



Water Quality Work Group Meeting

May 30, 2024

Location: Hudson River Foundation offices in NYC & Zoom

Minutes

Attendees: Marco Alebus (NJDEP), Elizabeth Balladares (HEP, UWFP), Brett Branco (SRIJB/Brooklyn College, STAC), Lisa Congiu (NJDEP), Philip DeGaetano (IEC), Mick DeGraeve (NJHDG/GLEC), Jason Fagel (NYSDEC), Kathryn Flynn (EPA), Biswarup (Roop) Guha (NJDEP, NJ co-chair), Rupu Gupta (HRF), Wayne Jackson (EPA), Jonathan Kennen (USGS), Andrew Koske (NJDEP), Michele Langa (NY/NJ Baykeeper), Tyler Linton (NJHDG/GLEC), Laura Logozzo (HRF), Patricia Lopes (NJHDG/PVSC), Keith Mahoney (NYCDEP), Shirin Mardani (NYCDEP), Ryan Minor (NJDEP), Rosella O'Connor (EPA), Gregory O'Mullan (Queens College CUNY, NY co-chair), Rosana Pedra Nobre (HRF/HEP), Rob Pirani (HRF/HEP), Bidya Prasad (NJDEP), Susan Rosenwinkel (NJDEP), Emily Ruby (Riverkeeper), Isabelle Stinnette (HEP/HRF), Makini Valentine-Turton (EPA), Ryan Van Manen (EPA), Judith Weis (Rutgers, STAC), Virginia Wong (EPA), Meiyin Wu (Montclair University, STAC)

Next Meeting: Thursday, September 5th at 10:30am via Zoom

1. Overview of Agenda, Introductions, Partner Updates, and Minutes Approval

Gregory O'Mullan opened the meeting and provided an overview of the agenda. February minutes were introduced and motioned for approval by Roop Guha and seconded by Mick DeGraeve. The following updates were shared:

- Jason Fagel announced that NYSDEC has published an Advanced Notice of Proposed Rule Making (ANPRM) in the New York State Register on May 8, 2024. The ANPRM solicits public input toward NYSDEC's Triennial Review of Water Quality Standards (WQS). The Triennial Review is an opportunity for the Department to integrate the best available science and methods into WQS to protect the waters of the State. Three public hearings will be held. There is an online survey tool that people can submit to DEC. Public comment period will be open until November 8, 2024. For more information please visit: [https://dec.ny.gov/environmental-protection/water/water-quality/standards-classifications/ANPRM-triennial-review-of-water-quality-standards#:~:text=Notice%20is%20hereby%20given%20that,Water%20Quality%20Standards%20\(WQS\).](https://dec.ny.gov/environmental-protection/water/water-quality/standards-classifications/ANPRM-triennial-review-of-water-quality-standards#:~:text=Notice%20is%20hereby%20given%20that,Water%20Quality%20Standards%20(WQS).)
- Rob Pirani shared HEP's Annual Conference will be held on Tuesday, November 12th at NYU. A Save the Date will be released soon.

Action: February 2024 minutes were approved.

2. Overview of Water Quality Standards - Variance

Kathryn Flynn provided an overview of the water quality standards' variances which are applied when we can have incremental improvements over a defined timeframe. The regulation outlines requirements which include connections to the Use Attainability Analysis (UAA) process. Several examples were shared in how variances were applied such as in the Chicago Area for the use of chloride for drinking water. In comparison to the UAA, the variance requires improvements over a specific time, maintaining the underlying designated uses, requires periodic review, and triggers the Endangered Species Act.

A discussion was held around the changes in variance regulation. Since 2015, regulations have specified the process and there are more examples and information to build from. Outside of the Great Lakes, the water quality regulations did not speak much towards the use of variances and there was a lot of push back in its broader use. A variance can now go beyond the time frame intended but requires 5-year reviews. A discussion was also held around the term greatest pollutant achievable which NJDEP has struggled with. Kathryn indicated that there is no defined rule for this term and an area where EPA can work closer with the agencies to identify the best path forward. A question was asked whether there would be a penalty for not complying with interim limits at the end of the variance term if the variance was based on one pollutant that is naturally occurring? Kathryn indicated that there are no penalties included in EPA's variance regulation 131.14. However, a discharger's NPDES permit is an enforceable document. For there to be fines for not complying with the final WQS at the end of the 10-year period, that would have had to be written into the permit as a deadline. The interim limits that are included in any NPDES permit are enforceable, and fines could be levied for violations.

3. State of the Estuary – Water Quality Analysis Update

Isabelle Stinnette provided an overview of the short term and long-term trends of various water quality parameters that will be part of the State of the Estuary report. Of note, dissolved oxygen continues to improve on the long term though is leveling off in the short term. Enterococcus shows no major trends across the estuary and many of the regions are still problematic. Nutrients are improving overall, and some research questions are emerging for the impacts on pH at various HRECOS stations. Water temperature is showing clear signals of warming throughout the estuary which may be offsetting some of the good work that we've been working towards, impacting nitrogen and dissolved oxygen.

Judith Weis noted between dissolved oxygen and the eutrophication between the upper and lower Hudson is an interesting dynamic and wondered if that is being driven by non-point source pollutants or from agriculture. Judith also raised other contaminants of emerging concern such as bromide compounds and PFAS. Brett Branco added that it would be useful to see the nitrogen trends in Jamaica Bay overlain with the nitrogen loading data from the Wastewater Treatment Plant over the same period, where reduction has been in the order of roughly 50%. Jason Fagel noted that dissolved oxygen short term being variable may be due to the saturation limit and Kieth Mahony echoed that if the water temperature is also raising, this would impact the saturation limit where you would not see the same improvement.

Action: Members are encouraged to review the PowerPoint and provide any additional feedback or comments to Isabelle at istinnette@hudsonriver.org

4. Action Agenda Revision

Rob Pirani provided a brief overview of the Action Agenda revision process, with the anticipation of a draft Action Agenda to be released for the 2024 Annual Conference. Rob highlighted the mission, goals, and roles that partners have echoed in one-on-one meetings and work group meetings. New to this Action Agenda, HEP will be making commitments across the five goals to address the effects of climate change, elevate the importance of equity and environmental justice, foster opportunities to realize co-benefits, bringing actionable science, and leveraging the power of partnerships. Mick DeGraeve asked whether much has changed in the past 10 years. Rob indicated that the collaboration across has improved, we have a better idea of what we can do and how to engage partners, and our staff has also grown. Roop Guha agreed and thanked HEP staff and the Management Committee for all their work. A discussion was held around the current goal language for water quality. The phrase “where attainable” was noted as directly from the Clean Water Act but also sounded a bit like an excuse. Judith Weis questioned if the goal is to reduce sources of pollution do we have to recognize limitations in a goal statement? Greg O’Mullan added that partnership and engagement should be linked more directly to elevate innovation. Rob asked the group whether there is a way to reflect the different aspects of our work without being redundant, a show of hands, half the group felt “where attainable” should be removed while the other half felt we should keep it. Roop Guha suggested, as HEP is not a regulatory body should we really be saying facilitating the reduction of sources and perhaps that could get us away from using the attainable language.

The remainder of the time, the work group worked in small groups to discuss the following questions: (1) What are the primary barriers that that need to overcome to address the challenge? (2) Considering these barriers, what are some actions or solutions could you, your organization or HEP as a whole implement to overcome them? The following were the main takeaways from those discussions. Challenges to focus on included: non-point source pollution (NPS), climate change impacts to water quality, combined sewer overflows, microplastics, and stormwater inundation. Barriers discussed to address those challenges included: limited tools to capture NPS pollution, understanding aquatic life impacts in the water column, the changes in precipitation coupled with increased development, lack of standardize methodologies and identifying toxicity end points, and infrastructure upgrade costs. Solutions discussed include unifying priorities around NPS, support research, explore water quality standard variances, launch public awareness campaigns, explore regulatory opportunities to support infrastructure solutions and improve community’s understanding of risk. The virtual group went through a different exercise and shared the need for additional studies to elevate the need for improved water quality, using the State of the Estuary to celebrate major milestones, and highlight successes.

Action: Rosana will take everyone’s comments and input to incorporate it into the Action Agenda revision process. This will include the one-on-one partner meetings and gathered community listening session inputs.

5. Enclosed and Confined Waterways TEC

Over lunch, Rosana Pedra Nobre provided an overview of the Enclosed and Confined Waterways TEC for which the Water Quality Work Group had previously touched in collaboration with the Restoration Work Group. A total of 18 waterbodies were identified and selected as a focus for the TEC to evaluate progress

till 2050. In recognizing that millions of dollars in capital investments were made to improve water quality in several of the 18 confined waterways since 2009, the way the TEC is being tracked those improvements are not reflected. The Restoration Work Group proposed, with the Water Quality Work Group's input, revising how the TEC is tracked using metrics of significant effort than removal from the 305(b), 303(d), and/or TMDL lists as it is currently being tracked. Rosana shared examples of what metrics of significant effort could include such as construction of grey infrastructure (to address CSO treatment or abatement), debris removal, dredging of contaminated sediments, installation of green stormwater infrastructure.

The work group discussed whether tracking by metric of significant effort is appropriate for this TEC. Majority agreed that effort and data would be important to consider and suggested rather than effort utilize outcomes. Recognizing that outcomes may be difficult to track as data is limiting but pending on the project whether softening the shoreline or green infrastructure installations, these would be making an impact and biological metrics could be monitored to show the outcome of various investments/improvements to the waterbody. The work group then discussed whether upgrading all 18 waterbodies by 2050 is still a realistic goal. The group unanimously agreed no and suggested that by 2050 perhaps 50% completed would be more realistic. It was suggested to review the list of 18 waterbodies and identify if a community group exists that is pushing for improvement. If so, those waterbodies will likely be completed by 2050 as they help to elevate the issues and generate the momentum needed to address the problems in these waterways. In addition, some of the waterways will also be impacted by the Superfund process that could lead to big improvements in the near future.

Rob Pirani asked the group whether these priorities should also fall in the Action Agenda? Jason Fagel offered that in comparison to the greater estuary, these enclosed and confined waterbodies are very small in comparison. Greg O'Mullan suggested reviewing the list and considering which of the 18 waterbodies may have a higher probability of people interacting or accessing the waterbody. Judith Weis agreed and suggested focusing on the areas along Jamaica Bay and the Hackensack as priority areas. A discussion was held around identifying a subset of these waterbodies where the opportunity for greater success may be identified considering work led by NYCDEP and the Superfund effort to kick off in some of the areas. A holistic approach is preferred and defining what HEP's role could be in these greater efforts also should be further discussed. Ryan Van Manen added layering these sites with environmental justice communities that have limited access to swimming and the waterfront would also be an important consideration.

Action: Rosana will share the work group's recommendations to the Restoration Work Group.