

**Watershed Counts Reflections and Planning**  
**1:00 – 3:00 PM at Save the Bay**  
**May 27, 2011**

In attendance: Meg Kerr, Q Kellogg, Lesley Lambert, Judith Swift, Sue Kiernan, Jim Boyd, Peter Coffin, Eugenia Marks, Walter Galloway, Chris Deacutis, Pamela Luey, Elizabeth Gooding, Greg Gerritt, Bob Vanderslice, Warren Prell, Caitlin Chaffee, Kevin Cute, John Torgan, and Chris Littlefield on speaker phone.

## **I. Year 1 Accomplishments Summary**

We have a website available and understandable for the public -- with links to scientific data for regulators, scientists, etc. Watershed Counts is now a coalition of 34 agencies, NGO's and universities, etc.

### Process

- Met with stakeholders in MA and RI to develop a list of potential indicators, then consulted the RI Environmental Monitoring Collaborative to select Year 1 indicators
- Used workshops to engage a broad coalition of partners.
- Used the workshops to discuss issues, consider indicators, examine the science and the complexity but ended by agreeing on how to present to state and local decision makers
- Developed shared talking points for reporting on indicators at the State House, in report and on the web

### Science

- Scientists from universities, management agencies, nonprofits presenting best scientific information during indicator workshops
- Indicator data were distilled with input from scientific community
- Scientists were given the opportunity to review report, posters

### Communication

- Used email to keep stakeholders informed about meetings, findings, products
- Graphic artist developed logo and icons for indicators
- Web site [www.watershedcounts.org](http://www.watershedcounts.org) . This web site is funded through the Land & Water Partnership, which is a project of the Friends of the Moshassuck. The site is hosted by B G Hooke consulting. Bruce Hooke is the web designer. He will work with Meg, Q and Lesley to maintain the web site. Our goal is for partner organizations to link to this web site from their organizational web sites.
- Press – WPRO Steve Klamkin, WPRO Bill Haberman, goLocalProv coverage of State House event, Judith Swift op-ed carried in local papers

## **II. Reflection on Year One**

The group reflected on the five indicators. For public presentation, five indicators are a lot. We were encouraged to distinguish between indicators that are scientifically important and those that will move the public. We may not need to report on each indicator every year. Some do not change quickly (like sea level rise). We could imagine having perhaps 20 indicators and report each year on an important subset.

The group recommended creating a matrix of indicators – showing the lead agency, the level of commitment and the needs moving forward. A first draft is at the end of this summary.

The interagency discussions around these important Bay and watershed metrics have been terrific. The information that has been shared has been very useful. Much of the information is posted on watershedcounts.org, creating a valuable resource for participating organizations. The group agreed that it would be helpful to produce more content on the indicator moving into the meeting so the meetings could be used to discuss and refine the information. Subcommittees could be helpful creating the materials.

Reflections from the Chesapeake Bay Program’s indicator efforts were shared: 1) Avoid a detailed numeric scale. The Chesapeake used a 100 point scale and had difficulty using it over time; 2) Highlight a few indicators each year; 3) One person, or a couple of people, need to be in charge of the final assessments. The draft report can then be sent to a wide selection of reviewers for comment. (Note: A similar process was used to create the 2011 Watershed Counts report.)

Remember how powerful the simple “sneaker index” has been for the Ches Bay. DEM’s opening of closed shellfishing areas is a big deal!

We are encouraged to revisit the questions: Who is our audience? What do we want to accomplish with Watershed Counts? The clearer we can be, the more we can target our limited time and resources to identify the most relevant indicators for the audience and craft messages to reach this audience.

Where does advocacy fit into Watershed Counts? Watershed Counts provides a clearinghouse of data summarized into assessments that are endorsed by a broad coalition of agencies and organizations. This information can then be used by partner organizations to support on-going efforts. Advocacy organizations will be able to mine this information to support their programs.

#### Discussion of specific indicators

Beach closures – pretty straight forward.

Invasives – perhaps we should be looking at biodiversity in addition to (or rather than) invasives.

Impervious cover – suggestions

- Town by town analysis of changes in IC and management response
- Miles/acres of development remediated for IC (LID, stormwater management)
- DEM and CRMC have permit tracking for stormwater. One of the big challenges is that town permitting is hard to track. Simply issuing a permit does not mean that a project has been built.
- Implementation of the new manual provides opportunities for tracking change
- MA stormwater – we need more analysis

- CT NEMO has developed an IC TMDL. They are finding that tracking stormwater management is fuzzy – but useful.

Flow – could we track annual dry periods? Also high flows are important, especially to the public. Siltation, particularly in urban areas, impacts habitats.

### III. Considering Year Two

#### A. Indicator Selection

DEM advocates including water quality in the indicators for Year Two. DEM also supported using the monitoring collaborative as part of the selection process.

Economic metrics related to the Bay and watershed should be considered

- Ecotourism
- Should make the point that there is a COST associated with doing nothing. And a financial gain if action is taken.
- Ecosystem services
- Could we get help from URI's ENRE Department? Tim Tyrell's analyses need to be updated, but are a model of what we would like
- Save the Bay is also looking at this metric – trying to find ways to establish the value of the bay
- Include bicycle tourism and freshwater fishing
- Shellfishing – landings, \$ generated, aquaculture
- Include the multiplier effect

Fisheries

- Flounder
- Herring – anadromous fish

Bay water quality

- DO
- Nutrients (N and P)
- Temperature

River Water quality

- Pathogens
- Water quality parameters, e.g., DO, temperature

Recreational opportunities

- Access – RI has limited good, safe access for salt water fishing
- studies by Brown student, Rob Thompson
- Where is access? Where SHOULD access be?
- How much are access areas used?
- CRMC's designated rights of way
- Saltwater fishing licenses

Marine invasives

- CRMC is in the 3<sup>rd</sup> year of monitoring at floating docks
- There are also good historic data (Jim Carlton, Williams-Mystic)
- RI has annual funding
- There are numerous established species, and the number is increasing
- CRMC has ID cards for volunteers to use
- Invasives links to biodiversity – issues of smothering, habitats are challenged/replaced
- Economics – Dave Prescott with STB found that 60% of scallop stock were smothered (however the scallops have done well this year)
- This year, CRMC will begin underwater filming of potential introduction points. establishing sentinel sites for mitten crab and other species
- Should we revisit the invasive matrix? Is this a good use of resources? Perhaps we are better to report on presences/absence or risk/threat and the effect of species already present
- We could use biodiversity. What do we know about the loss of biodiversity due to invasives? Do we know how much acreage is affected? How many acres are managed to address the problems?

#### Emerging contaminants

- Endocrine disruptors (Rainer Lohmann)
- Pharmaceuticals

#### Land use pattern change

- Intensification scale

Wetlands – DEM currently tracks the acres lost/year due to permitted activities

#### Freshwater Connectivity

- Several watersheds are already monitored through NRCS and RC&D Council (Wood-Pawcatuck and others)
- U MA Amherst has protocol
- ME has done survey

#### B. Other thoughts

This effort has limited staff. Could the group form subcommittees to support the effort?

State agencies might be able to give more – but we need to make a specific request. For example, DEM put some of the Watershed Counts posters in the Director's office. Can we ask the other agency participants for a similar display?

Could we develop short video clips for website and information kiosks (DMV, airport) – places where a broad cross section of the population would see it.

Encourage linkages to [www.watershedcounts.org](http://www.watershedcounts.org). We can add ECRI and the RI Saltwater anglers.

## Matrix of Indicators (Year 1)

Indicator	Lead Agency	Comments
Beach Closures	RI DOH – Amie Parris/Lauren Russo	HEALTH reports on beach closures. Updating the indicator each year with data on closure events is not difficult.
Freshwater Resources - Flow	RI DEM Office of Water with support from RI WRB and USGS	Our indicator is anecdotal. We need more information on MA. And a clear way to convey information on low and high flow.
Impervious Cover	RI DOT with support from URI (Natural Resource Science) and RI DOA. MA partners unclear.	IC by town for MA and RI and for entire watershed. Numbers are unlikely to change significantly year to year – and data are not available yearly. There are many recommendations for tracking stormwater projects, municipal response. It is unclear who has the capacity to take this on.
Fresh water and terrestrial invasives	RI Natural History Survey	RINHS developed an indicator matrix designed to consider presence and the threat of invasives and management responses. Applying the matrix would be time consuming. RINHS resources are limited.
Climate Change	CRMC	The metrics will change slowly. The indicator can be updated as new data are available without too much difficulty.

## Matrix of Indicators (Year 2)

Indicator	Lead Agency	Comments
Estuarine Water Quality	NBNERR	
Freshwater Quality	Narragansett Bay watershed organizations with paid staff (WPWA, Woonasquatucket, Blackstone and Taunton)	Grant funds have been requested from EPA Healthy Communities to support the indicator development.
Protected Land	TNC	
Natural Resource Economics	Save the Bay	