

**MBNMS Research Activity Panel
Meeting Summary
November 12, 2010**

Host: Chris Harrold – Marine Conservation Biology (Monterey Bay Aquarium)

Location: Ocean View Conference Room
Monterey Bay Aquarium
886 Cannery Row
Monterey, CA 93940

Date: Friday, November 12th, 2010; 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
	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
X	Estuarine Ecology	alternate	Watson, Beth	Elkhorn Slough NERR and Foundation
	Fisheries	primary	Grimes, Churchill	NOAA Fisheries Service
X	Fisheries	alternate	Vasques, Jason	California Department of Fish & Game
	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
X	Marine Policy	primary	Abeles, Adina	Center for Ocean Solutions
	Marine Policy	alternate	David, Aimee	Center for the Future of the Oceans, MBA
X	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
X	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
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)

GUESTS:

	Name	Institution
X	Barton, Michelle	California State University Monterey Bay
X	Burton, Erica	Monterey Bay National Marine Sanctuary
X	Castellon, Nick	California State University Monterey Bay
X	Cooper, Wendy	California State University Monterey Bay
X	Currier, Lindsay	California State University Monterey Bay
X	Garcia, Joseph	California State University Monterey Bay
X	Gregorio, Dominic	State Water Resources Control Board
X	Hanley, Charles	California State University Monterey Bay
X	Hansen, Paul	California State University Monterey Bay
X	Herz, Randy	California Ships to Reefs
X	Jordan, Cortland	California State University Monterey Bay
X	MacRae, Devin	California State University Monterey Bay
X	Miller, Kat	California State University Monterey Bay
X	Platko, Joe	California State University Monterey Bay
X	Scheiblauber, Steve	Harbor and Marina, City of Monterey
X	Schperberg, Daniel	California State University Monterey Bay

CONSENT ITEMS

Introductions/Modifications to the Agenda (Harrold)

- 2011 RAP meeting schedule: sign-up sheet passed around to host a meeting
- Updated MBNMS map/poster available for RAP members

ECOSYSTEM-BASED MANAGEMENT INITIATIVE

Update: Integrated Ecosystem Assessment (IEA) and Research Areas Workshop (DeVogelaere)

- Sanctuary embarking on Ecosystem-Based Management (EBM) Initiative
- Marine zoning already occurring off central California
- Four goals of the EBM Initiative
 - 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 sustainable uses within MBNMS to enhance resource protection while allowing compatible uses
- Research Areas Workshop was held at NMFS, Santa Cruz, 26 October 2010
 - Asked scientists how current marine zoning influences their work
 - Discussed the potential role of scientists in these zoning processes (e.g., stakeholders, advisors)
 - Written report will be sent to workshop participants

HOST PRESENTATION AND DISCUSSION

Overview of Research at Monterey Bay Aquarium (Dr. Mike Murray/Monterey Bay Aquarium)

- Mike Murray gave presentation on status of sea otter population in North Pacific (including central California coast)
- Collaborative research program to the north, “Coastal ecosystem response to influences from land and sea”
- Question: what factors are contributing to status trends to sea otter populations and expansions
- Populations face threats from various sources:
 - Watershed influences
 - Oceanic influences (marine productivity)
 - Density dependent factors
- Sea otters are being used as sentinels for ecosystem health; sea otters occur in the nearshore and are depth limited (200+ meters diving depth); life-span only 12-15 yrs in wild; therefore can be used as sentinels for nearshore processes, at decade-long scales
- Major threat to southern population suppression is infectious diseases (the why and how are being investigated); of the beachcast carcasses that died of infectious diseases, about 40% died from toxoplasma (land-based toxin), all evidence suggests there must be a cat source (domestic or wild)
- Murray noted recent publication that describes sea turtles as biosentinel for runoff, see: <http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0012900>

RESEARCH SCIENTISTS AS MBNMS STAKEHOLDERS

Research Scientists as MBNMS Stakeholders (Harrold)

- Scientists are more than advisors, and don't act like it, unless there is a threat
- Is there something we can or should do to better act as stakeholders?

RAP Discussion:

- Research is valuable to the area (Griggs: ~\$250 million budget among institutions)
- We have to be careful with the perception of scientists as stakeholders; We have to be careful to remain objective
- We are told that we are not stakeholders; we are told not to participate at that level (as advocates)
- Scientists are typically brought in to provide info, and rarely asked to sit at the table; wondering if scientists can be used for decision making at the management table
- We need scientists to disseminate/distribute info at the table, and effectively provide info to management; don't necessarily have to be at the table
- Perhaps scientists (or subcommittee) can work with the sanctuary to think about these things more carefully: 1) research permits; 2) advise how to spend funds; 3) management that could affect science
- Major points out of this discussion (Harrold):
 - Research community has negative perception of MBNMS research permits
 - Research stakeholders could advise/influence the directing of funding towards research

- Research stakeholders could influence management decisions
- Research stakeholders could watch out for research interests
- Research community believes there is competition for vessels/funds
- Scientific opinions on positions could better inform public policy
- Perhaps the problem is not knowing where the public policy decisions are happening (e.g., AMBAG), perhaps MBNMS or MBCORC could share that info
- Vasques is interested in providing input regarding CDFG permits
- **ACTION**: Harrold suggested DeVogelaere, Harrold, Burton create list to move forward and share with group

MBNMS RESEARCH FOCUS TOPICS OF RAP

MBNMS Research Focus Topics of RAP (Harrold)

- Chris outlined the topic, and presented a “straw man” for RAP discussion
- RAP is a working group of SAC
- RAP has broad goals
- In 2006, membership reorganized to include representative research disciplines and institutions
- The RAP has often raised the issue of what topics the RAP "could sink its teeth into" That is, what are the research priorities that the RAP should engage in
- Because the RAP is in service to the MBNMS and its SAC, these priorities should reflect the priorities of the Sanctuary
- Sanctuary research priorities are interspersed throughout the 426-page management plan
- Harrold proposes that the RAP and the Sanctuary together identify a small number of important research priorities on which the RAP could focus. These would not exclude discussion and consideration of other topics. They would, however, help us focus.
- John Hunt, Andrew DeVogelaere, Erica Burton and Chris Harrold drafted a "straw man" list of RAP research priorities to start the discussion
- This “straw man” list was provided to RAP members and discussed
 - Beach COMBERS: beach-cast carcass surveys, analysis, and interpretation
 - Data extremely valuable to MBNMS and others institutions on the central CA coast; currently no MBNMS funding going to it
 - Research areas component of the Sanctuary's Ecosystem-Based Management Initiative, and/or other roles in that process
 - Researchers as stakeholders. This is a different role from providing scientific advice. It's more about how Sanctuary actions or inactions affect the regional research endeavor
 - Recent initiative to review/recommend research related to opening a commercial halibut fishery in Monterey Bay
- Chris asked: What do RAP members think of this list? What should be added? Removed? Replaced? Modified?

RAP Discussion: What are the scientific topics that we want to sink our teeth into, and influence MBNMS?

- **What do RAP members think of the list?**
- Halibut Trawl RAP Subcommittee was a good example of a task for RAP; with RAP diversity, trawl group had knowledge (or knew about it)
- It would be good to know what SAC expects
 - At the SAC retreat a shotgun list of priorities was created, and will be prioritized for next 2 years
- Researchers as Stakeholders – Perhaps keep on list of RAP focus topics
- **What should be added?**
- *Impacts of climate change*
 - Priority for Office of National Marine Sanctuaries (ONMS)
 - New Ocean Climate Center at Gulf of the Farallones NMS office (Oct 2010), leading the ONMS effort to address climate change
 - Perhaps GF Superintendent can speak at future RAP meeting
- *Ecosystem-Based Management Initiative (EBMI) & Integrated Ecosystem Assessment (IEA)*
 - Seems like a natural way for RAP to get involved, and could be significant; we could help sanctuary form a more meaningful role; making EBMI more transparent to us and we influence it, working on it periodically
 - If we are going to think of ourselves as advisors, it would be good to get presentation from NMFS
 - Perhaps Phil Levin (IEA PI from NMFS/Seattle, or other) could give a presentation to the RAP
 - RAP doesn't meet frequently compared to speed of IEA, perhaps need subcommittee
 - RAP is interested
 - Perhaps Rikki Dunsmore (MBNMS Environmental Policy Advisor) could give a presentation to the RAP
- *Research Permits*
 - Perhaps add to list of RAP focus topics

HALIBUT FISHERY PROPOSAL

Update on Subcommittee Activities and Report (DeVogelaere)

- Review is not complete
- Goal was to review proposal to reopen halibut trawl fishery
- Reopening fishery would require change to California state regulations (Fish and Game Commission)
- RAP Subcommittee was formed to review proposal
- Literature list became very long
- Subcommittee chose to review local reviews
- Bycatch studies were not optimal
- Committee likely to suggest new local study would be appropriate

- In the mean time, Assemblymember Bill Monning (27th District) set up discussion group, and determined research study should be done locally
- A project that can be a model for this one is The Nature Conservancy/CSUMB work in Morro Bay

SANCTUARY RESEARCH UPDATE

None

SANCTUARY ADVISORY COUNCIL UPDATE

None

SUGGESTED FUTURE AGENDA ITEMS

- EBMI/IEA presentation
- GFNMS presentation on climate change (Haddock)
- Dedicated meeting on climate change with GFNMS and those doing actual research (McPhee-Shaw)
- Policy update from Aimee David (Ramp)

GUEST COMMENTS

- Dominic Gregorio (State Water Resources Control Board) offered to arrange a presentation on mussel watch data assessment for last 25 years; legislation to create state monitoring council
- Randy Herz (California Ships to Reefs) read a written statement on sinking of artificial reef in MBNMS and associated research; requested “California Ships to Reefs” to give presentation to RAP
 - RAP asked Herz to submit something in writing to inform the RAP
 - Post-meeting: Herz sent PDF to Erica Burton for RAP distribution; Burton emailed to RAP; those interested would comment directly to Herz

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 climate 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 recently heard Marine Spatial Planning talk from Massachusetts, or speaker from Center for Ocean Solutions (Meg Caldwell)
- Ken Johnson work in Elkhorn Slough (per McPhee-Shaw)
- Aimee David volunteered to provide list of policy issues that are current (from D.C., Sacramento) that may need science input
- 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)
