctuarysimon.org/photos/photo_search.php?search=kw&keywordS</u> <u>earchTerm=NOAA+Ship+Bell+M.+Shimada</u>
- Water sampling for radionuclide analysis:
 - Woods Hole Oceanographic Institution (WHOI) started a citizen science project collecting ocean water samples because of the concern from the public about radionuclides from Fukushima washing ashore in North America
 - Save The Earth Foundation provided funding for the collection and analysis of seven water samples at three locations: eastern Smooth Ridge (sea surface), Sur Ridge (3.5 meters), and Davidson Seamount (200, 400, 600, 800, 1000 meters).

 None of the seven water samples had detectable amounts of Cesium-134 from Fukushima, but it can be detected at sample sites moving west across the Pacific towards Japan. Results can be viewed on WHOI's website: <u>http://ourradioactiveocean.org/results.html</u>

Regional Sound Research Effort Update (Andrew DeVogelaere)

- Regional Sound Committee trying to incorporate regional activities into national effort
- Hydrophone was installed on MBARI's MARS cable (approximately 900 meters); John Ryan is the lead
- Rarely seen Beaked Whales were recorded with hydrophone
- New container ship *Benjamin Franklin* sailed under Golden Gate Bridge late December 2015, and could be heard by hydrophone for 10 hours during transit
- Scripps hydrophone collected high frequency recordings and found they were caused by migrating midwater fishes; MBARI hydrophone data are being shared with this project

Grant Support Requests (Andrew DeVogelaere)

- Sanctuary Staff often receive requests for letters of support for proposals
- As a result, guidance is now available to help both parties
- See "Letters of support from MBNMS (guidance document)" under "Research Priorities and Science Needs" at: <u>http://montereybay.noaa.gov/research/welcome.html</u>

HOST PRESENTATION AND DISCUSSION

How They Fit Together: SIMoN, MBON, IEA, Condition Report, and the RAP (Jennifer Brown)

- Brown provided presentation on the various pieces and how they fit together
 - Sanctuary Integrated Monitoring Network (SIMoN) tracks monitoring in individual habitats
 - Condition Reports use monitoring information and experts to assess health
 - Integrated Ecosystem Assessment (IEA) is helping identify standard parameters to measure
 - Marine Biodiversity Observation Network (MBON) is gathering data and will present it for near real time status and trends assessments
- RAP opportunities to get involved:
 - SIMoN: update your existing projects and add new projects (and outreach to colleagues)
 - Condition Reports: get involved input and review by RAP very important. We may need your data for status and trend assessments
 - California Current IEA & MBON: may be approached for your time series data for incorporation into ERDDAP or CeNCOOS
 - MBNMS habitat conceptual models: RAP could choose to work on one habitat each year. Refine indicators and work to get time series data available or to launch key new monitoring efforts

RAP RESEARCH PRIORITIES

Role of RAP to MBNMS (John Hunt)

• Hunt briefly introduced the topic and summarized the role of the RAP, including:

- Contribute to Status and Trends Information: Long-term monitoring is important for Condition Report and other effort
- Serve as Subject Advisors
- Reinvigorate Communications with Research Community
- RAP agreed to continue the discussion at next RAP meeting

QUICK UPDATES ON NEW HIRES AT INSTITUTIONS, AND FACILITY UPDATES

- Chavez: new hires at MBARI (bioacoustician, engineer, 2 techs)
- Ramp: new oceanographer at NPS (from WHOI)

SUGGESTED FUTURE AGENDA ITEMS

• RAP Action Plan for long-term monitoring (continue Role of RAP discussion)

OTHER

- Ed Ricketts Award and Lecture:
 - Will be part of new lecture series, as soon as late-June
 - Call for nominations will be sent out soon by email

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
- RAP Membership:
 - Revisit RAP member policies including representation: discipline vs institution; available at: 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)

2010 KAP Meeting Schedule and Locations					
Date	Host	Location			
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			

2016 RAP Meeting Schedule and Locations