

## DRAFT MINUTES

RI Environmental Monitoring Collaborative  
Oct 18 2011, 1 to 3 pm  
DEM Room 300

Present: *J. Boyd, M. Cole-Ekberg, A. Colt, C. Deacutis, L. Green, Q Kellogg, M. Kerr, S. Kiernan, C. LaBash, A. Parris, D. Pryor, L. Russo, B. Stankelis, T. Uva, C. Young*

Meeting called to order at 1:05 PM

1. Chuck LaBash gave an update of the Northeast LiDAR project, a multi-phase project started 3 years ago. The goal is to enhance flood and sea level rise mapping. Phase I: Six coastal states submitted a concept proposal to USGS (for ARRA funds) focusing on coastal areas. Project developed during 2009; match provided by states and other entities. NE LiDAR project awarded in early 2010 for \$1.4 million. USGS assisted with project management, etc. Coastal coverage from NY (Long Island) to ME. RI contributing funds were provided from DoA federal highway funds, matched by funds from The Nature Conservancy, with only 1/3 of RI funding coming from USGS ARRA funds. Additional contributions by USGS Woods Hole; National and RI programs of the Natural Resources Conservation Service.

RI data collection completed between 4/29/11 and 5/7/11, just before full leaf out. Each state had different specs. RI chose to expand coverage to all of RI and decrease the nominal point spacing to 1 m (from 2 m). Vertical accuracy is 15 cm RMSE (NSSDA  $\pm 30$  cm). Of 10 billion "returns", 2 billion were usable points for characterizing the bare earth elevation surface. The 2m Digital Elevation Model (DEM) has been processed to flatten inland hydrography ~2-acre or greater surface area (~350' diameter for a round pond). Intertidal zones not hydro-flattened in DEM thereby retaining surface elevation detail known as a 'bare water surface' characterizing intertidal features, e.g., aquaculture locations. A proposal has been submitted to the URI Transportation Center to develop a higher resolution DEM, process data into State Plane Feet coordinates, and develop web-based services to distribute the base LiDAR data and derivative products (DEM and hillshade surfaces). Seeking funds to perform post-processing of the base LiDAR data to extract trees, building footprints and other features. Awaiting final deliverable of classified base LiDAR and DEM with 1560 tiles, 1.5 km edges.

2. Marci Cole Ekberg gave an update of the eelgrass mapping in RI. The Eelgrass Mapping Taskforce (informal and composed of Marci, Ken Raposa, Mike Bradley) got funding from the Habitat Restoration Trust Fund to perform overflights. Flights must be done in the early a.m., with no wind, no clouds, and at low tide. This year there were no sufficient windows of opportunity, so will try again next year in mid to late May. Hurricane Irene may have disturbed SAV and ecosystem

- needs time to settle. Coordinating with New York/ Long Island eelgrass surveys. Bob Stankelis said that Ken Raposa has been working on Tier II statistical sampling of eelgrass beds to collect data between overflights. Developing method on Prudence Island, but if not too complex, could be applied throughout the bay. Marci would like the EMC to brainstorm about future funding sources. Sampling protocols are tiered: I, II, III. Recommend sampling every 3 to 5 years (3 would be good, 5 is realistic). Marci will consider recommendations to be included in the environmental monitoring strategy being developed by the EMC.
3. Linda Green gave an update on Watershed Watch. They've just finished their 24<sup>th</sup> season, with 350 to 450 volunteers on 270 sites (roughly 1/3 lakes & ponds, 1/3 rivers & streams, 1/3 salty). The salty sites are the most quickly growing sector, with active participation by such groups as the Tiverton Harbor Commission and Save Bristol Harbor. They're having a problem maintaining monitoring on Greenwich Bay. Speculate that it's because it's difficult to get out in the water, so will focus on dockside monitoring. Worked with RINHS to train for AIS identification. Save the Lakes, a citizen group focused mostly on lakes in northern RI, is focusing on AIS. Next year WW will lose funding from USDA because the integrated project is being discontinued, so WW will be unable to provide any more "freebies" (sampling without funding). All data are on the WW website: <http://www.uri.edu/ce/wq/ww/index.htm>. They're thinking about ways to celebrate the upcoming 25<sup>th</sup> season.
  4. Data management and access was discussed. DEM has the tools in place for an on-line compatible database with regard to water quality but can't go forward due to lack of funding to hire staff or contractors to complete the web interface and maintain the database. Tom Uva suggested creating a web page accessed from the EMC web page with a brief description of each monitoring program and links to their data. The EMC report should continue to include data management and access in the annual report, along with a dollar estimate of what it would take to achieve a functional data repository. Salt Pond Coalition has developed a geospatial system for archiving monitoring data for ponds.
  5. Sue Kiernan gave an update of the stream gage network. The Coordination Team has picked up funding three long-term gages that lost funding from the Water Resources Board for FY2012. Four gages in the Big River area that have primarily short-term data will be dropped. The CT continues to supplement funding for several other stream gages as well that have lost funding from DEM. Stream gages need stable funding. There is some interest in adding another gage to the Pawtuxet River by RIEMA for the purposes of flood prediction. People don't realize how the data from these gages are used on a regular basis.
  6. Discussion: Is our monitoring capacity increasing or decreasing? Sue K. summarized the programs that have been recently dropped, as well as those that have never been implemented but are considered a priority:

**Recently dropped**

NuShuttle/Bay Window

URI/GSO benthic sampling pgm stopped in spring 2010  
Icthyoplankton sampling 2008  
Limited fish tissue sampling 2009  
Selected project stream gages (Big River)

**Not implemented**

Rotating assessment of coastal embayments  
Fish tissue- marine waters  
Freshwater beach monitoring  
Others

Discussion: We need to keep the unimplemented priorities on the table, and keep them in the report. Sue stated that DEM monitoring for WQ is largely federally subsidized. She noted that Mark Gibson feels that DMF is managing to maintain support for most of the fish surveys in state waters. But federal agencies (NOAA, NMFS, EPA) will be cutting funding. Ames noted that Bob Ballou feels that federal support for Area 2 lobster population surveys may dry up in the future. We need to establish connections to management priorities and public values.

7. The group discussed the 2011-2012 report to the CT. The following suggestions were made:
  - The one page summaries need funding information: garnered, lost, and needed.
  - Need more detail on management uses and value to decision-makers.
  - Add a table that lists why the monitoring activity is important and what the funding needs are. Linda suggests looking at the factsheet “Why Volunteer Monitoring Makes Sense” from the Extension Volunteer Monitoring Network, found at: <http://www.usawaterquality.org/volunteer/pdf/GuideBook/WhyMakesSenseII.pdf>.
  - A map showing places where monitoring has assisted in management. Could show accomplishments representing each monitoring activity. This could help legislator’s identify positive impacts in their districts.
  - Could include a success story on each page; simply a graphic and a caption could convey all that’s needed. Examples:
    - stream gages are used by the National Weather Service for flood prediction...”this non-descript gage triggers...”
    - blue-green algae blooms are measured by volunteers
    - urban beach initiative

- Plan to release the report in early January. Do we need a one-pager summarizing the report? Where might it be distributed?
- What about communication strategy to general assembly and governor's office?
- The report needs to be geared and timed to interface with the agency budgeting process.
- Ames has offered the help of Melissa Deciantis to produce the report.
- This year's report should be focused on the priorities that were established in 2005.

Amie Parris updated the group on the DOH beach monitoring program. They will be receiving double the funding next year from EPA to conduct DNA microbial source tracking. During summer 2011 they also monitored unlicensed saltwater beaches. Freshwater beach monitoring continues to be an issue. Currently the cost is borne by beach owners, many of whom are summer camps. FW beaches are only monitored a few times each season. In Summer 2011, 69% of the beach closure days were at freshwater beaches.

We should try to estimate the cumulative losses over the past several years in state funding to, for example, the stream gage network. Sue K. will try to come up with these numbers for state programs.

Tom U. suggested using a survey to gather information about the various monitoring programs: what, when, how, costs, etc. in order to begin to update the monitoring inventory. It was then agreed that making amendments to the 2005 monitoring inventory would be easier.

8. Bob Stankelis introduced the newly formed NB WQ Work Group. They held their first meeting in early October, focusing on organization and purpose. They will function as a subcommittee of monitoring collaborative. Bob will compile meeting notes shortly. Their next meeting will be held in early 2012. They will work on marine water quality indicator for Watershed Counts and for managers. They'll improve communication by establishing a listserv. Bob will send notes and framework to the collaborative for comment.
9. Sue K. discussed the statewide WQ monitoring strategy. Sue needs to update the existing WQ monitoring strategy by March 2012. She would like to establish a basic one page template (similar to Env MC annual report) in the WQ monitoring strategy and use it to build an environmental monitoring strategy by adding SAV, land use, etc. This will not be complete but it's important to start. The goal is to have a final template by the end of the year. Should include protocols (what, how, when), purpose and costs. This will allow us to update the list of wants that

gets sent to the CT. Sue K. can do the water monitoring strategy, but we'll need to send other templates out to those who can fill them in.

10. Meg Kerr and Q Kellogg reviewed the Watershed Counts work. WC has had a productive first year, developing indicators for IC, flow, CC, beaches, invasives. Three of these five have numbers that can be tracked. Two (freshwater flow and invasives) are still under development through continued conversations with stakeholders and experts. Will return to larger group with proposals. Work this year includes development of indicators for:

- FW water quality, focusing on streams and rivers at first and working with four staffed watershed groups (Wood Pawcatuck Watershed Association, Taunton River Watershed Alliance, Woonasquatucket River Watershed Council and the Blackstone River Coalition). This work is supported by a two year cooperative agreement with EPA
- Protected lands
- NB water quality
- Economic indicator. A “sliver” of this work will be undertaken in partnership with Save the Bay. Bob S. suggested that shellfish resources might be a good place to start.
- A freshwater wetlands indicator will be developed next year with DEM support

11. Ames C. discussed the EMC's workplan. The annual report is essential.

Collaborative should develop priority recommendations to spend the balance of about \$44,000 left in the FY 2012 OSPAR allocation. Funds have to be expended no later than June 2012. Suggested that the process of allocating remaining funds could entail:

- Solicit one page requests utilizing a consistent template
- Have the entire collaborative make recommendations to BRWCT who will make final decisions

Kiernan and Colt need to confirm the dollar amount actually available in OSPAR account. How the money can be used is somewhat restricted by DEM and DOA requirements. Also available from the BRWCT revenue account is the \$9,000 budgeted for CT standing Committees. This money is meant to support the administrative functions of the collaborative. Project spending could be requested directly or Chair and Co-Chairs could develop an annual budget (in coordination with B Stankelis).

Meeting adjourned at 3 pm.

Respectfully submitted,  
Q Kellogg, RIEMC chair