

FINAL



NJ Water Monitoring Council

Measuring What Counts for Clean & Plentiful Water

MEETING MINUTES

SEPTEMBER 29, 2021, 10:00 am – 2:00 pm

Virtual TEAMS Meeting

MEMBER ATTENDEES (Alphabetical by Organization) & GUESTS

- **American Littoral Society:**
- **Barnegat Bay Partnership:** Nicole Petersen
- **Brick Township MUA:** Rob Karl, Will Ruocco
- **DRBC:** Nansoo Suk
- **EPA R2:** Emily Nering, Jim Ferretti, Kathleen Savino
- **Great Swamp Watershed Association:**
- **IEC:** Evelyn Powers
- **Meadowlands Environmental Research Institute:** Ying (Cheryl) Yao
- **Monmouth County Health Dept:**
- **Monmouth University/Urban Coast Institute:**
- **Montclair State University:** Meiyin Wu (*speaker*), David Hsu
- **Musconetcong Watershed Association:** Cindy Joerger, Christa Reeves, Samantha Johnson
- **NJDEP:**
 - **DWM&S:** Bob Schuster (*speaker, co-chair*), Jenna Krug (*coordinator*), Bruce Friedman, Helen Pang, Dean Bryson, John Vile, Kimberly Cenzo, Biswarup Guha, Marzooq Alebus, Emmalee Carr, Sheri Shifren (*speaker*), Brian Taylor, Brianna King, Andrew Jensen, Brian Henning, Amanda Baksa, Thessaly McFall, Grace Noll, Kimber Ray, Claire Huang-Lindabury
 - **DWS&G:** Ray Bousenberry (*steering committee*), Catherine Jedrzejczyk, Ritwik Menon
 - **DSR:** Nick Procopio (*steering committee*), Sandra Goodrow, Robert Newby, Greg Raspanti
 - **DFW:** Jan Lovy (*speaker*)
- **NJDMAVA:**
- **NJDOH:** Jessie Gleason (*speaker*), Loel Muetter
- **NJ Harbor Dischargers:**
- **NJ Pinelands Commission:**
- **NJ Sea Grant Consortium:**
- **NJ Water Supply Authority:** Heather Desko, Angela Mostwill
- **NOAA:**
- **NY/NJ Baykeeper:**
- **Raritan Headwaters Association:** Maria Berezin Dowling
- **Rutgers (Coop Extension WRP):** Lisa Galloway Evrard
- **Rutgers (Env. Bioengineering):**
- **Rutgers (IMCS):**
- **Stockton University:**
- **The Watershed Institute:**
- **USGS NJWSC:** Heather Heckathorn (*co-chair*), Anna Boetsma (*speaker*), Zoltan Szabo

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- **Member Emeritus:** Leslie McGeorge (NJDEP), Alena Baldwin-Brown (NJDEP), Nancy Lawler (MWA), Bob Reiser (USGS)
- **Guests:** Alison Jones (Clean Ocean Action), Ben Croke (NJ Watershed Ambassador), Michelle DiBlasio (The Nature Conservancy), Stanley Stephansen (EPA R3, *speaker*), Rancocas Watershed Ambassador, Greg Cavallo, Julia Fine, Jinjie He, Joe, Peerzada Madany, Marissa M., Rick Sajazmin, Amanda Rollizo (EPA), Christopher Sales
- **Council Business (Co-Chairs Bob Schuster, NJDEP and Heather Heckathorn, USGS):**
 - Copies of the agenda, minutes and most presentations will be available on the Council’s webpage - <https://www.nj.gov/dep/wms/wmc-meetings.html>
 - Minutes from the May 26, 2021 Council meeting were approved as presented.
 - **Next meeting will be held on January 26, 2022**, either as a virtual Teams meeting or possibly a Hybrid at DRBC. Suggested topics for this meeting include climate change related work and green infrastructure; NJPDES related work including industrial stormwater permitting, MS4 permitting, how permits allocate pollution and how these contributions to waterways are monitored; eDNA, groundwater eDNA (was a session on this at the national water monitoring meeting- extensive platforms set up already, focused on specific functional groups); Aquatic invasives - Council Steering Committee will discuss these and decide which topic to pursue.
 - Retirements & New Members – No announcements regarding retirements or new members were made during this meeting.
- **Member Updates and Announcements:**
 - Council Member Updates:
 - Namsoo Suk (DRBC) shared that several DRBC staff participated in the AWRA conference (Sept 22-24) including one as a panel member for climate resiliency strategies, that they will be participating in the Oct 12-14 ICWP conference, and that all monitoring has been performed as planned with the exception of the tidal portion of the Delaware River because of high flow (2/3 has been postponed until next year).
 - Sam Johnson (Musconetcong WA) shared that the invasive NZMS has spread to 3 streams upstream of its origin and that they will be sharing a formal update.
- **Upcoming or Recent Conferences, Symposiums and Workshops**
 - Recent Conferences:
 - Sept. 22-24: 2021 American Water Resources Association (AWRA) Mid-Atlantic Conference “Water Resource Management: Tools and Success Stories” –Virtual (\$45 members, \$55 non-members) - <https://www.eventbrite.com/e/2021-awra-mid-atlantic-conference-tickets-148345030981>
 - Upcoming Conferences, Symposiums and Workshops (Presenting or Attending?):
 - Nov. 2-4: 2021 National Aquatic Resource Surveys (NARS) Workshop; In-person (Chicago, IL) and Live-streamed (Free to attend, registration required)
 - Nov 8-10: 2021 Virtual Annual Water Resources Conference (AWRA); (\$495 members, \$595 non-members; \$95 students); Register by October 8 to save \$100; https://www.awra.org/iCore/Events/Event_Display.aspx?EventKey=ANNUAL2021
 - May 14-20: 2022 NALMS Joint Aquatic Sciences Meeting
 - Others? – ICWP October
 - NALMS – all virtual Nov 15-19
 - D &R Greenway Land Trust is hosting the 51st Garden State Watercolor Society’s Annual Art Exhibit with the theme of the Delaware River recovery. Exhibit displays

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beautiful paintings related to the river and runs until 10/17. See drgreenway.org for more information.

➤ Presentations (Topic: Pathogen Monitoring & Source Trackdown)

- All or most presentations from this meeting will be available on the Council website at: https://www.nj.gov/dep/wms/download/NJWMC_09-29-2021_Agenda_fnl.pdf
- 1) Navesink Source Trackdown Study: Local Level Involvement and Working Collaboratively (Bob Schuster, NJDEP, Robert.Schuster@dep.nj.gov) - Bob presented on the bacterial pollution and source trackdown work in the Navesink River conducted by NJDEP Bureau of Marine Water Monitoring highlighting the importance of local level involvement and collaboration among partners for long term success of project efforts.
- 2) Investigating Atlantic Menhaden Mortalities in New Jersey (Dr. Jan Lovy, NJDFW, Jan.Lovy@dep.nj.gov) - Dr. Lovy presented on the work that he and his colleagues have done to investigate mortalities of Atlantic menhaden in and around New Jersey in the Fall of 2020 and Spring of 2021. The commonly occurring fish-pathogenic bacterium, *Vibrio anguillarum*, was found to be the predominant cause of disease and death, and its presence likely exacerbated by a combination of environmental stressors.
- 3) Scope and Preliminary Findings of WRF Funded Study of Legionella with the Passaic Valley Water Commission (Jessie Gleason, DOH, jessie.gleason@doh.nj.gov) - Jessie Gleason presented on the scope and preliminary findings of their work on *Legionella*. *Legionella*, the causative agent of Legionnaires' disease, is an emerging concern for water utilities. To better understand this emerging topic, a Water Research Foundation funded project to evaluate Legionella occurrence by water utility characteristics in a large public water utility was recently completed. A *Legionella* monitoring protocol including non-culture and culture-based *Legionella* detection methods for swabs, first draw and flushed cold water samples from total coliform sites (n=58) during summer and winter sampling was implemented in the Passaic Valley Water Commission (PVWC). Only five locations had low-level culture detection (0.5 – 1.6 CFU/mL) among first draw samples and only one site had both a first and flush draw detection (8.5 CFU/mL and 1.1 CFU/mL). qPCR found limited detection of *L. pneumophila*, and no *L. pneumophila* SG1. *Legionella* occurrence was significantly greater in the summer than the winter but no difference found between first draw and flush samples. Total organic carbon, copper, and nitrate were significantly associated with *Legionella* detection.
- 4) Revisiting Musconetcong After Ten Years (Dr. Meiyin Wu, MSU, wum@montclair.edu) - Dr. Wu discussed their (Montclair State University and Musconetcong Watershed Association) study assessing water quality trends and identifying sources of fecal contamination in the Musconetcong River Watershed from 2007 to 2018.
- 5) Novel Bacterial Monitoring in Urbanized Areas of Delaware River Basin in Support of Recreational Water Quality (Anna Boetsma, USGS, aboetsma@usgs.gov) - Anna shared information on the novel instrumentation being used to monitor bacteria in the Delaware River Basin.
- 6) Pathogen Trackdown and the Lower Raritan / Perth Amboy Project (Stanley Stephansen, EPA, Stephansen.Stanley@epa.gov) - Stan discussed the Second River trackdown pilot project conducted collaboratively to assess the presence and sources of *E. coli* as well as lessons learned for a NY/NJ Harbor-wide water quality monitoring report. He also discussed a pathogen source trackdown study conducted in the Lower Raritan.

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- 7) NJ's Beach Program – 2021 Washups: An All-Encompassing Approach (Sheri Shifren, NJDEP, sheri.shifren@dep.nj.gov) - Sheri gave an excellent summary of the Cooperative Coastal Monitoring Program including its history and goals. She then discussed a coastal washup event that occurred in the summer of 2021 where medical waste was discovered on several beaches following Tropical Storm Elsa and the source trackdown that followed.
- Discussion
- There was a request to Council coordinators to please share the resource for public water systems for monitoring for *Legionella* when it becomes available.
 - Reminder that the next meeting will be held on January 26, 2022. Topic will be Climate Change related work.