

NJ Water Monitoring Council Measuring What Counts for Clean & Plentiful Water

MEETING MINUTES JANUARY 26, 2022, 10:00 am – 2:00 pm Virtual TEAMS Meeting

MEMBER ATTENDEES (Alphabetical by Organization) & GUESTS

- American Littoral Society: Zach Nickerson
- Barnegat Bay Partnership: Nicole Petersen
- Brick Township MUA: Rob Karl, Will Ruocco
- DRBC: John Yagecic (steering committee), Kristen Kavanagh (speaker), Namsoo Suk, Ron MacGillivray
- EPA R2: Britta Bierwagen (speaker), Emily Nering (speaker), Kathleen Savino
- **IEC:** Evelyn Powers
- Meadowlands Environmental Research Institute: Ying (Cheryl) Yao
- Monmouth University/Urban Coast Institute: Jim Nickels
- Montclair State University: Meiyin Wu
- Musconetcong Watershed Association: Christa Reeves
- NJDEP
 - DWM&S: Bob Schuster (*speaker, co-chair*), Jenna Krug (*coordinator*), Vic Poretti (*steering committee*), Megan Rutkowski (*speaker*), Bruce Friedman, Leah Gibala-Smith, Coleen Makuszewski, Arman Hosen, Chris Kunz, Kimberly Cenno, Sarah Gentile, Brian Henning, Sheri Shifren, Deborah Kratzer, Alex Dinkel, Helen Pang, AnnaMarie Signor, Marzooq Alebus, Vincent Mina, Andrew Jensen, Yaso Sivaganesh, Johannus Franken, Marina Jackson, Lisa Congiu, Brett Wiley, Amanda Baksa, John Vile, Brian Taylor, Dean Bryson, Tom Miller, Ismail Sukkar, Kevin Biallas, Brian Pinke
 - o **DWS&G:** Ray Bousenberry (*steering committee*), Catherine Jedrzejczyk,
 - o DSR: Nick Procopio (steering committee; speaker), Heather Genievich, Greg Raspanti
 - o DFW: Russell Babb
 - o DCCCES: Karl Hartkopf
 - AC WLM: Lauren Drumm
 - o DO LRP: Katherine Todoroff
 - o DO REC: Kevin Hassell
- NJDMAVA: Sarah Helble
- NJDOH: Loel Muetter, Danielle Clemons, William Manley
- NJ Water Supply Authority: Heather Desko, Angela Mostwill, Kyle Clonan
- NY/NJ Baykeeper: Allison Fitzgerald
- Raritan Headwaters Association: Emily Mayer, Kristi MacDonald, Rita Isabel Matos
- Rutgers (Coop Extension WRP): Lisa Galloway Evrard
- Stockton University: Christine Thompson
- The Watershed Institute: Erin Stretz
- USGS NJWSC: Heather Heckathorn (*co-chair*), Zoltan Szabo (*speaker*), Pam Reilly, Molly Schreiner, Kathryn Cahalane, Stephen Cauller, Alex Fiore, Alison Gordon, Eric Jacobsen, Jon Janowicz, Liam Kenefic, Jonathan Kennen, Lucas Pick, Melissa Riskin, Robert Rosman, Robert Schmidt, Malia Scott
- Member Emeritus: Leslie McGeorge (NJDEP), Alena Baldwin-Brown (NJDEP), Bob Reiser (USGS)

- Guests: David Robinson (Rutgers State Climatology Office; speaker), Alicia Calkins (Watershed Ambassador WMA16), Michelle DiBlasio (The Nature Conservancy), Rancocas Watershed Ambassador, Mark Bennett (USGS VA/WV Water Science Center), Denise Manole (Watershed Ambassador Musconetcong), Ian Keebler (Watershed Ambassador Wallkill River WMG), Joe (Guest), Paul Signore (Guest), Lijie Zhang (NJIT)
- > Council Business (Co-Chairs Bob Schuster, NJDEP/DWMS and Heather Heckathorn, USGS/NJWSC):
 - Copies of the agenda, minutes and all or most presentations from this meeting will be available on the Council's webpage under the January 26 Meeting Schedule –
 - o <u>https://www.nj.gov/dep/wms/wmc-meetings.html</u>
 - See Appendix A for a copy of the Teams Chat Transcript (see below).
 - See Appendix B for a copy of any documents shared by members prior to, during, or after the meeting.
 - Minutes from the September 29, 2022, Council meeting were approved as presented.
 - Next meeting will be held on May 25, 2022, either as a virtual Teams meeting or possibly a Hybrid at DRBC. Suggested topics for this meeting include eDNA, aquatic invasive species, HABs, Barnegat Bay/Wetlands, CECs. Multiple people voted for eDNA and/or aquatic invasive species citing work they know is being done and giving suggestions for possible speakers.
 - Retirements & New Members No announcements regarding retirements or new members were made.

> Member Updates and Announcements:

- Council Member Updates and Discussion & Recent Conferences
 - Nov 8-10: 2021 Virtual Annual Water Resources Conference (AWRA)
 - Heather Desko The Northeast Aquatic Plant Management Society Conference was held virtually on Jan 11-13, 2022. Presentations and posters from Council member organizations included Downstream Fate and Transport of Cyanobacteria in the Raritan Basin by Kyle Clonan (NJWSA/ Montclair State University); Applying Publicly Available Satellite Imagery to Assess Harmful Cyanobacterial Blooms on Greenwood Lake by T. David Hsu (Montclair State); Assessment of Digital Flow Cytometry and traditional microscopy for HAB monitoring by Melissa Mazzaro (Montclair State); A Gap Year in Hydrilla Treatment & Bounce Back at a NJ Drinking Water Reservoir by Kyle Clonan (NJWSA). Several other presentations and posters may be of interest to the council, including a keynote on the Eagle Killer cyanobacteria that grows on hydrilla; eDNA for hydrilla monitoring; air sampling device for anatoxin-a monitoring; chemical management of *Lyngbya;* control of internal Phosphorus in lakes; and potential exposure to cyanotoxins in splash during recreation. Posters and presentations will be available soon on the Society's website: neapms.org
- Upcoming Conferences, Symposiums and Workshops (Presenting or Attending?):
 - March 2-4; 2022 Northeast Aquatic Biologists Conference (NAB), Portland, ME, \$210; <u>https://neiwpcc.org/events/nabconference/</u>
 - **March 30-31; 2022 Mid-Atlantic Aquatic Biologists Meeting (AMAAB), virtually hosted by NJDEP, \$20 (contact Jenna at jenna.krug@dep.nj.gov for more information) **
 - May 14-20: 2022 NALMS Joint Aquatic Sciences Meeting, Grand Rapids, MI (\$700) or Virtual (\$385), <u>https://jasm2022.aquaticsocieties.org/</u>
 - NEAPMS is holding free winter webinars on watercraft inspection programs on February 10th & 22- Heather Desko will be speaking about the NJ Water Supply Authority's Boat Stewards Program. (Informational flyer attached-please feel free to share with council members)
 - NEAPMS will also be hosting a "plant camp" for aquatic plant identification by professionals September 13-15 at the Taconic Outdoor Center. Final details and registration will be available soon. If you are interested, please contact Heather Desko.

> Presentations (Topic: CLIMATE CHANGE & RELATED WATER MONITORING)

- All or most presentations from this meeting will be available on the Council website at: <u>https://www.nj.gov/dep/wms/download/NJWMC_09-29-2021_Agenda_fnl.pdf</u>
- 1) State Climatology Report, Dr. David Robinson, Rutgers University -
- 2) Summary of Future Precipitation Intensity Projection, Nick Procopio, NJDEP -
- 3) Overview of Regional Monitoring Networks (RMN), Britta Bierwagen, Emily Nering, EPA -
- 4) Update on DRBC's Climate Advisory Committee, Kristen Bowman Kavanaugh, Deputy Executive Director, DRBC
- 5) IPCC Report Summary and Forthcoming Update to NJ Climate Science Report, Nick Procopio, NJDEP
- 6) Saltwater Intrusion, Potable Aquifers and Freshwater Resources, Zoltan Szabo, USGS
- 7) Ocean Acidification in New Jersey, Megan Rutkowski, NJDEP
- Discussion
 - Reminder that the next meeting will be held on May 25, 2022. Topic ideas presented here and encouraged will be discussed at our next Council steering committee meeting and decided on.

Appendix A. Chat Transcript

NJ Water Monitoring Council Meeting – January 26, 2022, Virtual via Microsoft Teams, 10 am – 2 pm

[1/26 10:07 AM] Kristi MacDonald eDNA and practical applications would be great

(1 liked)

[1/26 10:12 AM] Erin Stretz (she/her), The Watershed Institute (Guest)

It's a little "crunchier", but River Rally is also coming up in early June. <u>https://www.rivernetwork.org/connect-learn/river-rally/</u>

(2 liked)

[1/26 10:14 AM] allison fitzgerald (Guest)

are student presentations encouraged at this conference?

(1 liked)

[1/26 10:14 AM] Babb, Russell [DEP]

Just an FYI. Greg Hinks with the DEP's Marine Fisheries Admin is working on eDNA as well with Rockefeller U. in NY. A new publication, "<u>Current laboratory protocols for detecting fish species</u> <u>with environmental DNA optimize sensitivity and reproducibility, especially for more abundant</u> <u>populations</u>" has been published on ICES Journal of Marine Science. The new publication takes results from the NJ trawl survey eDNA project and builds upon it with additional laboratory analyses. Those authors might be willing to present as well.

(2 liked)

[1/26 10:14 AM] Alena Baldwin-Brown (Guest)

Congratulations Jenna!

(1 liked)

[1/26 10:20 AM] Leslie McGeorge (Guest)

Jenna - Great job in maintaining leadership. in Assoc. of Mid-Atlantic Aquatic Biologists! A good regional water group.

(1 liked)

[1/26 10:21 AM] Suk, Namsoo [DRBC]

DRBC published "Water Withdrawal & Consumptive Use Estimates (1990-2017) & Projections Through 2060 and available at <u>https://www.nj.gov/drbc/programs/supply/use-demand-</u>

projections2060.html

(1 liked)

[1/26 10:21 AM] Krug, Jenna [DEP]

Thanks for sharing, Namsoo!

[1/26 10:22 AM] Savino, Kathleen

NEAPMS - shows "it may have been deleted, or I do not have permission...". Can you also send via email to group? (blankface)

(1 liked)

[1/26 10:22 AM] Krug, Jenna [DEP]

Yes, I will share via email as well. Thanks for pointing that out smile

[1/26 10:26 AM] Erin Stretz (she/her), The Watershed Institute (Guest)

Question about that press release: Is the \$9.8 million in addition to or part of the RFP already issued? [1/26 10:27 AM] Krug, Jenna [DEP]

https://www.nj.gov/dep/wms/bears/2020-2022grants.htm

(1 liked) [1/26 10:30 AM] Erin Stretz (she/her), The Watershed Institute (Guest) Ah, just a release about the existing rfp. Thanks! (2 liked) [1/26 10:32 AM] Clemons, Danielle [DOH] Schuster, Robert [DEP] did you folks record the grant information session for the Water Quality Restoration Grant? [1/26 10:44 AM] Lisa Galloway Evrard Thank you, Dave! (1 liked) [1/26 11:10 AM] Alena Baldwin-Brown (Guest) When is the interactive projected precipitation tool expected to be "live"? [1/26 11:12 AM] Alena Baldwin-Brown (Guest) That's great. Can the link be shared with the Council once it goes "live"? [1/26 11:15 AM] Krug, Jenna [DEP] https://nj.gov/dep/climatechange [1/26 11:31 AM] Nering, Emily https://www.usqs.gov/apps/ecosheds/fpe/#/ (2 liked) [1/26 11:36 AM] Leslie McGeorge (Guest) Britta - Good to hear RMN still going strong. What is the longest period of record EPA/ORD and states have so far for Mid-Atlantic or New England RMN sites, and is there any evidence yet of any water quality trends that may possibly be attributed to climate change? [1/26 11:40 AM] Alicia calkins (Guest) How can we submit stream photos? [1/26 11:41 AM] Poretti, Victor [DEP] Thanks Britta & Emily. [1/26 11:43 AM] Kristi MacDonald Raritan Headwaters is hoping to contribute to RMN. Is the program open to environmental nonprofits? How do we contact you? (1 liked) [1/26 11:44 AM] Alicia calkins (Guest) I see! Thank you. [1/26 11:45 AM] Nering, Emily for folks in NJ who are interested in the RMN, you can contact me: nering.emily@epa.gov (2 liked) [1/26 11:46 AM] Nering, Emily we may be able to help folks in NJ with equipment loans for the RMN, if necessary (2 liked) [1/26 11:54 AM] Krug, Jenna [DEP] www.nj.gov/drbc/about/advisory/ [1/26 11:55 AM] Krug, Jenna [DEP] www.nj.gov/drbc/contact/interest [1/26 11:59 AM] Bierwagen, Britta Kristi, you can also include me on your email: bierwagen.britta@epa.gov (3 liked)

[1/26 12:03 PM] Kristi MacDonald Dean Bryson is the person who introduced me to RMN :) (2 liked) [1/26 12:16 PM] Leslie McGeorge (Guest) Perhaps I missed this, but did Nick mention why climate extreme precipitation impacts expected to be greater in north Jersey? [1/26 12:18 PM] Matos, Rita Isabel I hope with NJ's school curriculum in adding climate change as a lesson plan will keep the younger generation more informed and will create innovation. All hope is not lost! (2 liked) [1/26 12:20 PM] Heckathorn, Heather A We'll be back at 1240 (smile) [1/26 12:21 PM] Krug, Jenna [DEP] Thank you again to all of our morning speakers! (2 liked) [1/26 1:06 PM] Krug, Jenna [DEP] https://nj.gov/dep/climatechange/data.html (1 liked) [1/26 1:26 PM] Christa Reeves Could this flow model study be used for surface water to well water transfer of E.coli concentrations? [1/26 1:35 PM] Alicia calkins (Guest) Who is the contact for the salt water intrusion monitoring in Cape May county? [1/26 2:00 PM] Leslie McGeorge (Guest) Thank you to all speakers and organizers for excellent climate change information provided today. Well done! [1/26 2:02 PM] Dinkel, Alexander [DEP] Regarding Zoltan's presentation, what type of continuous monitoring equipment are you planning to use and is this equipment meant for surfacewater, groundwater or both? [1/26 2:04 PM] Dinkel, Alexander [DEP] Great. Thanks Zoltan! [1/26 2:05 PM] Alicia calkins (Guest) Thank you!! [1/26 2:08 PM] Alena Baldwin-Brown (Guest) Thanks very much for a great meeting - good presentations and really interesting discussions! (2 liked) [1/26 2:09 PM] Ying Yao Thank you for all the excellent presentations! Lots of important information! [1/26 2:10 PM] wum@montclair.edu (Guest) Thank you to all speakers for the excellent presentations. [1/26 2:10 PM] Lisa Galloway Evrard Thank you for a great program today! [1/26 2:10 PM] Bob Reiser (Guest) Thanks everyone [1/26 2:10 PM] Dinkel, Alexander [DEP] Thanks all! [1/26 2:10 PM] Nering, Emily Thanks! Great presentations!

[1/26 2:11 PM] Krug, Jenna [DEP] Thanks to all the afternoon speakers! [1/26 2:11 PM] Hartkopf, Karl [DEP] Great job all! [1/26 2:11 PM] Krug, Jenna [DEP] Thanks to all attendees as well!

Appendix B. Member shared documents.

Want to learn more about aquatic invasive species spread prevention?

Join us for the Northeast Aquatic Plant Management Society's

Winter Webinar Series on

Watercraft Inspection Steward Programs



February 10th, 2022 1:30-3:00PM -NewJersey's Boat Steward Program, Heather Desko, NewJersey Water Supply Authority -Boater Behavior Survey, Tim Campbell, Wisconsin Sea Grant -Great Lakes AIS Landing Blitz, Ceci Weibert, Great Lakes ANS Panel

February 22nd, 2022 2:00-4:00PM

How to track boater movement: An example from New York State,

John Maríno, New York Natural Herítage Program

Registration is free. Please head here to sign up: <u>https://attendee.gotowebinar.com/</u> register/259543438138486030

Once you register for the webinar you will receive an email from "Watershed Management" with a link to join the webinar. Please save that information to your e-calendar for the dates/times of the webinars. The same join link will work for both sessions.



To learn more about the Northeast Aquatic Plant Management Society please visit us at www.neapms.org