

Water Quality Work Group Meeting

August 29, 2023

Location: Zoom (online only)

Minutes

Attendees: Marco Alebus (NJDEP), Brett Branco (SRIJB/Brooklyn College, STAC), Lisa Congiu (NJDEP), Mick DeGraeve (NJHDG/GLEC), Jason Fagel (NYSDEC), Mike Flood (EPA), Biswarup (Roop) Guha (NJDEP, NJ cochair), Frank Klapinski (NJDEP), Lingard Knutson (EPA), Michele Langa (NY/NJ Baykeeper), Hildegaard Link (Rutgers, STAC), Tyler Linton (NJHDG/GLEC), Paty Lopes (NJHDG/PVSC), Keith Mahoney (NYCDEP), Kelly Mascarenhas (NJDEP), Rosella O'Connor (EPA), Rosana Pedra Nobre (HRF/HEP), Robert Pirani (HRF/HEP), Shannon Roback (Riverkeeper), Clay Sherman (NJDEP), Stan Stephansen (EPA), Shino Tanikawa (NYC Soil & Water Conservation District, NY co-chair), Isabelle Stinnette (HEP/HRF), Makini Valentine (EPA), Judith Weis (Rutgers, STAC), and Virginia Wong (EPA)

Next Meeting: Virtually on Tuesday, December 5th at 10:30 AM

1. Overview of Agenda, Introductions, and Minutes Approval

Shino Tanikawa opened the meeting and provided an overview of the agenda. <u>June minutes</u> were introduced and motioned for approval by Mick DeGraeve and seconded by Roop Guha.

Action: June 2023 minutes were approved.

2. Partner Updates

Roop Guha shared that at 1 PM NJDEP will be hosting a stakeholder meeting to present anticipated amendments of the Surface Water Quality Standards at N.J.A.C. 7:9B to update the human health criteria for 94 toxic substances, primarily based on recommendations published by EPA in 2016, and freshwater human health criteria for 1,4-dioxane, perfluorononanoic acid (PFNA), perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS). For more information please visit: <u>https://dep.nj.gov/event/surface-water-quality-standards-stakeholder-meeting-for-toxic-substances/</u>

Roop Guha announced on August 7th, 2023, NJDEP adopted amendments to the Surface Water Quality Standards (SWQS), N.J.A.C. 7:9B, which updated the primary contact recreational criteria at N.J.A.C. 7:9B-1.14(d)1 and the freshwater ammonia criteria at N.J.A.C. 7:9B-1.14(e), based on the EPA's recommendations. Details of the amendment may be found <u>here</u>.

Frank Klapinski shared NJDEP will be presenting on the Draft 2022 New Jersey Integrated Water Quality Assessment Report at public hearing meetings to present the statewide surface water quality assessment



results. To review the draft and register for one of the two public hearings being held on September 14th, please <u>click here</u>.

Rosana Pedra Nobre shared that HEP will be hosting a webinar highlighting the final report on the NY/NJ Harbor Estuary Economic Study completed by ICF and Dr. Robert Johnston on behalf of NEWIPCC. Please save the date: Thursday, September 21st from 3-5pm. Registration and additional details to come.

Jason Fagel shared that NYS has concluded their listening sessions for the \$4.2 billion Clean Water, Clean Air and Green Jobs Environmental Bond Act. Details can be viewed <u>here</u> and more about the Bond Act is available <u>here</u>. NYS is still accepting comments across the state via an online survey for stakeholders and members of the public to share ideas. Please share this link for the survey: <u>https://survey123.arcgis.com/share/1009c5d5ef5e4bc4b09f47ba7012086b</u>

3. WQWG Bylaws and Co-Chair Updates

Shino Tanikawa announced her term as the NY co-chair is coming to an end this year and the WQWG will be opening the NY co-chair position to serve a minimum of 2 years (from 2024-2026). Shino encouraged NY members of the Work Group to email Rosana with their interest. Rosana Pedra Nobre shared an overview of the process, which includes submitting a photograph and a short paragraph on anyone's interest in being a NY co-chair. This information will then be distributed to the WQWG for a nomination vote. By the December meeting, the WQWG will select a nominee who will then be presented to the Management Committee for approval.

Roop Guha highlighted the major changes to the WQWG's existing bylaws, found on page three <u>here</u>. Rosana shared that the reason for the proposed change to the bylaws seek was to enable the cochairs to serve a 3-year term (from 2-years) to reduce having an election every year. Rosana also stated that HEP/HRF will stagger elections to avoid having two new co-chairs at the same time. The work group supports the proposed amendment by consensus and the proposed bylaws will be submitted to the Management Committee for approval.

Action: If you are interested in serving as the NY co-chair of the WQWG, please email Rosana (<u>rosana@hudsonriver.org</u>) by October 15th with your interest.

Action: Bylaws modifications were supported by a consensus and will be submitted to the Management Committee for approval.

4. Bipartisan Infrastructure Law – HEP Project Update

Rosana Pedra Nobre provided an overview on BIL funding to HEP, specifically focusing on the water quality actions that BIL funds are being used to advance. The presentation included projects that were approved in the first two years of BIL funds (FY 22/FY 23) as well as the proposed third year of BIL funds (FY 24). HEP's equity strategy has been approved by EPA and matching funds have been waived for these first three years. Year four and five match requirements are subject to the continued approval of HEP's equity strategy. Rosana covered various projects which included advancing green infrastructure, improving CSO event notifications, monitoring in the Arthur Kill for DO, advancing an indicator integration process with



the STAC, supporting climate monitoring in a subwatershed of the Hudson, and continue supporting climate adaptation through climate RFPs.

In providing more details around the proposed monitoring for the Arthur Kill, questions were asked around the frequency of the monitoring and limitations. The pilot will cover a total of 24 hours in the field and will be aimed at achieving a typical hot summer day. The project team is limited in which days to go out, but ideally, we would avoid a rainy day for the monitoring. As a pilot, the data will not answer all the questions we may have in the Arthur Kill, but it will certainly help to identify areas of monitoring needs and potential locations for a continuous monitoring sonde to be located. Michael Flood asked whether USGS will be measuring chlorophyll-a to determine the influence on DO. Rosana will follow up with a response. Tyler Linton asked how DO will be measured by both boats. The 'fast' boat will be at a constant near surface depth while the 'slow' boat will be taking the vertical profiles at depth for DO.

Action: Work Group members are recommended to discuss project ideas and/or Action Agenda priorities with Rosana for consideration of FY 25 (Year 4) BIL funds.

5. Integrated Water Quality Assessment

Makini Valentine from EPA Region 2 shared a framework around the Clean Water Act on the water quality standards. She covered the overall process for the states to complete their integrated reports, the categories for which waterbodies are listed, and the methods for water quality data/information to be used to assess each waterbody. The 303(d) list includes waterbodies that do not meet water quality standards, do not have TMDLs, and are not expected to attain water quality standards in the next two years. The states are required to identify the pollutant that is causing the impairment, provide a rationale for the listing, assign priority for developing a TMDL, and seek public input. Makini shared that the EPA's guidance document includes the reporting components of the integrated report and the process that EPA is involved in. The states submit the assessment results to <u>ATTAINS</u>. Once EPA approves the submitted results, the assessment determinations will then appear on EPA's <u>How's My Waterway</u> platform.

Frank Klapinski shared NJ's water quality assessment process, building on Makini's presentation. NJ has over 25,000 monitoring stations across the state with approximately 5.1 million data samples to process in their assessment. Data is pulled from the Water Quality Portal and reviewed station by station per parameter and then combined for sub lists (or categories) of assessment units before being compared to the designated use assessment. There are several parameters for data reviewed by NJDEP that are captured for aquatic life, recreation, potable water supply, fish consumption, and shellfish harvesting. The integrated report is separated into five different sub lists (or categories). 10-year time frames of data are pulled and in addition to grab samples, continuous data is also processed in NJ's assessment. NJ has a rotating basin approach across five basins where lead staff take a deep dive on 15 parameters for that region. Results are shared on an <u>online platform, starting in 2018-2020</u> from the latest report. NJ anticipates the draft 2022 web report to be shared during the September 14th stakeholder meeting and out this Fall. NJ will then begin its 2024 assessment to get back on track with EPA's timeline.

A discussion was held around the role of variances. Roop Guha clarified that a variance does not change the underlying designated use and its corresponding criteria; a WQS variance is not a waiver of the SWQS therefore there are no changes to the water quality assessment methods. NJ's WQS variances



can be discharger or discharges specific, or waterbody specific, or include multiple discharges. The process is not easy for a permittee to obtain. A water quality standards variance will include a duration or a time limit that must be justified. A WQS variance will have to be included in the SWQS at N.J.A.C. 7:9B by rule and must be approved by USEPA upon adoption. Judy Weis asked where arsenic was coming from as it was shown as a major pollutant in NJ. Frank and Roop Guha both discussed how naturally occurring arsenic is the major source found in surface water. It is listed in the report because NJ has a very strict standard for arsenic and a requirement to inform the public on the contamination.

Jason Fagel provided an overview on NYS DEC DOW's process through a water wheel, like EPA's framework. NYS separates the state into 17 drainage basins, and they pick between 3-4 basins to focus the state's effort on each year. NYS has a 5-year basin schedule which allows DEC to cover all the waterbodies every 5 years. A schematic was shared on DEC's assessment automation process where data sources are fed into R to help generate the 303d list, 305b list, and fact sheets. There are over 4,500 fact sheets that are generated based on this assessment process and available through the DECinfo Locator map. Additional information regarding the consolidated assessment and listing method (CALM) can be reviewed here. Jason provided an overview of data quality requirements and indicated that the state is currently in a data solicitation period for data and requesting data to be submitted this September, click here for more information. In reviewing the Harbor Estuary, Jason noted that there are no glaring gaps for the parameters that DEC looks at. Parameters and locations outside of the NYCDEP Harbor Survey would be helpful to have for parameters that have a water quality standard.

Shannon Roback asked what the state's process or conversations have been in dealing with the challenges posed by ELAP certification for community organization and academic data collection. NYS is very limited in accepting non-ELAP data as dictated by law. To change this, the law would need to be modified. Frank added that NJDEP is also limited in using NJDEP's Office of Quality Assurance certified data. NJ is working to bring more data into its process through a tiered approach for community science data. Tyler Linton asked if there are any considerations of sampling outside the recreational season in the context of climate change. Roop indicated that NJ collects data throughout the year and while the number of samples varies based on the monitoring network, accessibility, and ability of sampling to conduct monitoring during winter.

A discussion was held around microplastics and the lack of a standard, but as an emerging issue what would be the state's plan to address microplastics? Jason indicated the biggest barrier is that there is no standard method of collection and analysis for microplastics. For the states to be able to set a standard, they typically focus on toxic and dosing for aquatic life. There would need to be additional work done here and effort by EPA to focus on this issue. Roop also added for NJ, they did have a Science Advisory Board question around this and recognize that while microplastics is an important emerging contaminant and there are a lot of information gaps to develop aquatic life or human health criteria that need further research. Judy Weis added that microplastics do have a lot of toxic compounds that are attached to it which changes a lot in the environment. Further conversations are needed, and Hildegaard Link and Judy Weis will continue these with others in the Work Group that are interested offline.