

**MBNMS Research Activity Panel
Meeting Summary
May 2007**

Host: John Hunt –Water Quality (University of California, Davis)

Location: Marine Pollution Studies Lab
Granite Canyon
34500 Highway One
Carmel, CA 93923

Date: Friday, May 11th, 2007; 9:00 am to 12 pm

Members PRESENT:

| | Name | Discipline | Institution | Primary/ Alternate |
|---|------------------------|-----------------------------|--|-------------------------------|
| X | Cailliet, Greg | Deep Sea Ecology | Moss Landing Marine Laboratories | primary |
| X | DeVogelaere, Andrew | Research Coordinator | Monterey Bay National Marine Sanctuary | |
| X | Faurot-Daniels, Ellen | Marine Policy | California Coastal Commission | primary |
| X | Harrold, Chris* | Marine Conservation Biology | Monterey Bay Aquarium | primary |
| X | Hunt, John | Water Quality | University of California, Davis | alternate |
| X | McPhee-Shaw, Erika | Physical Oceanography | Moss Landing Marine Laboratories | primary |
| X | Sharp, Gary | Marine Policy | Center for Climate/Ocean Resources Study | alternate |
| X | Storlazzi, Curt | Marine & Coastal Geology | United States Geological Survey | primary |
| X | Van Dyke, Eric | Estuarine Ecology | Elkhorn Slough NERR | alternate |
| X | Yoklavich, Mary | Shelf & Slope Ecology | NOAA Fisheries Service | primary |

*Sanctuary Advisory Council Member: Research (Primary)

†Sanctuary Advisory Council Member: Research (Alternate) – Currently open

Members ABSENT:

| | Name | Discipline | Institution | Primary/ Alternate |
|--|-------------------|-----------------------------|--|-------------------------------|
| | Bograd, Steven | Physical Oceanography | Pacific Fisheries Environmental Laboratory | alternate |
| | Carr, Mark | Nearshore Ecology | University of California, Santa Cruz | alternate |
| | Chavez, Francisco | Biological Oceanography | Monterey Bay Aquarium Research Institute | primary |
| | Coulston, Pat | Fisheries | California Department of Fish & Game | alternate |
| | Epel, David | Water Quality | Hopkins Marine Station | primary |
| | Grimes, Churchill | Fisheries | NOAA Fisheries Service | primary |
| | Kudela, Raphael | Biological Oceanography | University of California, Santa Cruz | alternate |
| | Micheli, Fiorenza | Marine Conservation Biology | Hopkins Marine Station | alternate |
| | Paull, Charles | Marine & Coastal Geology | Monterey Bay Aquarium Research Institute | alternate |
| | Pomeroy, Caroline | Social Sciences | California Sea Grant Extension Program | primary |
| | Starr, Rick | Shelf & Slope Ecology | California Sea Grant Extension Program | alternate |
| | Wasson, Kerstin | Estuarine Ecology | Elkhorn Slough NERR | primary |
| | | Deep-sea Ecology | | alternate |
| | | Nearshore Ecology | | primary |
| | | Social Sciences | | alternate |

GUESTS:

| | Name | Institution |
|---|--|--|
| X | Anderson, Brian | Marine Pollution Studies Lab |
| X | Breaker, Laurence (next meeting, will be a member) | Moss Landing Marine Laboratories |
| X | Burton, Erica | Monterey Bay National Marine Sanctuary |
| X | Conley, Gary | Monterey Bay National Marine Sanctuary |
| X | Krigsman, Lisa | Sea Grant/MPA Center |
| X | Mace, Amber | California Ocean Protection Council |
| X | Phillips, Bryn | Marine Pollution Studies Lab |
| X | Siegler, Katie | Marine Pollution Studies Lab |
| X | Szoboszlai, Amber | Sea Grant/MBNMS |
| X | Uttal, Lisa | Monterey Bay National Marine Sanctuary |

CONSENT ITEMS

Introductions/modifications to the agenda (Chris Harrold)

- As of April 30, 2007, the MBNMS has a new Superintendent: Paul Michel
 - If RAP has research ideas that Superintendent could promote at NMS Headquarters in DC, let Andrew DeVogelaere know
 - A topic at next RAP meeting will be critical research issues of the RAP, to provide to Superintendent

PRESENTATIONS

Pesticide effects in the aquatic ecosystems of streams and estuaries draining to the Sanctuary (Brian Anderson/Marine Pollution Studies Lab at Granite Canyon)

Brian presented an overview of the following:

- Agriculture effects in MBNMS watersheds
- Coastal watershed monitoring
 - Pajaro River (1994-1995)
 - Salinas River (1998-ongoing)
 - Santa Maria River
- Water and sediment toxicity observations in the Salinas River downstream of Ag drains
- The Marine Pollution Studies Lab has a new web site
 - www.envtox.ucdavis.edu/GraniteCanyon/GraniteCanyon.htm

California Ocean Protection Council (Amber Mace/California Ocean Protection Council & California Ocean Science Trust)

Amber Mace provided information on the California Ocean Protection Council and the California Ocean Science Trust

- The California Ocean Protection Council was established pursuant to the requirements of the California Ocean Protection Act (2004); after 2 National Commission Reports (US Commission on Ocean Policy and Pew Oceans Commission report)
- Council
 - Secretary for Resources, Chair

- Secretary for Environmental Protection
- Chair of State Lands Commission (Lt Gov or State Controller)
- State Senator
- State Assembly Member
- Two public appointees
- State Council Conservation Executive Officer is Council Secretary
- California Ocean Science Trust Representative is Science Director
- 2007 priorities (5 year strategic plan 2006)
 - Research and monitoring
 - Seafloor mapping (state waters)
 - Ocean observing (Upcoming workshop focused on Monterey Bay – September; link tools with management needs)
 - MPA monitoring
 - Impacts of climate change (1 million to Sea Grant each year)
 - Water quality
 - Marine debris
 - Low-impact development
 - Once-through cooling
 - MLMA and MLPA
 - Governance
 - Enforcement
 - Funding
 - Develop metrics to measure progress
 - Ecosystem-based management
- California Ocean Science Trust (non-profit)
 - Supports Ocean Protection Council
 - Science services
 - Directory of experts for specific topics
 - Monitoring MPAs
 - Funds received from Protection Council
 - Goal to help CDFG implement MLPA/MPAs
 - MPA Monitoring Enterprise Leadership
 - Science
 - Information Management
 - Communications

DISCUSSION ITEMS

Water Quality Monitoring Database (Gary Conley/MBNMS)

- Gary briefly described the components of the Central Coast Water Quality Data Synthesis, Assessment, and Management (SAM) Project
 - Compile water quality data and develop system for integration
 - Assess data utility and comparability
 - Address non-point source pollution questions and identify information gaps
 - Establish framework for ongoing data integration and water quality assessment

- Gary presented the progress and status of the SAM database, and demonstrated potential outputs using spatial information
- A workshop will be held in the fall (~Nov) to demonstrate the database and get others to upload data directly into database
- Recent outcomes include
 - Input to Santa Cruz County water quality database design
 - CenCOOS collaboration
 - Data delivery to Regional WQ Control Board
- Next Steps
 - Address non-point source pollution questions
 - A Strategic Plan

**Santa Cruz Visitors Center & Estimating the number of invertebrates in the MBNMS
(Lisa Uttal/MBNMS)**

- Lisa summarized the development, process, and next steps of the Visitors Center
 - Start of construction is planned for Aug 2008
- During Lisa's characterization of MBNMS species, she wanted to improve the estimated number of invertebrate species occurring in the MBNMS; currently the estimate is 21 Phyla. She contacted several sources (including John Pearse/Lights Manual for coastal water, rocky shore, sandy beach, tidal mud flat, salt marsh, and float and dock species; MBARI for midwater, deep benthic, deep infaunal), but would like to know who else to contact (e.g. shallow subtidal-kelp forest) and/or a strategy for getting the answer.
- The RAP suggested the following sources:
 - Census of Marine Life
 - Cailliet's class cruise data sheets
 - PISCO
 - California Academy of Sciences, San Francisco
 - Reef Check (Cyndi Dawson)
 - Jack Engle (So Cal, UCSB)
 - Oliver, Slattery, Oakden (MLML)
 - Mike Graham (MLML)

UPDATES

John Hunt provided a brief history of the facilities at Granite Canyon

Andrew DeVogelaere provided an update on the recruitment and selection of the Research Representatives of the Sanctuary Advisory Council (SAC)

- Official start date is June 15th (will be sworn in at SAC meeting)
- Chris Harrold was selected as the SAC Research Primary (RAP Chair)
 - RAP Discipline: Marine Conservation Biology (Primary)
 - Institution: Monterey Bay Aquarium
 - charrold@mbayaq.org
- Laurence (Larry) Breaker was selected as the SAC Research Alternate (RAP Vice-Chair)
 - RAP Discipline: Physical Oceanography (Alternate)

- Institution: Moss Landing Marine Laboratories
- www.mlml.calstate.edu/pg/Faculty-Info-Laurence-Breaker/
- lbreaker@mlml.calstate.edu

John Hunt provided an update on a recent workshop he attended to discuss water quality monitoring and agriculture food safety.

- He suggested Diana Stewart as a speaker at a future RAP meeting.

As a follow-up to the last RAP meeting, Pat Coulston sent an update regarding the new CDFG permitting personnel:

- Starting the week of May 21, the responsibility for processing Scientific Collecting Permits will be transferred from Angela Louie to Elizabeth (Liz) Cuevas
- Liz reports directly to Pat Coulston and is located in the Monterey office
- She will receive technical support from Dr. Laura Rogers-Bennett (Bodega Marine Lab), who also reports to Pat Coulston

Liz Cuevas (ecuevas@dfg.ca.gov)
 CDFG, Marine Region
 20 Lower Ragsdale Dr., Suite 100
 Monterey, CA 93940

SUGGESTED FUTURE AGENDA ITEMS

- Larry Breaker: Regime Shifts
- Diana Stewart will be asked to speak at RAP meeting
- Critical research issues of the RAP, to provide to Superintendent

Future Agenda Items:

- Water Quality
 - Food safety and water quality (Carol Shennan-UCSC; per John Hunt) – SEPTEMBER MEETING?
 - Findings tracking pathogens in sea otters and connection to FW flows (CDFG, UC Davis?)
 - Critical coastal areas presentation (ASBS, areas water quality impaired, areas in good state; Ross Clark)
 - CCLEAN summary (Central Coast Long-term Environmental Assessment Network; Dane Hardin/Applied Marine Sciences)
- SIMoN: future monitoring (JMPR or beyond)
- SIMoN’s Special Status Species Project (Jennifer Brown)
- The State of Nation’s Marine Managed Areas (Lisa Wooninck and Rikki Dunsmore)
- Filling open RAP seats

2007 RAP Meeting Schedule and Locations

| Date | Host | Location |
|--------------|-------------|----------------------------|
| January 12 | Pomeroy | CA Sea Grant, Watsonville |
| March 9 | Yoklavich | NOAA Fisheries, Santa Cruz |
| May 11 | Hunt | Granite Canyon, Carmel |
| July 13 | Coulston | CDFG, Monterey |
| September 14 | Wasson | Elkhorn Slough NERR |
| November 16 | Harrold | Monterey Bay Aquarium |