



NJ Water Monitoring Coordinating Council

Measuring What Counts for Clean & Plentiful Water

September 26, 2005
MEETING MINUTES

Attendees

Leslie McGeorge, Rick Kropp, Alena Baldwin-Brown, Lisa Barno, Kirk Barrett, Randy Braun, Bob Connell, Becky Cosgrove (for Bill Simmons), Lisa Galloway Evrard (for Chris Obropta), Jack Gibs, Jawed Hameedi, Nancy Immesburger, Mike Kennish, Ed Konsevick, Al Korndoerfer, MaryAnne Kuserk, Karl Muessig, Kerry Kirk Pflugh (for Danielle Donkersloot), Nick Procopio, Bob Reiser, Boris Rukovets, Ed Santoro, Mike Serfes, Dave Stedfast, Paula Zevin

Absent

Jeannine Der Bedrosian, John Kushwara, Steve Nieswand, Amy Shallcross, Bob Tudor, Mike Weinstein

Guests

Kevin Berry – NJDEP/WM&S
Dean Bryson – NJDEP/WM&S
Shawn Crouse – NJDEP/DFW
Jim Kurtenbach – EPA Region 2
John Vile – NJDEP/WM&S

➤ **Old Business**

- A. Minutes from the 5/25/05 Council meeting were approved
- B. EPA Challenge Grant for water monitoring data exchange has been awarded to DEP. Partners in applying for the grant included DEP, USGS, and DHSS. DEP's Office of Information Resource Management is working with DEP's Water Monitoring & Standards to coordinate implementation of the grant. The electronic NJ Water Monitoring Inventory, being spearheaded by the Data Management/Data Exchange Subcommittee, should be linked with the outcome of this grant.

➤ **NJ Water Monitoring Technical Workshop/Training Session (April 19 & 20, 2006, Rutgers EcoComplex, Columbus, NJ)**

Planning for this technical workshop and training session has begun. Tim Miller (USGS) and Tracey Mehan (former AA for Water, EPA HQ) have been suggested as potential keynote speakers for the workshop. Randy Braun will contact Tracey re: interest/availability; if he is not interested/available, Rick Kropp will contact Tim. A draft outline for both events has been developed. The workshop will include a plenary session, lunch speaker and 3 concurrent breakout sessions (1 in the AM, 2 in the PM). Ideas or suggestions for the workshop should be directed to Leslie, Rick or Alena.

(Follow-up Note: Tracey Mehan has accepted the invitation to be the keynote speaker for the workshop)

The training session will focus on macroinvertebrate identification and will be conducted by Bob Bode from NYDEC, an expert in the area of midge identification. Participation will be limited to

20 for this hands-on class. Kevin Berry (NJDEP/WM&S) and Al Korndoerfer are coordinating details for the training session. Questions and/or needs for this session should be directed to Kevin or Al.

➤ **Delaware River PPL Flyash Spill**

Al Korndoerfer provided a brief summary of the NJDEP/WM&S water monitoring efforts related to the August flyash spill by the PPL Martin's Creek facility, as well as some preliminary water column results. (Follow-up note: the final water column report, from this monitoring effort, is available from NJDEP Water Monitoring & Standards' webpage at: <http://www.state.nj.us/dep/wmm/publications.html>)

➤ **Technical Presentations** (Copies of all of presentations have been posted to the Council's webpage - <http://www.state.nj.us/dep/wmm/wmccmeetinginfo.html>)

The Council heard technical presentations on the following aspects of biological monitoring in NJ:

A. *Overview of Biological Monitoring* – Jim Kurtenbach, EPA Region 2

Jim provided an overview of biological monitoring at the federal level, including background on development/publication/refinements of Rapid Bioassessment Protocols (RBPs), fish protocols, lake and reservoir technical documents and coastal/estuarine biocriteria documents. He also provided a brief introduction to NJ's participation in a pilot study using the Tiered Aquatic Life Use (TALU) method for determination of aquatic life use attainment.

B. *Ambient Biological Monitoring Network (AMNET)* – Dean Bryson, NJDEP/WM&S

Dean presented information and results from the 2 completed statewide sampling rounds of NJDEP's Ambient Biological Monitoring Network (benthic macroinvertebrates). AMNET consists of over 800 stations which are divided into 5 water regions and sampled on a 1x/5-year rotating basis. The 3rd round of sampling for 3 of the regions (Northwest, Northeast, and Raritan) is already complete; sampling in the Lower Delaware region is underway. Areas for future focus include development of a Pinelands macroinvertebrate index, a Coastal Plain macroinvertebrate index, refinement of the index for Northern NJ (genus → family level), as well as moving from a 3-tiered to a 4-tiered scoring system (adding "slightly impaired" to the existing "non-impaired", "moderately impaired" and "severely impaired"). It was also recommended that there be a focus on development of marine indices, which – if pursued – should be coordinated with IMCS.

C. *Fish Index of Biotic Integrity* – John Vile, NJDEP/WM&S

John detailed the Fish Index of Biotic Integrity (IBI) network that is maintained by NJDEP's WM&S, as well as results from the completed Round 1 of sampling. This network consists of 100 stations, located in northern NJ, which are sampled 1x/5years. Sampling for Round 2 got underway in 2005. In Round 2, of the initial 100-site network, 3 former sites have been dropped because they did not meet the criteria while 3 new urban sites have been added in 2005. There is also a plan to pursue adding additional new urban sites to the network complement.

D. *Fish IBI in the NJ Coastal Plain* – Shawn Crouse, NJDEP/DFW

Shawn provided an overview of NJDEP Division of Fish & Wildlife's Fish IBI study, which is located in the Lower Delaware portion of the state. Development of this south Jersey IBI will complement the northern NJ effort as well as assist in the state's efforts to develop a holistic biological assessment of its aquatic resources. In addition to development of an index for fish assemblages in this portion of the state, the study, which was conducted from 2000-2004, also resulted in the identification of new fish species to this region.

E. *Current and Future Uses of Biological Data* – Kevin Berry, NJDEP/WM&S

This presentation detailed current and future uses of biological data including preparation of the Integrated Water Monitoring and Assessment Report (305(b) and 303(d)), to inform development of surface water quality standards, as well as the use of TALU as the future for gauging CWA goal attainment.

F. *Biological Monitoring in the Pinelands* – Nick Procopio, NJ Pinelands Commission

In this presentation, Nick detailed the types of biological monitoring taking place in the Pinelands area of the state. The 3 areas of particular focus are the Mullica River Basin, the Rancocas River

Basin and the Great Egg Harbor River Basin. The conclusions of these studies are that land use activities are the trigger for water quality degradation (increased land use = increased pH and specific conductance) and biological community alterations.

G. Efficacy of Estuarine Indicators – Jawed Hameedi, NOAA

Jawed provided a brief overview of indicators – their types and uses – as utilized in the estuarine environment for decision-making purposes. He also provided information regarding the development of indicators, as well as indices, as part of the “information pyramid”.

➤ **Subcommittees**

Data Management/Data Exchange

Dave Stedfast (USGS) provided a summary of the activities of the Data Management/Data Exchange subcommittee. The Subcommittee is spearheading the development of an electronic inventory of NJ water monitoring activities. The Subcommittee has developed a list of draft fields for the inventory, which was distributed for review and comment (comments should go to Dave Stedfast). Once complete, this inventory needs to be linked with the EPA Information Exchange Challenge Grant.

Monitoring Methods

This new Subcommittee is expected to make a report at the next Council meeting.

➤ **IOOS Workshop**

Jawed Hameedi gave a brief recap of the results from the 2.5 day NOAA-sponsored IOOS-related Workshop that had taken place in mid September at Rutgers. The intent of the workshop was to find ways to link water quality observations and monitoring with elements of the Integrated Ocean Observing System (IOOS), the Delaware Watershed, Bay and Ocean. (**NOTE:** a full presentation from this workshop is available on the Council’s website)

➤ **Topics for Next Meeting**

- IOOS/National Water Monitoring Network
- Water Quantity/Water Supply
- Flow/Drought Indicators

➤ **Next Meeting**

January 25, 2006 at DRBC (snow date – February 1).