

**RARGOM Board Meeting  
University of New Hampshire  
Morse Hall, Room 301**

**6 January, 2006**

**Minutes**

In attendance: Marilyn Buchholtz ten Brink (EPA), Todd Callaghan (Mass CZM), Michele Dionne (Wells NERR), Jeffrey Runge (UNH), Keston Smith (Dartmouth), Bruce Tripp (WHOI), Gordon Wallace (UMB)

**Institution activities updates**

Todd Callaghan: Outfall monitoring sites, MWRA up for renewal, no testing for pharmaceuticals, new methods for source tracking using chemical signatures

Gordon Wallace: UMB has hired 3 new faculty; Research updates: Endocrine disruptors in Boston Sewer System; Copper and Lead distribution models- concentration is actually 3-4 times higher than predicted; National Coastal Assessment Monitoring;

Jeffrey Runge: New Northeast Consortium director; Joint Center for Coastal Observation Technology; Coastal Observing Center research: transects and modeling: buoy in Great Bay, use of satellites to estimate carbon cycling in GoM coastal waters; model tracking fate of cod eggs and larvae from Western Gulf of Maine spawning sites.

Michele Dionne: NERR has opened up new housing facility. Research: mercury transformation in food webs; Invasive species impacts; role of ice in altering marshes; restoration projects; website about watersheds in seacoast region, models to indicate how changes are impacting groundwater supplies, impacts to landscape.

Keston Smith: Dartmouth's ECOHAB work; A. Bilgili still working on research projects in Great Bay

Marilyn Buchholtz ten Brink: EPA office of research and development: nutrient criteria for bays and estuaries, creating water quality criteria based on Clean Water Act; EMAP: Ecological Monitoring and Assessment Program: monitoring water quality and ecosystem protection; national indicator development- NE report under review (Walt Galloway); National Program Director is Kevin Summers; Sediment profile imaging (Giancarlo Cicchetti); MAPCOAST

program; Tiered Aquatic Life: establishing gradients of stress in aquatic life responses; EPA funding situation: external grants program diminished; funding for AUV- looking for region wide use; EPA equipment sharing opportunities; population modeling for fish (Jason Greer, Tim Gleeson, Suzy Ayvazian).

### **Finances update**

The budget and expenses for 2005 were presented. The projected balance is \$16,060.84. This is approximately \$1,000 less than projections, made in early 2004, of carryover to 2006. The balance reflects less revenue from dues, by nearly \$5,000, than projected. To compensate for this, the RARGOM office expended less for website development, scanning and office expenses than was budgeted. In addition to two members who have not yet submitted their dues, membership will be offered to several non-member institutions who have indicated that they will be willing to join in 2006. The anticipated extra revenue would be \$4,000, in which case revenue from dues in 2006 is projected to be \$21,425. The budget for 2006 will therefore remain as projected, with the exception that office expenses will be reduced to \$500.

### **July workshop report and planning of follow-up session**

The report of the theme session, entitled "Modeling Needs Related to the Regional Observing System in the Gulf of Maine" (RARGOM Report 05-1), that was held on 6-7 July, 2005 at the Cliff House in Ogunquit, Maine is available on the RARGOM website. The powerpoint presentations of all plenary speakers are also posted on the website. Published versions of the report will be available in March.

A one-day, follow-up theme session for the workshop is planned for late winter, early spring. The purpose of this session is to allow the community to respond to the report once they have had the opportunity to read it. The session will be held at the University of New Hampshire and will be open to all. The timing of the session will be announced later.

A discussion about integration of the various monitoring activities in the Gulf of Maine followed. At present, there does not appear to be much organized coordination among agencies (e.g. NOAA, EPA, NERR, GoMOOS and other IOOS activities). A broad brush meeting that brings together agencies and organizations involved in monitoring to present and discuss coordination of observing activities is needed. Estuarine monitoring is a critical component. The establishment of the Northeast Regional Association of Coastal Ocean Observing Systems should be helpful in this regard. Perhaps RARGOM can play a role here as convener of a session in collaboration with the Regional Association.

### **Planning for theme sessions for 2006/2007**

*Ecosystem metrics and indicators*

M. ten Brink will confer with K. Friedland about the status of this session.

*"Linkage between estuaries, nearshore and coastal ocean ecosystems in the Gulf of Maine: does coastal human activity have a significant impact on the greater Gulf?"*

The theme session would address questions about change in nearshore habitats and the need for understanding the connection with the offshore Gulf of Maine ecosystems. There is concern, especially in the fishing industry, that shifting land use patterns and coastal zone development, including introduction of contaminants, are affecting the distribution of harvested populations of Gulf of Maine fish and invertebrate species, their life cycles and survival of sensitive early life stages. The scientific understanding of life cycles, habitats for early life history stages and impacts of changes to wetland and coastal habitats and to land-derived contaminants in the Gulf of Maine, however, is, perhaps surprisingly, still rudimentary. While time series exist for water quality parameters in the GoM, it is unclear whether they have been analyzed with respect to the linkage to the offshore ecosystem and whether the appropriate water quality variables are being measured. A better understanding of biogeochemical exchanges, and of the transport and mixing of water between estuaries and the nearshore and offshore environments is also needed.

The theme session would bring together natural and social scientists, coastal managers and members of the fishing community to discuss these issues. In addition to identifying basic ecosystem measurement and experiments, a unifying theme is also the need for multidisciplinary model development to describe linkages between estuaries, nearshore waters and the deeper waters of the Gulf, as well as linkages between the land and nearshore with respect to watershed discharge, stressor response and habitat change. The main objective of the theme session is the identification of specific questions, gaps, data needs and research priorities, which will be written up in a report for broad distribution in the community.

J. Runge and L. Incze will take the lead in organizing this session, tentatively scheduled for the fall of 2006. It could be linked with a workshop on a similar theme under consideration by the Census of Marine Life and perhaps also NEERS (New England Estuarine Research Society).

Other theme session planning

*Impacts of climate change in the Gulf of Maine*

J. Runge will approach A. Pershing for his interest in leading this session for 2007-2008.

*Invasive species in marine ecosystems of the Gulf of Maine*

L. Incze will approach L. Harris as a possible leader of this session for 2007-2008.

*Gulf of Maine Council Gulfwatch*

The Gulfwatch program has now been active for over a decade. There is interest in the community to find out about the results, and access to the Gulfwatch databases. J. Runge will approach S. Jones about the possibility of organizing a session.

### *The Gulf of Maine: decadal synthesis of research knowledge*

The board discussed the possibility of holding a longer meeting that would provide a synthesis of recent knowledge about the Gulf of Maine, similar to meetings held in 1985 and again in 1996. The 1996 meeting in St. Andrews produced a volume that served as a useful summary and perspectives of current knowledge of the physical and ecological processes in the Gulf of Maine. The concept is that this should be updated every decade.

J. Runge and L. Rutter will send out a call to membership to assess interest in a session such as this, including nominations to form an organizing committee. Timing for this session would be 2008.

### **Website planning: the new look and content of the RARGOM website**

Lynn Rutter presented a summary of recent developments and planning for the website (see attached). James DuPrie presented the design of the website if it is done by websolutions, an organization within the UNH Computing and Information Services.

The website can provide a number of services to the community, including:

- *Events updates*. Lynn can now update messages
- *Events planning*. Lynn has worked with UNH to create an online system for registration.
- *Bibliographic database*. The bibliographic database is present on the web but is not working effectively. We have asked J. DuPrie and D. Remsen to provide quotes to upgrade and maintain this service
- *Funding databases*. J. DuPrie has been tasked with scanning GrantsNet for funding opportunities and posting them on the website.
- *Communication with members*. This needs to be developed. The service could include reports of what is happening at each member institution and providing information regarding programs, events, funding and graduate student opportunities, equipment sharing, contact names.
- *Theme session reporting*. All theme session reports are up on the website. At present, reports do not follow any set format. Creation of a format may help the theme session coordinator complete the report and get it posted on a timely basis.

The Board tasked the website committee with making recommendations for moving forward over the next several months. These recommendations should be sent around to all board representatives for the okay to make the steps needed to upgrade the website.

### **Next meeting**

The next board meeting will be hosted at the Wells National Estuarine Research Reserve on June 16.