



FINAL

NJ Water Monitoring Council

Measuring What Counts for Clean & Plentiful Water

May 27, 2020
MEETING MINUTES

Member Attendees

NJDEP – *DWM&S*: Leslie McGeorge, Alena Baldwin-Brown, Bob Schuster, Brian Henning, Deborah Kratzer, Vic Poretti *DWS&G*: Ray Bousenberry, Jeff Hoffman, Catherine Jedrzejczyk *DSR*: Sandra Goodrow
DWQ: Marzooq Alebus

NJDOH – Gary Centifonti

NJDMAVA – Sarah Helble

USGS – Bob Reiser, Heather Heckathorn, Tom Imbrigotta, Pam Reilly

DRBC – Ron MacGillivray, Namsoo Suk

EPA R2 – Phil Cocuzza, Muhammad Bilal Manj, Emily Nering

IEC – Evelyn Powers

NJ Pinelands Commission – Marilyn Sobel

NJ Water Supply Authority – Heather Desko

Rutgers (Coop Extension Service) –

Rutgers (IMCS) –

Rutgers (Env. Bioengineering) –

Montclair University – Meiyin Wu

Monmouth University/Urban Coast Institute – Jim Nickels

Stockton University – Christine Thompson

NJ Sea Grant Consortium – Pete Rowe

Meadowlands Environmental Research Institute – Cheryl Yao

NOAA –

Monmouth County Health Dept. –

Barnegat Bay Partnership – Nicole Peterson

The Watershed Institute – Erin Stretz

Musconetcong Watershed Association –

Raritan Headwaters Association – Kristi MacDonald, Mara Tippet

Great Swamp Watershed Association –

American Littoral Society –

NJ Harbor Dischargers –

Brick Township MUA – Rob Karl, Will Ruocco

Guest Speakers/Discussion Leaders

Paula Blaze – DEP/OQA
Alex Fiore – USGS NJWSC
Christopher Impelliteri – EPA/ORD
Bob Mueller – DEP/DSR
Alaina Ungarini – DEP/DWSG
Pete VanMetre - USGS

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- **Council Business** (Copies of the agenda, minutes and most presentations are available on the Council's webpage, under "Meeting Information" - <http://www.state.nj.us/dep/wms/wmccmeetinginfo.html>)
- Minutes from the 01/22/20 Council meeting were approved as presented.
- The next meeting will be September 23 as a virtual Teams meeting. The topic recommended by the Council for this meeting is monitoring for microplastics in water.

Information Updates, Presentations and Announcements:

1. *Information Updates and Announcements*

Member Updates

- Leslie McGeorge announced that she would be retiring as of June 30 and that a new DEP Co-chair would be named shortly - Leslie has been the DEP Co-chair since the Council was formed in 2003. [Note: Bob Schuster has been named the new DEP Co-chair]
- Jeff Hoffman requested to step down from his role as the NJGWS representative on the Council's Steering Committee member but will remain on the Council. Ray Bousenberry has agreed to replace Jeff on the Steering Committee. In addition, Catherine Jedrzejczyk has joined the Council as an additional NJGWS representative.

Announcements

- Leslie announced that the National Water Monitoring Conference is being rescheduled for the week of April 19, 2021 in Providence, RI. Ideas for sessions are being sought and should be sent to nwqmc@epa.gov.
- Pam Reilly announced several recent USGS publications including naturally occurring contaminants in aquifers where groundwater is "ancient", documenting estrogenic endocrine disruption in NJ surface waters, bridge scour countermeasures at selected bridges in the US, and landscape drivers of dynamic change in river water quality. She also announced a new publication "Passive Sampling of Groundwater Wells for Determination of Water Chemistry", which features a chapter co-authored by Council member Tom Imbrigotta. These items are available online at the USGS publications warehouse <https://pubs.er.usgs.gov/>.

Presentations:

- ***Effects of Multiple Stressors on Northeast Stream Ecosystems*** – Pete VanMetre (USGS) shared early results from the USGS National Water Quality Program's Regional Stream Quality Assessment (RSQA) work. The overall study is designed to determine the effects of the landscape (urbanization, agriculture, geology and soils), and multiple environmental stressors (habitat alteration, nutrients, contaminants) on biological communities (algae, invertebrates and fish) in streams in 5 regions of the US. Pete presented results from the Northeast Stream Quality Assessment (NESQA) project, and in particular data from the two sampling sites in NJ – Saddle River at Ridgewood and Hohokus Brook at Ho-Ho-Kus. Sampling focused on water quality (nutrients, pesticides, pharmaceuticals, mercury, hormones), sediment quality (metals, PAH's, organohalogens, hormones, radionuclides, toxicity tests), habitat and biology. Water and sediment quality data is available on the project website (<https://webapps.usgs.gov/RSQA/>). Ecological data will be added soon. A score card is displayed for each site. Provisional results show Hohokus Brook has the highest pesticide toxicity index score and is among the highest for nutrient concentrations. Sediment contamination at both sites were among the highest in the region. The fish MMI was good at Saddle River and lowest in the region at Hohokus Brook, indicating highly impaired conditions. The invertebrate MMI scores were rated good.

Session – PFAS Monitoring

- A. ***PFAS and DEP Contaminants of Emerging Concern Workgroup*** – Sandra Goodrow (DEP/DSR) provided an overview of DEP's Contaminants of Emerging Concern (CECs) workgroup including its role in identifying programs that are working on and sharing information related to CECs, particularly PFAS. The group is also utilized to elevate information to higher management levels within the department. [see <https://www.nj.gov/dep/wms/wmccmeetinginfo.html#2020> for presentation]
- B. ***Status of PFAS Analytical Methods and Field Sampling Protocols*** – Chris Impelliteri (EPA/ORD) summarized EPA's progress in development of analytical methods for PFAS (Standard Methods, research

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methods and developmental methods) as well as field sampling protocols. [see <https://www.nj.gov/dep/wms/wmccmeetinginfo.html#2020> for presentation]

- C. **Lab Certification Program for PFAS** – Paula Blaze (DEP/OQA) shared the available PFAS certifications – drinking water, non-potable water and solid and chemical materials, certification techniques, as well as the various parameters that DEP’s OQA offers for laboratory certification. [see <https://www.nj.gov/dep/wms/wmccmeetinginfo.html#2020> for presentation]
- D. **ITRC PFAS Status and Release of Tech-reg Document and Training Materials** – Bob Mueller (DEP/DSR) summarized the work of the Interstate Technology Regulatory Council’s (ITRC) PFAS Team including its technical and regulatory guidance document, fact sheets, online video modules as well as upcoming PFAS-related roundtable webinars. [see <https://www.nj.gov/dep/wms/wmccmeetinginfo.html#2020> for presentation]
- E. **Overview of PFAS Studies and Methods Used by the USGS NJWSC** – Heather Heckathorn and Alex Fiore (USGS NJWSC) provided an overview of both the projects as well as ongoing networks (including cooperative networks with DEP’s BFBM and NJGWS) in which PFAS is monitored by the USGS’ NJWSC. In addition, the monitoring methods, such as passive samplers, were discussed as well as future plans and areas of interest for PFAS monitoring. [see <https://www.nj.gov/dep/wms/wmccmeetinginfo.html#2020> for presentation]
- F. **Monitoring Surface Water for PFAS: Synoptic Study with NJ’s Ambient Surface Water Quality Monitoring Network** – Leslie McGeorge (DEP/BFBM) summarized a study that is underway to look at PFAS in surface water, using sites from the cooperative NJ Ambient Surface Water Quality Monitoring Network (cooperative with USGS NJWSC), as well as future plans to look more closely at possible “hot spots” and potentially sample for PFAS in sediment and fish tissue. Chris Kunz (DEP/BFBM) is the Project Manager for this study. [see <https://www.nj.gov/dep/wms/wmccmeetinginfo.html#2020> for presentation]
- G. **Highlights and Considerations of PFAS Partitioning** – Sandra Goodrow (DEP/DSR) presented information regarding research that’s being done in two phases to examine levels of PFAS partitioning in fish tissue, sediment and water as well as how the results are being used to develop a bioaccumulation factor (BAF) for PFOS. [see <https://www.nj.gov/dep/wms/wmccmeetinginfo.html#2020> for presentation]
- H. **NJGWS PFAS Groundwater Pilot Study and Future Work** – Catherine Jedrejczyk (DEP/NJGWS) provided an overview of a pilot study, from 2018, to look at the occurrence of selected PFAS in shallow ambient groundwater in the coastal plain province of NJ. She also shared information related to ongoing PFAS-related work that is being done by NJGWS. [see <https://www.nj.gov/dep/wms/wmccmeetinginfo.html#2020> for presentation]
- I. **PFAS in NJ: Monitoring Requirements and Results Summary** – Alaina Unguarini (DEP/DWSG)
[Awaiting approved presentation summary]

➤ **Topic for Next Meeting**

Monitoring for Microplastics

➤ **Next Meeting**

September 23, 2020 - virtual Teams Meeting

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PFAS-Related Gaps/Needs

- More data needed by USGS to assess effectiveness of passive samplers