



NJ Water Monitoring Coordinating Council

Measuring What Counts for Clean & Plentiful Water

September 30, 2009
MEETING MINUTES

Member Attendees

NJDEP – *WM&S*: Leslie McGeorge, Alena Baldwin-Brown, Bob Connell, Danielle Donkersloot, Debra Hammond, Al Korndoerfer *NJGS*: Ray Bousenberry *OS*: Judy Louis *DWS*: Eileen Murphy
SRP: Mary Anne Kuserk

USGS - Rick Kropp, Eric Vowinkel, Jack Gibs

DRBC – John Yagecic, Karen Reavy (for Bob Tudor, Tom Fikslin & Ed Santoro)

EPA R2 - John Kushwara, Paula Zevin

IEC - Caitlyn Nichols

NJ Pinelands Commission –

NJ Water Supply Authority –

Rutgers (Coop Extension Service) – Diana Morgan (for Chris Obropta and Lisa Galloway Evrard)

Rutgers (ICMS) –

Passaic River Institute/Montclair U. – Kirk Barrett

Meadowlands Environmental Research Institute –

NOAA –

Monmouth County Health Dept – Mike Stephens (for Bill Simmons)

Guest Speakers/Discussion Leaders

Sandra Cohen – NJDEP/WM&S

Seth Hackman – NJDEP/OIRM

Paul Morton – NJDEP/WM&S

Stu Nagourney – NJDEP/OQA

Guests

Harry Chen – NJDEP/OIRM

Sheri Driber – NJDEP/OIRM

Rebecca French-Mesch – NJDEP

Rich Hyjack – NJDEP/OIRM

Jack Pflaumer – NJDEP/WM&S

Ashley Pengitore – PVSC

Jay Watson – NJDEP/CO

Angela Witcher – NJDEP/OIRM

➤ **Council Business**

- Minutes from the 5/20/09 Council meeting were approved.
- New Members/Member Updates: Eileen Murphy joined the Council as the rep for NJDEP's Division of Water Supply; Debra Hammond replaced Nancy Immesberger as a rep from NJDEP's Water Monitoring & Standards; Ray Bousenberry replaced Mike Serfes as a rep from NJDEP's NJ

Geological Survey; and Caitlyn Nichols replaced Boris Rukovets as the rep from the Interstate Environmental Commission.

- July 2009 National Water Quality Monitoring Council Meeting Information – Leslie McGeorge and Eric Vowinkel provided a recap of important information from the July National Water Quality Monitoring Council meeting in Portland, OR. Among those items mentioned were: discussions on the upcoming 2010 National Monitoring Conference, to be held in Denver, as well as updates regarding the Methods & Data Comparability Board, including the new Sensors Workgroup. Leslie also provided a summary of the efforts revolving around support for State & Regional Monitoring Councils including the new Webinar series, which was launched in Sept by the NWQMC's Communications & Outreach Workgroup. Leslie and Alena Baldwin-Brown participated on behalf of the NJ Council. As future webinars are scheduled, Alena will share the dates/times with Council members. Leslie also announced the formation of a national Water Quality Statistics workgroup, which is being led by herself, Doug McLaughlin (Western Michigan Univ.), and Dan Sullivan (USGS). If Council members are interested in participating in the workgroup conference calls, they should contact Doug at: douglas.mclaughlin@wmich.edu.
 - NJ Water Monitoring & Education Summit and Volunteer Monitoring Update – Danielle Donkersloot provided an overview of the upcoming Summit, scheduled for November 18 & 19 at the Rutgers EcoComplex in Bordentown. As a Co-Sponsor, Danielle asked Council members who had not submitted abstracts to for oral presentations to consider participating as moderators or with general assistance during the Summit itself. Interested Council members were asked to respond to Alena. Danielle also provided an update on the activities of NJ's Volunteer Monitoring Program, known as Watershed Watch. Danielle's presentation is available on the Council's website.
 - Emerging Contaminants Subcommittee: Caitlyn Nichols (IEC) reported that the subcommittee continues to work on drafting the white paper. She distributed a working definition of "Emerging Contaminants" on which they would like Council feedback, requested information on any EC-related projects either in NJ or in the region, and (again) requested an EPA contact for the subcommittee. [NOTE: John Kushwara has, subsequently, offered to be the EPA Region 2 contact for EC-related questions/issues]
 - Water Quality Data Exchange Project: Paul Morton provided an update on development of the overall NJ Water Quality Data Exchange System, including the NJ Water Monitoring Inventory. The "data in" portion of the WQDE system is now ready to use. As part of his presentation, Paul outlined how to register for and get started using this portion of the system. He also provided a preview of the features of the forthcoming Water Monitoring Inventory ("data out" portion). Paul's presentation is available on the Council's website.
 - Release of Phase 1 of the NJ Water Quality Data Exchange System – As mentioned above, the 1st phase of the WQDE system (the "data in" portion) is ready to use. NJDEP Deputy Commissioner Jay Watson, NJDEP OIRM Director Sherry Driber and other members of the WQDE Team joined the Council to announce the official release of this portion of the system, including a request that all monitoring partners begin using the system to share their data with NJDEP. A fact sheet on this portion of the WQDE system was developed and distributed. Information about using WQDE, including the fact sheet, is available under "Related Links" on the Council's website.
- **Technical Presentations** (Copies of many of the following presentations have been posted to the Council's webpage - <http://www.state.nj.us/dep/wms/wmccpresentations.html>)
- *2008 NJ Integrated Water Monitoring and Assessment Report Results* – Sandra Cohen (NJDEP/WM&S)
- Sandra Cohen provided an overview of the highlights and results from the final 2008 NJ Integrated Water Quality Monitoring and Assessment Report. This report, which is required biennially under sections 305(b) and 303(d) of the Federal Clean Water Act, is designed to provide the status of the quality of the state's waters as well as identify those waters which are not meeting water quality standards. The report is available at: http://www.state.nj.us/dep/wms/bwqsa/2008_final_IR_complete.pdf.

- *New HUC12 and Stream Hydrography Coverages* – Seth Hackman (NJDEP/OIRM)

Seth Hackman provided an update on the new HUC 12 and stream hydrography coverages being developed by DEP. Seth showed examples of comparisons between the existing HUC 11 and new HUC 12 coverages. He also showed how the new stream hydrography coverage provides more accurate information regarding locations of streams throughout the state – again using examples from the current stream coverage and then overlaying the new coverage to show the improvement. The HUC 12 coverage is available from NJDEP’s GIS downloads page (<http://www.nj.gov/dep/gis/lists.html>) and the NJ Geographic Information Network page (https://njgin.state.nj.us/NJ_NJGINExplorer/index.jsp). The new hydrography coverage is available as a Map Feature Service from the NJ GIN site.

Sensors

A. *Delaware Demonstration Project for the National Monitoring Network* – Eric Vowinkel (USGS NJ Water Science Center)

Eric Vowinkel provided the Council with an update on the National Monitoring Network’s Delaware Demonstration project, with an emphasis on the sensor-related monitoring that’s being used including DO sensors for aquatic life in the Delaware Basin, real time flow and water quality monitoring in the Delaware River and Bay, NOAA’s National Estuarine Research Reserve stations, and glider use along the NJ coast, among others. He also detailed plans for FY10 which include continued NASQAN monitoring at the Delaware River at Trenton site (12x/year) as well as continuous monitoring at the Delaware River at Delran and upgrades of turbidity sensors at the Delaware River at the Ben Franklin Bridge and Reedy Island.

B. *Evaluation and Implementation of Sensors in a Regulatory Environment* – Stu Nagourney (NJDEP/OQA)

Stu Nagourney spoke to the Council about a national project in which he is involved related to using sensors to collect physical and chemical environmental data. Applications in which sensors have been used include monitoring of septic systems, NPS, beach water quality, CSOs, and golf course maintenance. He also shared concerns regarding use of sensors for regulatory purposes or in a regulatory environment, as well as issues concerning operational reliability, data quality and detection limits, and communication, management and storage. Stu also provided an overview of the sensor pilot project which is doing groundwater monitoring for nitrate (4x/yr) at a CAFO in Iowa, as part of EPA’s Environmental Technology Verification Program, as well as some additional proposed projects/studies.

C. *Continuous Monitoring of NO₂ and NO₃ in NJ Surface Water* – Jack Gibs (USGS NJ Water Science Center)

Jack Gibs provided an update on sensor technology that’s being used to monitor NO₂ and NO₃ in NJ surface waters. The two locations at which sensors have been placed are the Delaware River at Trenton and the Passaic River below Pompton River at Two Bridges. Conclusions from the Delaware River site show: a strong link to individual hydrologic events; moderate-strong daily and weekly fluctuations; Diel fluctuations linked to primary production, temperature and discharge; and there was not enough data to determine the effects of season. Data from the Passaic River location is undergoing evaluation.

➤ **Technical Topics for Next Meeting**

Wetlands Monitoring, Nutrients

➤ **Next Meeting**

January 27, 2010 (snow date – February 3) at UGS NJ Water Science Center