

**MBNMS Research Activity Panel  
Meeting Summary  
September 11, 2015**

**Host:** Jason Scorse – Social Sciences (Middlebury Institute of International Studies)

**Location:** McCone Building Boardroom (see campus map and parking info below)  
Middlebury Institute of International Studies at Monterey  
499 Pierce Street  
Monterey, CA

**Date:** Friday, September 11<sup>th</sup>, 2015; 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)
	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)
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
	Marine Policy	primary		
	Marine Policy	alternate	David, Aimee	Monterey Bay Aquarium
	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	<b>Lindholm, James</b> †	California State University Monterey Bay
	Shelf & Slope Ecology	alternate		
X	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
	Water Quality	alternate		

\*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:**

Aiken, Emily	California State University Monterey Bay
Cogan, Charles	Middlebury Institute of International Studies
Dawson, Cyndi	Ocean Protection Council
Favaloro, Jeanette	California State University Monterey Bay
Kathey, Scott	Monterey Bay National Marine Sanctuary
King, Zachary	California State University Monterey Bay
Lopez, Liz	California State University Monterey Bay
Rangan, Leela	public
Williams, Jessica	California State University Monterey Bay

**CONSENT ITEMS**

Introductions/Modifications to the Agenda (Lindholm)

**HOST PRESENTATION AND DISCUSSION**

Social Sciences Update (Scorse and Cogan/MIIS)

- Scorse discussed recent Op-Ed piece in San Luis Obispo Tribune, dated 9/4/15 ([http://www.sanluisobispo.com/2015/09/04/3791617\\_in-defense-of-local-marine-sanctuary.html?rh=1](http://www.sanluisobispo.com/2015/09/04/3791617_in-defense-of-local-marine-sanctuary.html?rh=1))
  - Recent launch of NOAA’s sanctuary nomination process led to communities interested in nominating south-central California area (Channel Islands to northern tip of San Luis Obispo County)
  - Sierra Club approached/funded Jason Scorse and Judith Kildow for economics impacts report (<http://www.sierraclub.org/sites/www.sierraclub.org/files/sce/sierra-club-california/PDFs/Final%20Report%20for%20Central%20Coast%20NMS%20Econ%20Study%209-25-14.pdf>)
- Economics Study: short study conducted last summer; economic benefits include:
  - Government expenditures on Sanctuary offices, staff, infrastructure, as well as additional research money raised by Sanctuary staff
  - Money raised by local NGOs and academics to conduct sanctuary-related research
  - Increased coastal tourism and increase to relevant business revenues from it
  - Increased property values, property taxes, and business, local, state and federal tax revenues due to sanctuary proximity
- Fishing community worried about new regulations; nomination stated no fishing regulations
- Oil industry also a critic
- Scorse/Kildow report not peer-reviewed, authors open about that
- Report facts were distorted by critics, so authors decided to write an op-ed piece

Charles Cogan, Research Director, NOEP and Blue Economy, MIIS

- Cogan summarized three projects working on: theme – economics of climate change adaptation on coastal areas related to sea level rise
- 1) Investigate some of the ideas used elsewhere to find ecologically, economically feasible solutions to address sea level rise
  - Sea level rise will ‘force’ coastal home owners to protect their homes (e.g., protective structures; hard armoring or soft armoring – wetlands, beaches)

- Exploratory in nature
- Possible sites: Monterey, Ventura Co., Humboldt
- Funded, up and running, need to complete December
- Working with The Nature Conservancy
- 2) Economic impacts of sea level rise, national project, work done over last 10 years
  - Property damage
  - Vulnerable populations (use census data):
    - Socially vulnerable: elderly, poor, linguistically-challenged
    - Disruption of economic activity, under-represented businesses
  - Experimenting with San Mateo County (has ocean side and bay side populations, which are different)
- 3) Marketable rights, shift land ownership (e.g., move portion of land parcel up hill)
  - How protect coastal wetlands for future, three questions/uncertainties:
    - How much rise will occur?
    - How will wetland change?
    - How will values change?
  - Use computer models; work with The Nature Conservancy
  - Propose to find an answer, satisfactory enough to make a decision

## PRESENTATIONS REQUESTED BY RAP

### Sanctuary's Spill Response Plan (Scott Kathey/MBNMS)

- Scott discussed what the MBNMS would do, and not do, in the event of a spill
- Oil Pollution Act of 1990 (result of Valdez spill in 1989), outlines government role
- USCG or EPA (if east of HWY 1) are the federal lead(s) in directing response
- MBNMS would be player at the table; we do not clean-up oil; we do not collect dead or injured wildlife; we do not coordinate volunteer clean-up groups; we could help
- MBNMS first line of defense is to prevent (e.g., shipping lanes moved offshore); preclude oil and gas development
- MBNMS interests during/after spill:
  - Response: Minimize spill, minimize damage from response
  - Natural Resource Damage Assessment (NRDA): quantify losses of natural resources and scale projects to restore injured resources
- Area Contingency Plan in place for the area, including Incident Command System organization
- MBNMS would like to notify regional research institutions in the event of a spill (pull sensitive equipment, close sea water intake to marine labs, or monitor natural resources), include long-term monitoring data sets in NRDA (e.g., Beach COMBERS)
- **ACTION**: Burton to recirculate call-for (list of) scientists interested in receiving notification in the event of a spill

### Natural Resource Damage Assessment for Refugio Oil Spill (Cyndi Dawson/Ocean Protection Council)

- Dawson described Ocean Protection Council (OPC)
  - Created by legislation in 2004
  - Improve collaboration and communication
  - Sits under California Natural Resources Agency;

- OPC is grantor of specified bond and other funds
  - (CalOST is a non-profit)
- Oil spill response and NRDA is very prescriptive with stages
- Potential components of a pollution case settlement
  - Clean up costs
  - Penalties
  - Natural resource damages (civil process)
  - Other claims: public entities, private claims
- What are natural resources damages?
  - Compensation for natural resource injuries
  - Compensation for loss of use and enjoyment
  - “Injuries” are biological impacts, “Damages” are monetary
- Pictogram available at: [www.refugioresponse.com/go/doc/7258/2551654/](http://www.refugioresponse.com/go/doc/7258/2551654/)
- Refugio NRDA: currently in “Data Collection” stage
- OPC funded project contributions
  - Baseline data condition assessment (southcoast MPA process)
  - Partnerships
    - Engage broader scientific and local community
    - Ensure the best science available is being used
    - Continued benefit to the state
  - Seafloor mapping information
- NRDA: currently divided into teams according to injured resource category
  - Birds
  - Marine mammals
  - Fishes
  - Rocky intertidal habitat
  - Sandy beach habitat
  - Subtidal habitat
  - Human uses
- Primary injury questions:
  - Q1: What was injured?
  - Q2: How much?
  - Q3: How badly?
  - Q4: For how long?
- Next steps: OPC science advisor team will engage in developing restoration concepts
- Lessons learned:
  - Comprehensive aggregation of datasets was useful (simple spreadsheet: who, what, where, when)
  - Early engagement with technical working group scientists was important
  - Engagement with OSPR prior to spill would have been useful (NRDA 101, Cyndi happy to facilitate 2016)

## **SANCTUARY ADVISORY COUNCIL UPDATE**

Summary of August 19th SAC Meeting at Half Moon Bay (Hunt)

- Hunt summarized the SAC meeting, highlights included:
  - Bird and mammal mortality event in spring, especially affecting Common Murres

- Receiver to detect tagged great white sharks has been deployed on the cement ship in Seacliff Beach
- MBNMS is the NEPA lead agency on three desal projects: Cal-Am slant wells in Marina, Deepwater Desal in Moss Landing, and People's Moss Landing Water Desal Project. Test well has been drilled in Marina.
- Management Plan Review initiated. Public scoping meetings in September and October. Comments due 10/30/15. Information available at: <http://montereybay.noaa.gov/intro/mp/2015review/welcome.html>
- SAC meeting minutes available at: <http://montereybay.noaa.gov/sac/sacma.html>

## **RAP RESEARCH PRIORITIES**

Discussion on RAP priorities and support for project funding (Lindholm)

- Lindholm provided background on recent need/issue to potentially voice support of Beach COMBERS program (in need of funding for continued existence), and framework for discussion (does the RAP want to get into role of supporting one program over the any/many other programs in the MBNMS, and/or programs we are each involved with)
- MBNMS contributes insurance for volunteers; recent outside grant will support upcoming training

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

- Pomeroy: CA Sea Grant seeking to hire new director (Starr done); position - not doing own research; more coordinator and liaison position, based in La Jolla; position closes in ~October; available online
- Scorse: looking for web developer; preferably grad student (low rate)
- Dawson: Prop 1 guidelines coming out; General Fund money for MPA monitoring in play now, in discussion with agencies, will be related to revised Master Plan Framework; early 2016 will hit the street (new RFPs)
- Lindholm: ongoing discussion on home affiliation of MLML (from SJSU to CSUMB); currently a great deal of uncertainty
- Burton: many RAP member 3-yr terms expiring; looking to renew;
  - **ACTION:** Burton will notify RAP members
- Storlazzi: part of geohazards group, monitoring money (80k) for El Nino, typically larger than normal storms later in winter, larger impacts of beach erosion, waves come out of southwest, strong down-welling flows; will be looking at beach morphology and imagery, fish habitat features; let Curt know if interested in data or combining forces; start in October in north bay; aerial photography; may work with Doug Smith, Rikk Kvitek; looking at WQ data coming down the San Lorenzo

## **SUGGESTED FUTURE AGENDA ITEMS**

- Scorse: Follow-up to Hunt's WQ presentation on how people are using data (see future agenda items); not sure how used in policy; where used, how used
  - Major work to be done before able to share data (Hunt); will be awhile
- Scorse (another way to pose it): if anyone knows of taking complicated data, and making available/used for policy, let him know; Curt mentioned recent PRBO study; ADV mentioned data collection for SESA and collaborative EFH proposal (interactive tool)

- November meeting: Seismic testing off Connecticut (per Storlazzi)
- Currents Symposium – adoption
  - Dawson: perhaps use state parks (Asilomar) as venue

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### Future Agenda Items (running list):

- MBNMS Updates:
  - Sanctuary Ecologically Significant Areas (SESAs)
  - Integrated Ecosystem Assessment (IEA)
- 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)
  - Ocean-based WQ presentation (per Hunt)
  - Elkhorn Slough Report Card:  
[http://www.elkhornslough.org/research/waterquality\\_reportcard.htm](http://www.elkhornslough.org/research/waterquality_reportcard.htm)
- Leadership changes at Big NOAA, and how affects little NOAA (MBNMS)
- 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
- Acoustic and seismic surveys
  - Continuation of SAC resolution to ban seismic air gun surveys
  - Seismic testing off Connecticut (per Storlazzi)
  - Center of Excellence for acoustics in development at GFNMS, Leila Hatch (SBNMS) involved (per DeVogelaere)
  - Report-out on RAP review of acoustics paper “NOAA ocean and sound strategy”
- Speaker series on science (Oceans Live; *Your Sanctuary* TV)
- Proposed regulation changes relative to CDFW Scientific Collecting Permits
- Coastal Rivermouth Lagoon inventory for state and central coast (Central Coast Wetlands Group/Ross Clark)
- RAP feedback for SAC (per Hunt)

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### 2015 RAP Meeting Schedule and Locations

Date	Host	Location
January 9	Lindholm	CSU Monterey Bay
<del>March 13</del>	<del>Wasson</del>	<del>ESNERR – cancelled</del>
<del>May 8</del>	<del>Carr/Pomeroy</del>	<del>Long Marine Lab, UCSC – cancelled</del>
July 10	Lindholm	CSU Monterey Bay
September 11	Scorse	Monterey Institute of International Studies
November 13	Storlazzi	U.S. Geological Survey

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