



NJ Water Monitoring Coordinating Council

Measuring What Counts for Clean & Plentiful Water

May 22, 2013
MEETING MINUTES

Member Attendees

NJDEP – WM&S: Leslie McGeorge, Alena Baldwin-Brown, Debra Hammond, Helen Pang, Vic Poretti,
Bob Schuster OS – Judy Louis, Nick Procopio

NJDHSS – Doug Haltmeier

USGS – Bob Reiser, Jack Gibs, Pam Reilly

DRBC – Bob Tudor, Tom Fikslin

EPA R2 – John Kushwara, Randy Braun

IEC – Caitlyn Nichols

NJ Pinelands Commission – Sarah Smith

NJ Water Supply Authority – Heather Desko

Rutgers (Coop Extension Service) – Lisa Galloway Evrard

Rutgers (IMCS) –

Montclair University – Meiyin Wu

Monmouth University/Urban Coast Institute – Jim Nickels

Meadowlands Environmental Research Institute – Christine Hobble

NOAA – Jennifer Samson

Monmouth County Health Dept –

Barnegat Bay Partnership –

Stony Brook-Millstone Watershed Association – Erin McCollum Stretz

Musconetcong Watershed Association – Nancy Lawler

NJ Harbor Dischargers – Ashley Slagle

Brick Township MUA – Rob Karl

Guest Speakers/Discussion Leaders

Kevin Berry – NJDEP/WM&S

Dean Bryson – NJDEP/WM&S

Brian Henning – NJDEP/WM&S

Jeff Fischer – USGS NJWSC

Neil Kamman - VTDEC

Jim Kurtenbach – EPA Region 2

Jill Lipoti - NJDEP/WM&S

Erik Silldorff - DRBC

Tom Suro - USGS NJWSC

John Vile – NJDEP/WM&S

Guests

Tom Belton – NJDEP/OS

Biswarup Guha – NJDEP/WM&S

Heidi Hoppe, USGS NJWSC

Jeff Reading – NJDEP/WM&S

Eric Vowinkel – USGS NJWSC (retired), Co-chair Emeritus

- **Council Business** (Copies of the agenda, minutes and most of the information updates and presentations are available on the Council's webpage, under "Meeting Information" - <http://www.state.nj.us/dep/wms/wmccmeetinginfo.html>)
 - Minutes from the 02/06/13 Council meeting were approved.
 - Remaining 2013 NJWMC meeting is scheduled for: September 25
 - September marks the 10th anniversary of the NJWMC. A celebration to commemorate this should be included as part of the September meeting.
 - Information Updates, Presentations and Announcements:
 1. New Member – The Council welcomed Pam Reilly, from USGS NJ Water Science Center, as a new member.
 2. Announcements – 1. Leslie McGeorge provided updates from the National Water Quality Monitoring Council including the status of and plans for the national Water Quality Portal. The Portal provides one-stop access to chemical/physical water data that resides in EPA's STORET Data Warehouse or USGS' NWIS database. The Portal can be accessed at: <http://www.waterqualitydata.us/>. EPA plans for a STORET Dashboard, which will allow quick views of data from each state in the STORET water quality data holdings, were also announced. 2. Bob Reiser summarized several improvements to graphics on the USGS' NWISWeb, including making changes to graphs without refreshing, the ability to display data status, and options for displaying date/time & data values. The ability to show multiple station results on 1 graph is expected to be available shortly. 3. Alena Baldwin-Brown announced that the latest updates to the NJ Council's Continuous Monitoring Inventory, which were coordinated by Paul Morton, are complete and the updated spreadsheet & accompanying map(s) should be available in the near future.
 3. Presentation – The Council was fortunate to host a guest speaker from VT DEC, who also spoke subsequently to NJDEP Water Resource Management personnel. Neil Kamman provided a presentation on Vermont DEC's Comprehensive Surface Water Management Strategy, including the evolution of VT's Watershed Management Division, the development of the Strategy (including defined goals and objectives), their tactical basin planning process, how monitoring data informs the process, and how they use implementation tables to establish and track priority restoration and protection efforts. In addition, he shared their use of various types of data and indicators as decision-making tools within this process. Vermont's integrated approach has many elements of similarity with DEP's developing Comprehensive Water Resource Management initiative. The VT Surface Water Management Strategy can be found online at: www.vtwaterquality.org.
- **Session – Superstorm Sandy**
 - A. *Storm Tide and Flooding Along the NJ Coast* - Tom Suro (USGS NJWSC)
Tom Suro provided background on the USGS coastal monitoring program, the storm history for Superstorm Sandy, the USGS sensor deployment and recovery as part of the storm, high water mark flagging and surveying, as well as access to data and reports.
 - B. *Water Quality and Wastewater Infrastructure Impacts* - Jill Lipoti (DEP/WM&S)
Jill Lipoti provided an overview of the impacts from Superstorm Sandy that were seen by wastewater treatment plants, including number of plants affected in NJ and volume of sewage overflow from VA – CT. In addition, she detailed the response plan from both NJ and NY related to issuance of recreational boating and shellfish harvesting advisories in the NY/NJ Harbor area, as well as the statewide shellfish closure and incremental reopenings based on improving sanitary water quality.
 - C. *NY/NJ Harbor Water Quality and PVSC Impacts* - Ashley Slagle (PVSC/NJHDG)
Ashley Slagle described the post-Sandy flooding effects on the Passaic Valley Sewage Commission's facility, and the monitoring efforts in the NY/NJ Harbor by the NJ Harbor Dischargers Group, as well as NJDEP and USEPA. She provided some of the monitoring results from samples collected Nov 5-Dec 6, 2012. In addition, she shared a video (shot by the US Army Corps of Engineers) of the after-effects of the PVSC flooding.
 - D. *Inland Flood Monitoring Plan Update and Discussion* - Dean Bryson (DEP/WM&S)
Dean Bryson provided information on the comments received and updates that have been made to the draft Inland Flood Monitoring Plan. Next steps for the plan include a final review by NJWMC

members, developing potential partners and defining their roles in the plan, working through laboratory logistics and developing a QAPP for the plan. Jack Gibs offered to join the NJWMC members who are reviewing the plan.

Additionally, Jeff Fischer and Tim Reilly shared information regarding human health and environmental exposure-related projects related to Hurricane Sandy, that USGS is planning to pursue. These projects will range from Long Island to Atlantic City. They are currently looking for stakeholder comment on the projects as well as ideas as to what types of things USGS could consider taking on.

➤ **Session – Biological Monitoring**

A. Applications of Aquatic Biomonitoring Data in NJ - Kevin Berry (NJDEP/WM&S)

Kevin Berry summarized how aquatic biomonitoring data are currently used by NJDEP including performing integrated water quality assessment (including nutrients), evaluating permits for ocean discharges, stream classifications (including Category One and trout production designations). He also detailed some additional uses of biomonitoring data including natural condition evaluation, reference condition establishment, as well as stressor-response studies.

B. 2008/2009 National Rivers and Streams Assessment Report and 2013/2014 NRSA in NJ - Jim Kurtenbach (EPA Region 2) and John Vile (DEP/WM&S)

Jim Kurtenbach and John Vile provided information on EPA's National Rivers and Streams Assessment (NRSA). Jim focused on the recently-released report from the 2008/2009 NRSA effort, including the parameters sampled and the results – both nationally as well as specific to EPA Region 2. John shared information regarding NJ's participation in the 2013/2014 NRSA effort including sampling locations and key indicators. There will be 20 sites, overall, sampled in NJ – DEP will take the lead in sampling 8 of those sites.

C. Ocean Benthic Monitoring - Bob Schuster (DEP/WM&S)

Bob Schuster shared information regarding the development and application of an ocean benthic index for NJ waters including background on why such an index is/was needed, the index that was developed, the results when it was applied, as well as other mechanisms (gliders, helicopter sampling) that are being used to help understand the low dissolved oxygen levels seen in the ocean and to determine if the results support continuing listing the ocean as “impaired” for DO.

D. DRBC Large River Biological Monitoring - Erik Silldorff (DRBC)

Erik Silldorff presented details on how DRBC assesses biological conditions, including the types of biological monitoring it performs (and where), development of reference conditions for the Delaware River, defining stressors and using them to construct a biological condition gradient, and developing a bioassessment methodology for the river.

E. Biological Assessments in the Musconetcong Watershed - Nancy Lawler (Musconetcong WA)

Nancy Lawler summarized how the Musconetcong Watershed Association (MWA) uses bioassessment as a tool for tracking river restoration. River restoration goals for MWA include restoring fish passage and free flowing condition. Bioassessment is used since it's something that all partners understand, the sampling & analysis are relatively inexpensive, there are well established sampling protocols, training is available, a DEP-approved QAPP has been developed and the data and information are easy to communicate.

F. Fish IBI Monitoring in NJ and Development of S. Coastal Plain IBI - John Vile (DEP/WM&S)

John Vile presented a summary of fish index of biotic integrity (assemblage) monitoring in NJ as well as why fish are a good biological indicator of water quality. He presented information about and results from NJ's well established northern fish IBI network, as well as the progress in development of and implementation of the new southern fish IBI network.

G. Headwaters IBI and Methods Validation Project - Brian Henning (DEP/WM&S)

Brian Henning provided an overview of NJ's new headwaters IBI for streams north of the fall line, including explanations of why monitoring headwaters streams is important, the development of the headwaters IBI, the chosen bioindicators (including salamanders), and future directions for the program, including validation of the metrics and post-validation monitoring.

➤ **Action Items**

- Send revised draft flood monitoring plan to previous commenters and add Jack Gibs to list of people willing to review/comment – *Dean Bryson*
- Distribute USGS Hurricane Sandy project descriptions, electronically, to Council for review - *Leslie or Alena*. Provide comments to Jeff Fischer and/or Tim Reilly- *all Council members*. [NOTE: an email containing the project descriptions was sent to all Council members requesting input. Council members were asked to provide comments and/or ideas to Jeff, Tim or Bob Reiser].

➤ **Technical Topic for Next Meeting**

Nutrients

➤ **Next Meeting**

September 25, 2013 at NJDEP Headquarters