

Ocean Research and Resources Advisory Panel (ORRAP)

of the National Oceanographic Partnership Program (NOPP)

Consortium for Ocean Leadership

25-26 April 2011

MINUTES

**** All meeting documents and presentations can be found
on the ORRAP website: www.nopp.org/committees/orrapp/orrapp_meetings/ ****

Monday, 25 April

L. Vincent (Designated Federal Official – DFO) called the meeting to order and introductions were made around the room. S. Ramberg reviewed the agenda for this meeting, mentioning that, 22 April ORRAP received the full content outlines from the National Ocean Council (NOC). The meeting started with Sub-Panel updates.

ORRAP Sub-panels – Issues for Attention and Action

Ocean Observing Sub-panel: The allocation of high frequency radar is an issue that is currently being talked about among several agencies. The Ocean Observing Sub-panel recommends that a full briefing from the National Oceanic and Atmospheric Administration (NOAA) be considered for the August ORRAP meeting. The full status report should also include satellite resources and regional-national partnerships. It was suggested that Zdenka Willis be the NOAA representative to brief the ORRAP in August so that she can speak to both regional partnerships and national efforts.

ACTION: Ocean Observing Sub-panel work with the NOPP Office to schedule briefings for August ORRAP meeting.

Industry Sub-panel: The Industry Sub-panel discussed the agenda for an offshore renewable energy workshop on accelerating the decision making process of ocean renewable energy projects. The workshop will be held 24-25 May 2011 at the Consortium for Ocean Leadership and will bring together individuals with real-world experience to discuss impediments to the permitting process. The main purpose of the workshop is to examine the overall process and how to expedite it, mainly focusing on wind energy, through in-depth discussion. There is a special coastal and marine spatial planning (CMSP) focused panel and a National Ocean Council staff representative was invited. The NOC representative forwarded the invitation to others working on the CMSP Strategic Action Plan (SAP) writing team, but the planning committee has not received any RSVPs from these representatives. It was recommended that the planning team of the workshop contact the Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE) Director, Michael Bromwich, and Science Advisor to the Director, Alan Thornhill, to inform them of the workshop and its goals. ORRAP members are invited to attend. Please RSVP to amiller@oceanleadership.org if interested in attending the workshop.

ACTION: Provide contacts to the workshop planning committee chairs (Paul Kelly and Randy Fisher) for improved coordination – ALL.

Education Sub-panel: The Education Sub-panel brought up the issue that education is not highly leveraged in the Strategic Action Plans of the National Ocean Policy and that it should be better highlighted. This discussion was continued in more detail during the in-depth review of the National Ocean Council's Strategic Action Plans.

ACTION: The Education Sub-panel will internally review its structure and membership of its group and report back to the full ORRAP on how education should be handled and what the mission of the sub-panel should be.

Ocean Acidification Task Force (OATF): The OATF published an updated report as a result of the discussion that occurred after the December ORRAP meeting, two conference calls and the release of the National Research Council report entitled *Ocean Acidification: A National Strategy to Meet the Challenges of a Changing Ocean*. The report defines the science of ocean acidification research and mentions the need to bridge the gap between the science and *in-situ* measurements. It also discusses how to make predictions based on what specific data are showing. The OATF has not heard an update from the Interagency Working Group on Ocean Acidification (IWG-OA) on plans for a national office on OA. The OATF suggested the OA national office should establish relationships with private foundations such as the Gordon & Betty Moore Foundation and the David & Lucile Packard Foundation.

ACTION: Peter Brewer will provide an electronic copy of the report from a meeting of several private foundations to discuss ocean acidification. The OATF will follow up with the IWG-OA.

Briefings – Data Management

The ORRAP members heard briefings on various data management topics: the National Science Foundation's (NSF) Biological and Chemical Oceanography Data Management Office (BCO-DMO), OceanSITES, the federal perspective on a marine biological data portal, and the Ocean Biogeographic Information System (OBIS)-Seamap and International OBIS.

HIGHLIGHTS from the presentations and discussion:

- * BCO-DMO ensures that data from awards under the NSF Ocean Sciences division are freely available online and permanently archived at the National Oceanographic Data Center.
- * Data can be password protected at BCO-DMO to limit access.
- * OceanSITES (www.oceansites.org) is a worldwide system of long-term, deep-water reference stations measuring dozens of variables and is leading the way in proper data management for ocean observations.
- * Six countries participate in the implementation of the Research Moored Array for African-Asian-Australian Monsoon Analysis and Prediction (RAMA) array.
- * Due to the "climategate" controversy, the scientific community must be aware that bad observations should not be eliminated before archiving the data, but rather should be flagged as an anomaly.

HIGHLIGHTS from the presentations and discussion continued:

- * The US Navy, the Bureau of Energy Ocean Management, Regulation and Enforcement (BOEMRE), and the US Geological Survey (USGS) informally work together to maintain OBIS-USA which is housed at USGS; the funding level for OBIS-USA is approximately \$250,000 each year.
- * USGS and NODC have an agreement that OBIS-USA data will be archived at NODC.
- * A central federal data portal for marine data would be beneficial for decision makers regarding CMSP decisions and regulatory decisions, such as the National Environmental Protection Act.
- * OBIS-SEAMAP collects data on marine protected species, which is archived in the international OBIS database which connects to the Global Biodiversity Information Facility (GBIF). OBIS is the largest marine data contributor to GBIF.
- * OBIS-SEAMAP includes survey effort (tracklines) and additional attributes which are essential for the development of statistical models of density or habitat preference.
- * The OBIS-SEAMAP efforts should be coordinated with the NODC and the National Ocean Council data portal.

Briefing –Critical Infrastructure for Ocean Research and Societal Needs in 2030

S. Ramberg briefed the ORRAP on the recently released National Research Council (NRC) Report entitled *Critical Infrastructure for Ocean Research and Societal Needs in 2030*, which is available online at http://www.nap.edu/catalog.php?record_id=13081. The statement of task for the committee was to identify major research questions in 2030, define categories of infrastructure that should be included in planning, provide advice on the criteria and processes to be used to set priorities, recommend ways federal agencies can maximize value of their investments in ocean infrastructure, and to address societal issues. The committee developed the following three main factors to consider when prioritizing infrastructure assets:

- Usefulness for addressing important science questions;
- Affordability, efficiency, and longevity; and
- Ability to contribute to other missions or applications.

HIGHLIGHTS from the presentation and discussion:

- * The committee outlined 32 science questions and focused on what infrastructure would be needed to answer those questions.
- * The committee recommended prioritizing ocean research infrastructure investments by estimating the economic costs and benefits of each potential infrastructure investment, keeping in mind the expected net benefit over time.
- * The report emphasizes the need for shared infrastructure that should be coordinated through a national strategic plan and the plan should be periodically reviewed every five to ten years.
- * P. Kelly suggested advertising the report in marine industry publications.
- * The report recognizes the need for a surge capability in ocean infrastructure for rapid response initiatives.

Other Business

R. Weller from Woods Hole Oceanographic Institution was elected as the new ORRAP vice-chair. S. Ramberg from National Defense University will continue as Vice-Chair.

Briefing –National Ocean Council

M. Weiss and J. Miller provided an update on the activities of the National Ocean Council (NOC):

- * The first meeting of the Governance Coordinating Committee (GCC) was 10 March;
- * Federal interagency drafting teams have developed outlines for the strategic action plans (SAPs) to address the nine national priority objectives;
- * A national coastal and marine spatial planning (CMSP) workshop is scheduled for 21-23 June with a dedicated public and stakeholder session;
- * A federal interagency team is developing the National Information Management System (NIMS) to support CMSP;
- * Federal representatives and federal co-leadership on the nine regional planning bodies is being finalized. The states will select the regional representatives.

HIGHLIGHTS from the presentation and discussion:

- * The NOC has been engaged in policy resolution and coordination on issues like HF radar for operational oceanography and responding to the Japanese nuclear incident.
- * The NOC is focused on four areas of consideration: regions of special interest, renewable energy, importance of national ocean policy in diplomatic efforts, and the role of national ocean policy in economic issues.
- * The SAP draft full content outlines will be released to the public for comment in June 2011 and the draft SAPs will be released to the public for comment in October 2011. The final SAPs should be available in early 2012.
- * The NIMS will be a portal where the community can discover data through links to databases.
- * The ORRAP highlighted that the NOC is lacking a representative from the Department of Education.
- * The NOC will seek further ORRAP input on the SAPs once the full drafts are complete.

ACTION: The ORRAP will provide input on the SAP outlines to the interagency writing teams and the NOC by 6 May 2010.

Tuesday, 26 April

L. Vincent (Designated Federal Official – DFO) called the meeting to order. M. Leinen reviewed the highlights of the previous day's presentations and discussions. D. Boesch volunteered to give an update on the Oil Spill Commission.

ACTION: ORRAP members consider recommendations regarding data management.

Briefing – Ocean Science and Engineering Implications: National Oil Spill Commission

D. Boesch provided an overview of the ocean science and engineering implications from the National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling report to the President (<http://www.oilspillcommission.gov/final-report>) which was released 11 January 2011. The report:

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- * Recognized systemic failures in risk management-lack of containment capability and oil spill response plans;
- * Recommend increased investment in the BOEMRE environmental studies program;
- * Recommend a joint research program between BOEMRE and other agencies like NOAA, USGS, and Department of Energy (DOE);
- * Recommend increasing industry fees to pay for environmental monitoring and research;
- * Highlighted the need for a comprehensive ocean observing system;
- * Recommend increased investment in R&D related to safety, containment and oil spill response;
- * Highlighted the need for long-term monitoring through the Gulf of Mexico Research Initiative and the BOEMRE environmental studies program.

Finalization of ORRAP input to the development of the nine Strategic Action Plans of the National Ocean Policy

The ORRAP developed targeted comments on the SAP outlines and also highlighted several high-level issues for the NOC to address. The high level issues focus on:

- * Five-year infrastructure plans;
- * Education;
- * Stability in ocean research funding;
- * Ocean observations;
- * International collaborations;
- * Strengthening the case for CMSP;
- * Critical legislative actions.

To view the targeted comments on the SAPs and to review the high level issues in more detail, please visit http://www.nopp.org/committees/orrapp/orrapp_meetings/.

ORRAP Member Information

L. Vincent asked the ORRAP members to provide nominations of new ORRAP members by 23 August to L. Vincent, R. Nikolaus and ORRAP leadership. Six new members will need to be nominated this year.

Next Meeting

The next ORRAP meeting is 23-24 August 2011 at Ohio State University's Stone Laboratory in Put-in-Bay, Ohio. Possible meeting topics include:

- ❖ NOC Strategic Action Plans;
- ❖ Briefings on ocean observing, the Great Lakes, and geoengineering;
- ❖ Updates and new membership of the ORRAP Sub-panels;
- ❖ Discussion of future ORRAP topics and paths forward.

Public Comment Period

C. Chandler recommended that additional agencies such as USGS and DOE share leadership on the writing team with NOAA and the National Science Foundation on SAP #9 on Ocean, Coastal and Great Lakes Observations, Mapping and Infrastructure. C. Chandler also recommended that SAP #1 on Ecosystem Based Management and SAP #2 on CMSP should incorporate data management into their plans.

P. Goldstein recommended that agencies consider data standards across agencies in order to reconcile different types of data. P. Goldstein suggested that roadmaps to make data usable need to be encouraged.

Adjourn

The meeting adjourned at 1:40 pm.

DRAFT

Meeting Attendees

ORRAP Members	Organization
Dennis Bartels	Exploratorium
Don Boesch	University of Maryland; Ocean Studies Board
Peter Brewer	Monterey Bay Aquarium Research Institute
Michael Bruno	Stevens Institute of Technology
Dan Costa	University of California, Santa Cruz
Randy Fisher	Pacific States Marine Fisheries Commission
Paul Gaffney	Monmouth University
John Gannon	International Joint Commission
Paul Kelly	Energy & Ocean Policy Consultant
Margaret Leinen, Chair	Climate Response Fund
Steve Ramberg	National Defense University
Andy Rosenberg	Conservation International
Kerry St. Pé	Barataria-Terrebonne National Estuary Program
Robert Weller	Woods Hole Oceanographic Institution
Clarice Yentsch (phone)	Nova Southeastern University Oceanographic Center
Invitees and others attending	
Mary Boatman	Office of Science and Technology Policy
Margaret Brady	National Oceanic and Atmospheric Administration
Bill Burnett (phone)	National Oceanic and Atmospheric Administration, National Data Buoy Center
Cyndy Chandler	National Science Foundation
Ben Chicoski	Energetics Incorporated
Paul Cough	Environmental Protection Agency
Margaret Davidson	National Oceanic and Atmospheric Administration
Jeannie Dean	Pew Environment Group
John Farrell	U.S. Arctic Research Commission
Michael Feldman	Consortium for Ocean Leadership
Bob Gagosian	Consortium for Ocean Leadership
Bob Gisiner	US Navy
Deborah Glickson	National Academy of Sciences
Philip Goldstein	University of Colorado

John Haines	US Geological Survey
Pat Halpin	Duke University
Peter Hill	Joint Ocean Commission Initiative
Jessica Keys	National Oceanic and Atmospheric Administration
Ginny Kibler	Environmental Protection Agency
Karen Kohanowich	Joint Ocean Commission Initiative
Judy Krauthammer	MACOORA
Thomas Liu	Council on Environmental Quality
Heather Mannix	Consortium for Ocean Leadership
Craig McLean	National Oceanic and Atmospheric Administration
Jerry Miller	Office of Science and Technology Policy
Molly McCammon	Alaska Ocean Observing System
Kate Moran	Office of Science and Technology Policy
Roxanne Nikolaus	Office of Science and Technology Policy
Josie Quintrell	National Federal of Regional Associations
Susan Roberts	National Research Council, Ocean Studies Board
Samantha Simmons	Marine Mammal Commission
Linwood Vincent, Designated Federal Official	Office of Naval Research
Michael Weiss	Council on Environmental Quality
Laura Wittman	National Oceanic and Atmospheric Administration
Kristen Yarincik	Consortium for Ocean Leadership
Josh Young	Consortium for Ocean Leadership
NOPP Office	
Mel Briscoe	Consortium for Ocean Leadership
Hilary Goodwin	Consortium for Ocean Leadership
Allison Miller	Consortium for Ocean Leadership
Leigh Zimmermann	Consortium for Ocean Leadership

