

Environmental Monitoring Collaborative

3rd Meeting – December 16, 2004, 10:00 AM – 1:00PM

Coastal Institute, Large Conference Room, URI Bay Campus, Narragansett

Attendees: Collaborative members – Peter August (Coastal Institute), *Chair*; Sue Kiernan (DEM); Art Ganz (DEM DFW); Elizabeth Heron (Watershed Watch); Thomas Uva (NBC); John King (URI GSO); Jeff Willis (CRMC); Chuck LaBash (URI Environmental Data Center); John Stachelhaus (DOA/RIGIS); and Dave Burnett (Department of Health)

Others: Lisa Gould, RINHS; David Gregg, RINHS; Peg Parker, (RI House Policy); Chip Young, (CRC); Jim Campbell (USGS); Don Pryor (Brown); Richard Ribb (NBEP); John Torgan (Save the Bay); Ames B. Colt (RI Sea Grant); Norm Rubinstein (EPA-Narragansett); Mike Traber, (URI); Warren Prell (Brown), Scott Nixon (URI GSO), Lisa Drake (CI/Old Dominion U), Mike Larkin (NUWC), Carol Thornber (URI)

Meeting Summary

RI Environmental Monitoring Collaborative updates

- Comments from Representative Naughton regarding her views on the monitoring collaborative and how it fits in with the Coordination Team legislation have been posted on the collaborative web page.
- The Coastal Institute has appropriated \$14,000 for a competitive grant (available only to CI Senior Fellows) to provide support to the collaborative in developing a comprehensive methodology for environmental monitoring data interpretation and synthesis. Proposals are due by February 1, 2005.

1. Review charges to Environmental Monitoring Collaborative

- Develop a statewide monitoring strategy that consists of the following:
 - An inventory of existing monitoring programs (currently available on the Coordination Team webpage at: <http://www.ci.uri.edu/Projects/RI-Monitoring/OnlineResources.html>)
 - An outline of additional monitoring programs needed. (Will need to devise a system for evaluating new monitoring proposals.)
 - A list of indicators that will be used to measure the health of the state's marine habitats.
 - A list of data standards and protocols that will be used on reasonable and consistent basis by monitoring programs that contribute data to the system.
 - A mechanism for data sharing among all monitoring programs that enables both monitors and users to securely access monitoring data via the internet and to retain the integrity of such data.
 - A plan to provide data from the state marine monitoring system for disaster prevention, preparedness, response and recovery efforts in the marine environment; and
 - A communications strategy to provide public access to monitoring data.
- To assist with the development and implementation of a state water monitoring and assessment program, developed consistent with guidance issued by USEPA, and to augment and implement such a program to achieve the purpose of the above monitoring strategy program.

- To prepare an annual report in the month of January on the activities for the preceding year as well as the predicted financial needs of the system for the upcoming fiscal year.
- To enter into data sharing agreements with federal and state agencies, municipalities and non-governmental organizations for the purpose of coordination and management of monitoring data programs.
- To accept grants, etc., for the purpose of carrying out the monitoring strategy; and
- To enter into agreements for staff support and contract with consultants for required services to the extent permitted by financial resources.

2. Finalize Principles Statement

- A draft principles document has been posted on the collaborative web site (http://www.ci.uri.edu/Projects/RI-Monitoring/Docs/Core_Principles.pdf).
- The document will be amended to incorporate suggestions from the collaborative members and be posted back on the web for further review.

Comment: Need to make clear connections between monitoring efforts and how they contribute to the management of the ecosystem. Demonstrate the cost of scientific and monitoring uncertainties in terms of decision making. Also, an individual is needed to constantly review available grants (e.g., www.grants.gov).

Comment: Probably need more discussion with regard to a strict time requirement (i.e., 6 months) for making data available for the web. The current proposed standard will not be feasible for many data sets and may add unnecessary costs. Should replace the 6-month standard with wording that is appropriate to the type of data being collected.

Comment: Within number 8 should we include a request that new monitoring initiatives address resources consideration issues. For example, new monitoring efforts should include an assessment of costs and resources required.

3. Brief Reports from Land Use, SAV, Nuisance Species, and Benthos Teams

Carol Thornburg (Macroalgae monitoring)

- New effort to monitor abundance of macroalgae in the Bay. The intent is to monitor and map macroalgae distribution starting in late spring into the fall periods with bi-weekly measurements.
- Methods will include use of accurate fish finder to locate beds of algae.
- Data will be made available in GIS map formats for public use.

Comment: Great opportunity to bring together this effort with the Narragansett Bay Commission upper Bay monitoring efforts.

Scott Nixon (Benthos monitoring)

- Proposal to focus on higher trophic levels (secondary productivity) of major animal components in the Bay.
- Perhaps five stations in the Bay to measure growth rates particularly in quahogs and the soft bottom communities.
- Will include measurements of zooplankton growth rates, winter flounder, and perhaps Tautog or Cunner sampled during the summer.

- These would provide some indication of how the higher trophic levels are responding to fluctuating nutrient levels.
- The synthesizing and interpretation of these data must be made in coordination and in context with other monitoring efforts.

Lisa Gould (Invasive species)

- Need a comprehensive nuisance species monitoring program that incorporates early detection and rapid response to avert ecological crisis and expensive eradication efforts.
- Such monitoring efforts are well established in other regions; we only need to decide which type of program we need to implement and the frequency of monitoring. More pristine sites could be done on 3 or 5-year cycles, while more heavily used areas would need to be monitored more frequently.
- Data repository already exists within the RI Natural History Survey and it would be a logical place to establish a nuisance species database.
- Need to select the appropriate monitoring sites and a good method for vouchering species.

David Gregg (Coastal land use change)

- Goal of this monitoring effort would be to provide watershed wide assessment of land use changes relative to water quality.
- Metrics are coastal buffer and riparian land use, impervious surface, and some elements of land use change over time.
- Area of interest includes all of RI, portions of the Bay watershed in Massachusetts, and the Little Narragansett Bay basin in Connecticut.
- Start with baseline conditions with available 1985-1999 Landsat data.
- It is proposed that the RI Natural History Survey would assemble and administer the team needed to conduct the analysis and host any work sessions and provide the deliverable products to the collaborative.

Comment: We need to be aware of possible duplication of efforts with respect to improving the accuracy of land use coverages. All projects must make strong linkages back to programs that will be using the data.

Mike Traber (Submerged Aquatic Vegetation)

- There is very little existing monitoring data on SAV in RI (one data set in the Bay, 1995 and one salt pond, 1999).
- CRMC policy preserve, monitoring and where possible to restore submerged sea grass beds. However, the CRMC does not have current data sets to evaluate permit applications.
- It would be great if we could have over flights done every 5 years to evaluate the extent of SAV. The Chesapeake Bay region conducts annual surveys and uses the data in permitting and management decisions.
- It would be nice to combine aerial photograph survey efforts from different programs, but there are problems with protocols and seasonal needs.

4. Finalize Review of DEM Plan

- The DEM monitoring plan is currently being revised and will include updated tables and budget elements. It should be completed about January 1.

- Need to send the monitoring collaborative report to the Coordination Team for review before it is sent to the governor and general assembly.
- After the DEM plan is completed in early January, the monitoring collaborative will have 2 weeks to provide further comments. All comments should be submitted via the collaborative listserv to provide a public record.
- It will be very important for the Environmental Monitoring Collaborative to make clear in its report that the resource needs for a comprehensive monitoring strategy need to be a budget priority.
- It was recommended to have the monitoring collaborative involved with discussions while the budget is being considered with regard to alternative strategies, if necessary, and implementation issues after the budget is passed.

5. What data are required for disaster preparedness and damage assessment?

- Environmental and economic data are needed as part of a NOAA damage assessment as part of the ESI dataset available on the internet.
- RI Sea Grant is starting to develop a better habitat inventory for the state. There are some big data sets for sediment chemistry that should be evaluated first.
- OSPAR fund – pool of money available for emergency response planning. It is fully budgeted out, therefore, no money presently available for new projects. OSPAR has helped to develop the Bay Rapid Assessment Team for the state.
- The current map coast project will bring some new sediment information into the statewide dataset.
- Another point is that we should not be thinking of oil spills as the only disaster that could occur in the Bay or watershed. FEMA lists a whole suite of other issues that should be considered. Should ask RIEMA about potential overlapping environmental concerns.

6. How to develop a process to entertain other monitoring initiatives in 2005?

- There are problems with newly proposed technologies that have no prior testing or viable history.
- Need to establish proof of concept work to satisfy the core principles of the collaborative. This issue will need to be further discussed in February.
- Besides communicating what research needs are necessary, this group should also be reviewing monitoring technologies across the board.

7. Research budget for 2005/06

- Will need to supplement the proposed DEM monitoring plan budget, where necessary to fill in data gaps.

8. January meeting to review content of report to Coordination Team

- Next meeting in the 3rd week of January.

9. Meeting Recap

- The Environmental Monitoring Collaborative will review Rep. Naughton's notes and recommendations on the Collaborative's proposed principles.
- Heard suggestions from groups outside of DEM on ways to fill-in monitoring data gaps. Program staff must be connected with the work of the collaborative to eliminate duplicative work and promote good communication.

- Peter will work with the groups with regard to principles statement number 8 and develop a concise document on projected cost estimates that will be posted on the collaborative List-serve and Coordination Team web pages.
- In early January, Sue Kiernan will provide the collaborative with a revised DEM monitoring plan document for review on the list-serve and Coordination Team web pages
- Comments on emergency preparedness will be posted on the collaborative website for review.

Meeting Summary constructed by James Boyd