MBNMS Research Activity Panel
Meeting Summary
July 9, 2010

Host: Erika McPhee-Shaw – Physical Oceanography (Moss Landing Marine Labs)

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

Date: Friday, July 9th, 2010; 9:00 am to 12:00 pm

MEMBERS:

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<th>Discipline</th>
<th>Primary/Alternate</th>
<th>Name</th>
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<td>X Water Quality</td>
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<td>Hunt, John†</td>
<td>University of California, Davis</td>
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*Sanctuary Advisory Council Member: Research (Primary)
†Sanctuary Advisory Council Member: Research (Alternate)
GUESTS:

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CONSENT ITEMS

Introductions/Modifications to the Agenda (Harrold)
- New RAP member
  - Marine Policy (alternate): Aimee David, Ocean Conservation Policy Manager, Center for the Future of the Oceans, Monterey Bay Aquarium
- Modifications to the Agenda
  - “Enhanced Ecosystem-based Management Initiative” agenda item presented by Lisa Wooninck (NMS West Coast Region)
  - “CeNCOOS Update” (Ramp) - Cancelled

HOST PRESENTATION AND DISCUSSION

New Research at Moss Landing Marine Labs (McPhee-Shaw)
- McPhee-Shaw presented physical oceanography research at MLML, including:
  - Boundary mixing in the deep Monterey Canyon
  - Research question: are canyons mixing hotspots
  - Monterey Canyon: site of confirmed boundary-interior exchange consistent with bulk mass conservation arguments and with localized mixing of stratified fluids
- McPhee-Shaw presented student research, including:
  - Decade of oxygen in Monterey Bay (Ashley Booth; received best graduate student poster award at Sanctuary Currents 2010)
  - Nitrate transport to coastal Monterey Bay (Tanya Novak)
  - Movement of sooty shearwaters in response to variability in winds in California current (student)
  - Santa Cruz wharf observatory (student)

ENHANCED ECOSYSTEM-BASED MANAGEMENT INITIATIVE

SAC Subcommittee Update and Research Workshops (Lisa Wooninck/NMS West Coast Region)
- Wooninck provided summary of Enhanced Ecosystem-based Management Initiative goals
  - Protect unique and rare places within MBNMS in their natural state for future generations
Protect areas within MBNMS where natural ecosystem components are maintained and/or restored
Establish research areas within MBNMS that can be used to differentiate between natural variation versus human impacts to ecological processes and components
Promote ecologically and economically sustainable uses, including fisheries, in the Sanctuary

• Basic steps of initiative to achieve broad ecosystem-based management goals
  o Step 1: Information gathering and analyses
  o Step 2: Propose and implement strategies/actions
  o Step 3: Monitor, assess, and adapt strategies

• We are currently in Step 1 phase: information gathering and analysis

• Wooninck presented a draft schedule of Step 1 phase
  o October 2010: A workshop to discuss ‘Research Areas’ will be held
  o November 2010: A workshop to discuss ‘Unique and Rare Places’ may occur

• SAC subcommittee formed (includes John Hunt) to provide input on Initiative (as a whole), and to suggest research experts in various fields

• John Hunt posed the question: should the IEA and Enhanced EBM Initiative be the focus of the RAP and Research Program for the next 3 years?
  o Chris Harrold suggested this could be the RAP’s focus, RAP has latitude to change focus on any MBNMS issue
  o Erica Burton stated that this issue will probably not refocus the MBNMS research program and probably not the RAP’s focus; the issue will continue to be a standing item on the RAP agenda; there are many Action Plans in the MBNMS Management Plan that the research program will address, and may request input from the RAP; the Initiative is just an element of the Management Plan

• To view Wooninck’s June 17th SAC presentation see,

SANCTUARY RESEARCH UPDATE

None

SANCTUARY ADVISORY COUNCIL UPDATE

SAC Update (Harrold)

• Harrold reported on two items of interest to RAP:
  o Enhanced Ecosystem-based Management Initiative: Lisa Wooninck provided update to SAC (as presented above)
  o Artificial Reefs: Jay Straith (recreational diver, lawyer) gave presentation to SAC outlining the pros and cons of sinking a large vessel off San Carlos Beach for dive opportunities

• To view these June 17th SAC presentations see,
SANCTUARY CURRENTS SYMPOSIUM 2011

Theme and Ricketts Award Nominations (Erica Burton/MBNMS)
- Burton requested suggestions for the 2011 Symposium Theme and nominations for the Ricketts Award
- RAP would like to see list of past theme suggestions, and Ricketts nominees
- Burton will send email to solicit ideas of both
- RAP had several other ideas to improve the Symposium:
  - How about getting MBCORC involved in planning/partner (Storlazzi)
  - And others – Center for Ocean Solutions, Stanford University (Harrold)
  - Poster session has eroded over time; give it more time and space (Starr);
  - Exhibitors have dropped off, and we may want to continue to decrease or eliminate; high school involvement has grown and we should continue to encourage (Harrold)
  - Perhaps the Symposium should be divided into two events: 1) Public event (high school and exhibitors); 2) Science event that is more science centric with regional scientists; maybe MBCORC hosts a science symposium (Storlazzi)
  - MBARI open house successful, perhaps have a multi-institutional open house (Haddock)
  - Perhaps use a more public-centric venue – e.g., maritime museum, hotel (McPhee-Shaw)

NRDA COLLABORATORS and LONG-TERM MONITORING PROGRAMS

Updating the Regional Collaborators List (Erica Burton/MBNMS)
- Burton reminded the RAP that a list potential Natural Resources Damage Assessment (NRDA) collaborators with long-term monitoring programs was created in 2007, in response to the 2006 central coast Safe Seas Oil Spill Drill
- This list is out of date, and will be updated
- Burton will send out an email poll of those individuals/institutions interested in collaborating during an oil spill event and subsequent NRDA, using existing long-term monitoring data and programs

SUGGESTED FUTURE AGENDA ITEMS
- Sanctuary Currents: follow-up to email poll on theme, awards (Burton)
- CeNCOOS update (Ramp)
- Ken Johnson work in Elkhorn Slough (per McPhee-Shaw)
- Any science presentation should have 5 minute discussion on policy or social science implication; or specifically any emerging science coming out of MBNMS that has policy implication or management (per Scorse); or any marine policy issue may need science input (MBNMS focused or other local issue; per Hunt)
- Aimee David volunteered to provide list of policy issues that are current (from D.C., Sacramento) that may need science input
- High-res climate models by UCSC; not necessarily Cayan or Dettinger (per Storlazzi)
- GFNMS Climate Change report (John Largier, CeNCOOS), what differences MBNMS might see (per Starr)
• Focus a meeting on climate change (per McPhee/ Storlazzi):
  - Global view
  - CA coast (Lisa Sloan, UCSC; sea level rise, Breaker)
  - GFNMS/CBNMS (Largier)
  - Local/MBNMS (who? Curt?)
• Perhaps MBCORC hosts a 1 or 2 day science meeting (per Storlazzi)

Future Agenda Items (running list):
• Water Quality
  - Critical coastal areas presentation (ASBS, areas water quality impaired, areas in good state; Ross Clark)
• SIMoN
  - SIMoN Special Status Species Project (Jennifer Brown)
• 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)
• CeNCOOS update (new website; activities)
• High-res models of CA (UCSC; or Cayan or Dettinger/USGS)
• National Weather Service Forecast Office (Tom Evans, Warning Coordination Meteorologist)
• Presentation on IEAs (e.g., Phil Levin, Frank Schwing, John Stein), including IEAs that have been implemented (per Yoklavich)
• MPAs
  - State MPA monitoring projects (Jason Vasques)
  - Marine Spatial Planning presentation (per Harrold); Fio Micheli recently heard Marine Spatial Planning talk from Massachusetts; or speaker from Center for Ocean Solutions (Meg Caldwell)

2010 RAP Meeting Schedule and Locations

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<td>Lindholm</td>
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<td>May 14</td>
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