



Water Quality Work Group Meeting

February 15, 2022

Location: Zoom (online only)

Minutes

Attendees: Alyssa Arcaya (EPA), Elizabeth Balladares (HEP), Brett Branco (Brooklyn College/SRIJB, STAC), Rob Buchanan (NYC Water Trail Association/BOP, CAC), Elizabeth Butler (EPA), Kim Cenno (NJDEP), Lisa Congiu (NJDEP, co-chair), Rosana Da Silva (HRF/HEP), Philip DeGaetano (IEC), Mick DeGraeve (NJHDG/GLEC), Mike Dulong (Riverkeeper), Jason Fagel (NYSDEC), Brent Gaylord (EPA), Biswarup (Roop) Guha (NJDEP), Siddhartha Hayes (HRP River Project), Sara Harrison (HRF), Wayne Jackson (EPA), Lingard Knutson (EPA), Tom Laustsen (PVSC), Jim Lodge (HRF), Joe Mannick (NJDEP), Kelly Mascarenhas (NJDEP), Rosella O'Connor (EPA), Rob Pirani (HRF/HEP), Evelyn Powers (IEC), Susan Rosenwinkel (NJDEP), Stan Stephansen (EPA), Isabelle Stinnette (HEP, RWG), Shino Tanikawa (NYC Soil & Water Conservation District, acting co-chair), Judy Weis (Rutgers, STAC)

Next Meeting: May 3, 2022 at 10:30AM via Zoom

1) Overview of Agenda, Introductions, and Minutes Approval

Lisa Congiu opened the meeting and provided an overview of the agenda and introduced the November minutes. Minutes were motioned for approval by Brett Branco and seconded by Roop Guha. Lisa informed that the work group has agreed to nominate Shino Tanikawa as the NY co-chair. Shino's nomination will be submitted to the Management Committee for approval which will be held in March.

2) Environmental Monitoring Plan: Water Quality Indicator Review

Rosana Da Silva presented the group on [HEP's environmental Monitoring Plan](#) that will be updated over the next year. The first step is reviewing the indicators that we are monitoring to make sure that they are still relevant in evaluating the health of the Estuary. Work Group members are requested to review the water quality indicators and provide feedback by February 28th. She will also be reaching out at a later date to make sure that the monitoring programs that are in the current version are still accurate and or new programs need to be added.

Mick DeGraeve asked whether we are looking at the quality of the data. Rosana clarified that at this stage, we are not looking at the quality – we are interested in the monitoring programs, what is being monitored, locations, and where data can be accessed. The quality of the data is reviewed as part of the State of the Estuary report.

Rob Buchanan asked the rationale for continuing to collect fecal coliform information, if *Enterococcus* is now the pathogens standard. Rosana informed that there are waterbodies in New Jersey that do not have an *Enterococcus* standard.

Roop Guha indicated that carbon (in addition to nitrogen) is one of the limiting parameters which was identified by the multi-decade long water quality study. He asked if TOC is included and, if not, the reason why. Rosana informed that carbon was not included on the indicator list in 2018 due to the lack of

monitoring programs, however it was included in the monitoring recommendations to fill in this gap. Rob Pirani confirmed that he recalled the same reasoning.

Rob Pirani added that there was initial interest in HEP serving as a repository of data but we found it was a step too far of our capacity and what was really useful. The effort in identifying common indicators to know what is being monitored, identifying gaps, and bringing groups together under the action agenda is the framework we are looking to move forward with.

Shino Tanikawa added the HEP CAC will be featuring a groundwater project by USGS regarding groundwater recharge, potential impacts of pollutants, and sea level rise. This may become a series of presentations, but groundwater is something that the CAC is looking into and could be an important indicator.

Action: Members will provide comments on the environmental indicator list by March 11th.

3) American Infrastructure Investment and Jobs Act: Overview & HEP Funding

Alyssa Aycara provided an overview of the Bipartisan Infrastructure Law (BIL). While EPA is still working on the guidance, she shared the types of activities that may be funded through the BIL as details continue to be worked on. Alyssa informed that NEP guidance may likely come by the end of the month and noted a state revolving fund (SRF) meeting for the states is scheduled for February 22nd.

Alyssa shared the BIL water programs focus on three aspects: geographic programs (like the Great Lakes, Long Island Sound), National Estuary Programs (NEPs), and SRF programs. The key priorities for the BIL include increased investments in underserved communities, lead service lines, tackling forever chemicals (like PFAS), and climate resiliency. The SRF is administered by EPA to provide below market rate loans/grants to fund water infrastructure improvements for clean water (i.e., infrastructure upgrades, green infrastructure, wastewater treatment plants) and drinking water (i.e., facilities, pipes, source wells, storage, and consolidating water systems). The states will create intended use plans (IUPs) which have a public comment process to identify project priority lists. Alyssa indicated that EPA is considering whether or not states will be required to create an IUP specific for the BIL funding. The BIL funds is an addition to the SRF funding that the states typically receive every year.

Alyssa shared that EPA is trying to figure out the guidance to target investments into underserved communities (seeking 49% principal forgiveness) as these are the communities that have likely not been able to apply for SRF. EPA is contemplating how states can work with regional entities to provide technical assistance and community capacity funding under the SRF. Under emerging contaminants, microplastics may or may not be on the list, but PFAS certainly will be. Alyssa shared the BIL totals that were shared with the governors at this stage. Isabelle Stinnette asked whether existing project priority lists should be drawn from under the BIL. Alyssa indicated this is something that they are reviewing through the guidance, but there certainly will not be enough funding to cover all the infrastructure work needed in the region. Roop Guha asked if the funds can be used for implementation projects or research-oriented projects as well. Alyssa indicated that it will be spelled out in the guidance once made available. Philip DeGaetano asked if the numbers shared are the appropriation numbers that are being negotiated in the current federal budget for this year. Alyssa indicated that there are two separate processes – the BIL numbers have been negotiated and this is the final totals. Rob Pirani added the BIL was finalized and approved for the 5 years. Rob Buchanan asked whether Alyssa could go over the numbers in terms of how much is

coming to NEPs and specifically how much will come to HEP. Rob Pirani indicated he will be going through this in his presentation.

Rob Pirani presented that this is a historic moment for the region and, through the BIL, a total of \$132 M will be provided to NEPs which translates to about \$900,000 per year for the next five years to HEP on top of our annual budget. Brett Branco indicated \$900k per year assumes that NEP money is divided evenly across all 28 programs. Liz Butler confirmed that yes, this is the case. Rob indicated that we are still waiting for the official guidance from EPA, but in conversations with NEPs and EPA, we are starting to come up with ideas so that we are ready to go as the guidance comes out. Rob shared a timeline, anticipating a separate workplan for BIL funding, and some examples of potential projects/activities that fall within the congressional intent and our Action Agenda such as green infrastructure support, climate adaptation, working with disadvantaged communities through capacity building funds or supporting projects in Urban Waters (Bronx/Harlem and the Passaic). Key considerations are starting with our Action Agenda and FY22 workplan, meeting all or most administration priorities, and what our program capacity and added value could be. Rob opened the remainder of the time for conversation.

Judy Weis shared that the problem with microplastics is that there are no "standard methods" for collection and analysis. And many people are (still) collecting them with plankton nets, which are known to miss most of the microfibers since they go through the holes. And microfibers are the most abundant type of microplastic in the environment. Shino Tanikawa asked whether NEP funding could be pooled to conduct a research project on developing a standard protocol. Rob noted that while NEPs have not discussed pooling its BIL funds, we have done that in the past to work on collaborative projects and something we can raise. However, it is important to frame ideas around implementing infrastructure. While research is not unimportant, it is critical in how we frame these activities in tying it to an infrastructure need and/or cost savings. Judy added there are people around the world that are working on standard methods, not to say that the NEPs shouldn't be working on the issue. However, this may not be the best-fit funding source for identifying standard methods, but development of policy to reduce the input is needed. When microplastics are measured properly, it is mostly fibers that come off our clothing and washing machines. Judy continued that perhaps requiring filters on washing machines is warranted to reduce/capture the microfibers, but legislation would likely need to be passed by NY and NJ. Roop Guha added while not a pilot control measure for microplastics, there is a lack of information and research of impact of existing STPs on the microplastics and whether any of the existing systems are removing microplastics. In the past, some of the studies have indicated increased concentration of microplastics in the effluent, which may be an anomaly. Judy Weis added that STPs capture most of them, which means they go into the sludge phase. And if the sludge is applied to land, that just moves the problems from water to the land. But I don't think most NY or NJ sludge gets applied to land. What is done with it? Jason Fagel shared Biosolids summary for NY: <https://www.dec.ny.gov/chemical/97463.html>. Judy added that from this document, land application of sludge in NYS is moving the microplastics into the soil and into our food.

Rob Buchanan indicated that a \$900K bump for HEP is great but it is interesting to compare that with what USACE is getting—\$1.05 billion for local projects. Rob asked if there was any way to tap into some of that, or make sure it's at least 'green'? Rob Pirani indicated that conversations with USACE have been ongoing in how we can accelerate projects and resiliency efforts in the region. Philip DeGaetano shared that Governor Hochul's FY22/23 budget proposes increased drinking water, wastewater and climate change infrastructure funding and also includes a proposed \$4 Billion Clean Water, Clean Air and Green Jobs Environmental Bond Act. Brett Branco added it is important to consider the assessment afterwards on

how these investments improve the region. This connects to Rosana's earlier presentation on the environmental indicators – how do we think about monitoring those investments? Rob Pirani agreed, thinking about how we connect infrastructure projects and baseline monitoring is something that would hit the nail with this funding.

Rob Buchanan asked how funding could go to communities, community education, and public access. Rob Pirani informed the group it would be great to get feedback from everyone on this. There is an interest from community groups to participate in conversations on LTCPs and green infrastructure projects. While the utilities have been doing different things, one thing that HEP could consider doing is an RfP for some of the funding for the community groups to come to us with their ideas on what they want to do, such as getting residents to public meetings on the LTCPs. Another idea would be tying funding directly to a project being advanced by a public agency and HEP funds could be used to help support community capacity. Rob Buchanan indicated that he felt the second part seems to be a responsibility of the utility. Rob Pirani shared that this may not be the case, because there are some limitations in utilizing ratepayer money. Traditionally, SRF funds are for the in-the-ground engineering work and somewhat constrained in community engagement funding where HEP funds could help fill in this gap. Sue Rosenwinkel added that the sewage treatment plants don't own land and that Rob Pirani's points are right on target.

Rob Pirani noted that data collection and analysis is something HEP would like to support, again something that we will need to connect the dots for congressional intent, but asked the Work Group whether there are particular opportunities that could be connected to some type of infrastructure decisions, that would be a place we could explore and utilize the BIL funding. Tom Laustsen shared, specifically for PFAS, that I-Bank funds are for in-the-ground funding, but what is needed for PFAS may not just be in-the-ground projects, but outreach and education to keep PFAS out of the system. Tom asked whether there is any educational programming that could be used to engage the public and industries to keep PFAS out. While it is not an in-the-ground-project, it would be an approach to address PFAS in a meaningful way. Rob added it would be important to work with PVSC, NJDEP, and EPA to tie this into reducing the need for infrastructure investment – a cost savings that we can point to – a possibility similar to microplastics. Philip DeGaetano added that on the BIL that increased the authorization to the LIS, whether there are opportunities for advancing modeling efforts that could be applied to the Upper East River. Alyssa Arcaya indicated that while they are still waiting on guidance for the geographic program, it would be interesting to see where areas of collaboration could exist. Roop Guha asked whether REMAP would be eligible for funding. Rob Pirani indicated that if it is tied to a dredging decision, then yes, but that ongoing monitoring may not be the right fit for BIL funding. Shino Tanikawa asked whether green infrastructure maintenance can be funded. Rob Pirani indicated probably not for ongoing maintenance, however ways to pilot efforts in connection to maintenance may be appropriate. Rob Pirani wrapped up the discussion by saying HEP staff will be awaiting EPA R2 guidance, but in the meantime working on a draft workplan to present to the Management Committee by March 16th.

Action: Members are encouraged to reach out to Rosana and Rob regarding ideas on how best BIL funds could be utilized to advance both congressional intent and our Action Agenda further before March 16th.

4) Shared Waters Communication

Rosana Da Silva shared that this portion of the meeting will focus on the [communications task](#) that was outlined by the Work Group and approved by the Management Committee. Rosana shared a presentation outlining the shared waterbodies and the various standards for each waterbody from both states. Roop

Guha shared a timeline which indicated the shared waters were downgraded in NJ during the 1985 Use Attainability Analysis for recreational uses. Jason Fagel added, picking up from 1985 UAA, there were details that certain waters did not have a recreational use due to industrial hazards. While he did not recall the aquatic life uses, in moving forward to NYSDEC's 2015 effort on I and SD waters, DEC did not change the best use, but did add protections including changes to the fecal coliform criteria (from 10,000 Total Coliform to 200 Fecal Coliform), as well as, the recent I and SD additions of enterococcus, ranging from 35 to 115 CFU/mL in the shared waters. Brent Gaylord added for CWA purposes, in May 9, 2016 EPA approved the "...water quality shall be suitable for Primary Contact recreation, although other factors may limit the use for this purpose" for the Class I and SD NY waters. NY's site-specific Entero Criteria has not been submitted nor has EPA taken action on these values for the SD & I waters.

Siddhartha Hayes asked whether there is a recommended minimum number of samples for calculating the monthly entero geomeans. Jason Fagel indicated that in NY, there are no minimums in the regulations, but unofficially it is meaningless to calculate the STV without 10 samples within a month. Roop Guha added for the SE1 standard on primary contact, NJDEP is anticipating adopting EPA's 2012 RWQC and that will be the most stringent option of 32GM and 110 STV. Jim Lodge asked if the NY SA classification in Raritan Bay allows shellfish harvesting with relay or depuration. Jason shared that he is not aware of a depuration program. Jim asked if classification is different from where shellfishing is allowed. Jason confirmed and suggested seeing 41.1 at link for status of Raritan Bay shellfishing areas (Richmond County) <https://www.dec.ny.gov/outdoor/103483.html#12837>.

Roop Guha shared that for any proposed changes, the state would publish the request through the NJ registrar, host a public hearing, and 60-day comment period before adoption. After adoption, only when EPA approves it, does that criteria get applied. Jason indicated a similar process in NY. Rosana Da Silva asked whether there has been any coordination among the states during the water quality standards development process. Philip DeGaetano answered that the 1985 UAA effort was the most coordinated effort by the states in adoption of upgrades to existing water quality standards. While there was communication at other times when actions were taken, the UAA effort was the most significant during Philip's career. Roop Guha added that when he looks back in the 2000s, there was a lot of coordination between the states through HEP's various work groups, specific to the Harbor TDMLs. Jason Fagel indicated that there is not much state-to-state coordination and, while the process is already complicated, we could be doing a better job in communicating efforts.

Kim Cenzo asked Roop to talk about the monitoring that could help further conversations with NYSDEC. Roop Guha shared that NJDEP is working with IEC to set up a harbor monitoring program to supplement NJHDG locations. The primary objective is an assessment of conditions in the Harbor and shared waters, the second year looking at more critical regions that will give us a perspective of existing conditions in the Harbor and designated uses since 1985, and evaluate the need for a UAA. Evelyn Powers added that they are working on analyzing data from last year. Rob Pirani asked how the new data would be utilized. Roop shared the first goal is to help calibrate the models and capitalize on the LIS modeling efforts. Roop added that there are data gaps that could be filled by REMAP and the NJHDG monitoring. Shino Tanikawa encouraged the Work Group to think about what these criteria mean for LTCP implementation. NYC will be implementing its LTCPs to meet the NYS WQS which may not be the same as NJ. Mick DeGraeve agreed this is important. Sue Rosenwinkel added she doesn't see that as a discrepancy, as NY and NJ are using different approaches to achieve their LTCPs in that NY LTCPs have selected the demonstration approach and NJ LTCPs have selected the presumptive approach (85% removal), both of which are options under the CSO Guidance. Roop Guha added that we need to hold space for a larger discussion.

Action: Work Group members are encouraged to help identify key individuals to be interviewed as part of our task. Recommendations should be sent to Rosana@hudsonriver.org.

5) Partner Updates

Siddhartha Hayes shared that Hudson River Park will begin monitoring in Tribeca and welcomed anyone to reach out directly to learn more about what is being monitored.

Sue Rosenwinkel shared that NJDEP has been hosting a series of stakeholder meetings on public engagement, climate change, environment justice, and CSO metrics in preparation of the next CSO permits and noted that there is a lot of pressure to get the ball rolling with the new funding.

Philip DeGaetano asked that a future meeting include an update on the LIS Modeling progress.