



Water Quality Work Group Meeting

December 5, 2023

Location: Zoom (online only)

Minutes

Attendees: Marzooq (Marco) Alebus (NJDEP), Elizabeth Balladares (HEP, UWFP), Jessica Bonamusa (NYCDOHMH), Brett Branco (SRIJB/Brooklyn College, STAC), Elizabeth Butler (EPA), Lisa Congiu (NJDEP), Kathleen Cuzzolino (USACE), Philip DeGaetano (IEC), Mick DeGraeve (NJHDG/GLEC), Mike Dulong (Riverkeeper), Jason Fagel (NYSDEC), Mike Flood (EPA), Biswarup (Roop) Guha (NJDEP, NJ co-chair), Rupu Gupta (HRF), Siddartha Hayes (HRPT), Wayne Jackson (EPA), Rupika Ketu (EPA), Lingard Knutson (EPA), Michele Langa (NY/NJ Baykeeper/Hackensack Riverkeeper), Jennifer LaPoma (EPA), Tom Laustsen (NJHDG/PVSC), Tyler Linton (NJHDG/GLEC), Shirin Mardani (NYCDEP), Kelly Mascarenhas (NJDEP), Rosella O'Connor (EPA), Rosana Pedra Nobre (HRF/HEP), Victoria Sacks (EPA), Zoe Screwvala (HRF), Isabelle Stinnette (HEP/HRF), Shino Tanikawa (NYC Soil & Water Conservation District, NY co-chair), Ryan Van Manen (EPA), Judith Weis (Rutgers, STAC), and Alice Yeh (EPA)

Next Meeting: TBD

1. Overview of Agenda, Introductions, and Minutes Approval

Roop Guha opened the meeting and provided an overview of the agenda. August minutes were introduced and motioned for approval by Philip DeGaetano and seconded by Mick DeGraeve. Roop announced the opportunity to send nominations for the NY co-chair position and welcomed submissions by the end of this week. Votes will be completed by email.

Action: August 2023 minutes were approved.

Action: NY co-chair nomination will be completed via email by January 2024.

2. Partner Updates

- Brett Branco shared that CUNY has been working alongside NYCDEP on nature-based solutions and recently completed field work in the constructed wetlands of Alley Creek and ribbed mussel work in Bergen Basin. PI's on the DEP LTCP research include Chester Zarnoch from Baruch College, Greg O'Mullan from Queens College and Dianne Greenfield from the CUNY Advanced Science Research Center. As the team works to process data, results may be shared by the end of the Spring/Summer 2024. Brett also thanked Evelyn Powers and the IEC team who have been very helpful in advancing this work.
- Rosana Pedra Nobre shared a funding opportunity that has been made available through Restore America's Estuary under the National Estuary Program Watersheds Grant Program. Letters of intent are due by 8pm EST on January 26th. For all inquiries related to this solicitation, please contact

Suzanne Simon, Restore America's Estuaries, at ssimon@estuaries.org. For additional information about the program, please visit <https://estuaries.org/nep-watersheds-grant/>. Rosana noted that this grant opportunity seeks to support implementation efforts rather than research, but includes stormwater, Harmful Algal Blooms (HABs), and climate resilience focus areas in addition to other habitat and restoration efforts.

- Dan Shapley shared that Governor Hochul signed the Living Shorelines Act and Flood Risk Disclosure legislation which should enhance NYSDEC's permitting authority to support natural shorelines that provide habitat for wildlife as well as flood protections for communities. Riverkeeper is working with Ossining and Sleepy Hollow on efforts to reopen their historic beaches. In addition, Scenic Hudson, Riverkeeper and Hudson River Sloop Clearwater hosted a virtual briefing about the Hudson River PCBs Superfund Project and published a report on an Independent Review of EPA's Upper Hudson River PCB Dredging Remedy. The webinar can be accessed here: <https://www.youtube.com/watch?v=uJOA0nW5DxQ&t=4s> and the report is available on Riverkeeper's website here: https://www.riverkeeper.org/wp-content/uploads/2023/11/November-10-2023_FOCH-Independent-Review-of-Upper-Hudson-River-Dredging-Remedy.pdf
- Brett Branco shared that CUNY and the Science and Resilience Institute at Jamaica Bay will be co-hosting a webinar with NY Sea Grant on lessons learned from living shoreline projects to be held on Thursday, December 14th at 1pm. To register for the webinar, please visit: <https://us02web.zoom.us/meeting/register/tZlqcO2oqT0qGtXG2g-rmVOelse9MxCBCwJ-#/registration>
- Roop Guha shared that NJDEP has released a survey to understand the grant and loan needs of nonprofits and local governments to address their environmental concerns and challenges. Your responses will help the NJDEP better assist organizations through grants, loans, and other opportunities. Please consider taking the survey via this link: <https://dep.nj.gov/grantandloanprograms/grants-and-loans-needs-survey/>
- Judith Weis received an email about rain proofing of New York City from Rebuild by Design. They have launched an open call for individuals and organizations to participate in the Rainproof NYC Working Groups. The working groups, co-facilitated and composed of staff from multiple NYC agencies and community leaders, will meet regularly from January through June to identify and recommend strategies and policies to adapt to increased heavy rainfall. To learn more about how to get involved please visit: <https://rebuildbydesign.org/rainproof-working-groups>
- Philip DeGaetano shared NYS's Clean Water agenda and the 2024 list of priority areas. The NYS Clean Water Coalition Policy Agenda can be reviewed following this link: <https://drive.google.com/file/d/12KM9sQLowX9iCTXVwaWJWpaXAF1rWAQx/view?usp=sharing>

3. Frontiers of Monitoring, Modeling, and Management: Status of Superfund Sites Across the Estuary

Elizabeth Butler provided an overview on EPA's Superfund program which was established in 1980 and is responsible for cleaning up some of the nation's most contaminated land and responding to environmental emergencies, oil spills and natural disasters. The NY/NJ Harbor estuary has many superfund sites, roughly 11 or so are ongoing. Elizabeth shared a cleanup map of the documented

superfund sites including completed sites and water-based superfund sites which can be viewed here: <https://map22.epa.gov/cimc>. The superfund cleanup process is a multi-step process beginning with preliminary assessments which includes review of historical information and collecting data to then listing it in the National Priorities List (NPL). Additional details about the process can be viewed here: <https://www.epa.gov/superfund/superfund-cleanup-process>.

Alice Yeh is one of three project managers who are working on the Diamond Alkali Superfund Site and the cleanup efforts in the Passaic River. There are four operable units (OU), referring to section areas of the entire site, that the superfund site is separated by that can be viewed here. Contaminants of concern within the Lower Passaic include PCBs, Dioxin, metals, pesticides, and PAHs. EPA issued a record of decision in 2016 for the lower 8.3-miles of the Passaic River which would include dredging and capping the riverbed from bank to bank. Dredged sediment will be sent to a processing facility, being built on property owned by Passaic Valley Sewerage Commission, in Newark where it will be dewatered and then transported to permitted disposal facilities. The design is expected to be completed in early 2024. There is no legal agreement in place, but once one is, the dewatering facility is estimated to take three years to be built and then another eight years to dredge and cap. For the upper 9 miles, EPA issued a record of decision for an interim cleanup plan in 2021, which calls for dredging and capping specific areas of sediment that serve as sources of contamination to the rest of the river. Dredged sediment will be sent either to the processing facility built to handle lower 8.3-mile dredged materials or to commercial facilities, then to permitted disposal facilities. After the interim cleanup, EPA will sample and measure progress toward meeting final cleanup goals yet to be developed and decide if further work is needed. The design of the upper 9-mile cleanup plan is expected to take about 3-4 years to complete. Additional details regarding this site can be viewed on the project website: <http://www.ourpassaic.org/>.

Mike Dulong asked whether EPA issued a record of decision (ROD) for the lower 8.3-miles before the interim remedy for the upper 9-miles and whether the upper river sediments are impacting the remedy downstream. Alice shared the ROD for the lower 8 was completed in 2016 while the upper 9 was completed in 2021. The lower 8.3-mile ROD describes modeling that we conducted to show that the lower 8 miles should be cleaned up first for various reasons, mostly because much of the contamination is there and has more chance of recontaminating the upper 9 miles rather than the other way around. The upper 9 miles ROD remedy is interim, because the biota modeling needed to establish final cleanup goals was taking a long time to complete, so we wanted to do some cleanup at the same time as the lower 8.3-mile cleanup, so the river is disrupted once rather than multiple times. Mike followed up with a question on if the biota modeling shows significant additional remediation is necessary in the upper 9, will it be difficult to move the potentially responsible party (PRP) to take more action? Alice answered no due to long term monitoring that will be put in place and if further action is necessary, it would be required in a legal instrument. Michele Langa also added that the CAG analyzed the plans and pushed for stronger controls in the interim ROD and the plan is also taking advantage of the infrastructure needed to make the cleanup possible to be used for both OUs at once.

Victoria Sacks discussed the Gowanus Canal located in Brooklyn which was listed in 2010 and a record of decision was made in 2013. Contaminants include PAHs, PCBs, and heavy metals such as mercury, lead, and copper. In November 2020, EPA broke ground and started their dredging program. There are three target areas to be remediated. EPA is currently working on the upper reach of the canal

which includes dredging, a multilayer cap, and armored layer. They recently finished the multilayer cap and are working on getting the armored layer cap in place for the upper reach. Once completed, EPA will proceed directly into the second remediation area where the first phase will include bulkhead replacement in this stretch of the canal. These bulkheads were placed in the 1800s and further strengthening or replacement of the bulkheads are necessary. Additional details about this site can be accessed through the project website: <https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0206222>. Isabelle Stinnette asked what is the contaminant absorbing substance? Victoria Sacks shared it is activated carbon and organic carbon.

Rupika Ketu discussed the Newtown Creek Superfund Site which includes a 3.8-mile tidal waterbody and is divided into two OUs. The OU1 includes the entire creek and investigation is ongoing with the 2011 legal agreement and the six potentially responsible parties (PRPs). OU2 looks at Superfund site-related chemicals of potential concern from CSO discharge volume into the site and requires NYCDEP to complete a post-ROD monitoring at the CSO which was signed in 2022 between EPA and NYC for a minimum of two years. EPA approved the remedial investigation report for OU1 in April 2023. EPA is also in the process of conducting an early action in the East Branch of the creek. It is important to know the sources of contamination in the creek and how those contaminants are moving in the creek. Additional information about this site can be accessed here: <https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0206282>.

Jennifer LaPoma is one of the project managers for the Hackensack River. The site was petitioned by the Hackensack Riverkeeper and the Lower Hackensack River was finalized as an NPL in September 2022. There are 23 river miles starting at the mouth from Newark Bay until Oradell Dam in Bergen County. Surface and subsurface sediments are contaminated with arsenic, chromium, lead, mercury, PAHs, and PCBs. EPA has a contractor on board to gather and evaluate existing data. This will allow EPA to review not just the 2016 and 2021 data collected by EPA, but historical studies and data that has been collected in the river for an assessment to nominate the site onto the NPL.

Lingard Knutson shared notes from Brent Gaylord who is the project manager for the Quanta Resources Superfund Site in Edgewater, NJ. The land portion of the site (OU1) had 140,000 cubic yards of soil which was removed and capped. A new bulkhead was also installed at the site. The next portion (OU2) EPA will work on is the river. A proposed cleanup for PAHs and arsenic in the river sediment was presented at a public meeting in July 2023. The proposed plan includes removal of contaminated sediment, placing a cap, and demolishing the pier structure. On November 6th, the comment period closed, and EPA is working towards a final decision. Brent is happy to answer questions and additional details can be found on the site page here: <https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0200034>.

Roop Guha asked whether data related to the surface/ground water quality collected in EPA's process would become publicly available on the water quality portal? Alice shared that data for the Passaic River has been published and accessible on the ourPassaic.org webpage. Elizabeth Butler added that yes data does get there, but there is a lag as to when data is made available. EPA goes through a validation process and sensitivity process for a legal case. Dan Shapley noted that there is interest in getting Coney Island Creek onto the NPL and asked what is known about the state of the creek and proposed next steps. Victoria Sacks shared that the site is still being evaluated and on the agency's radar. Elizabeth added that before a site gets placed on the NPL, EPA embarks on a pre-remedial investigation which includes

collecting data and negotiating with the state before a site is placed on the NPL. Limited sampling has been conducted and discussion with the state has been completed. As more information becomes available, EPA staff will share an update with this group.

4. Staten Island Warehouse FUSRAP – Time Critical Removal Action

Kathleen Cuzzolino is a project manager with USACE in the NY District in FUSRAP (Formerly Utilized Sites Remedial Action Program) which was initiated in 1974 to clean up sites related to the Manhattan Project (development of the atomic bomb). FUSRAP was moved from the Department of Energy to USACE in October 1997 to manage 21 active FUSRAP locations. The Staten Island site was the site of the African Metals Corporation which stored high-grade Belgian Congo uranium ore from 1940 to 1942. This Belgian Congo uranium ore was very valuable and while there were thousands of barrels delivered by barge to the site, it was taken with a lot of precautions and care.

Over the years, there has been more evidence of elevated readings and USACE fingerprinted the results which confirmed readings were the Belgian Congo uranium ore. Under the FUSRAP, the survey results in 2021 showed elevated levels in the northwest corner of the African Metals Corporation site which likely was the result of lost material of the shipping process back in the 1940s and not due to drums abandoned on the site. Shoreline data did not show elevated levels, but the USACE did identify shoreline erosion which triggered the time critical removal. USACE is nearing completion of the removal aimed for this year with revegetation in the spring. Vegetation was removed from the site, 100 tires were also removed, impacted soils were loaded directly into containers given the small size of the site (quarter of an acre). USACE is excavating the clay layer where they get to their background reading of radiation. Their goal is to backfill and revegetate the site to complete the remediation. USACE does have some hotspot removals that they will continue to work on site.

Shino Tanikawa asked what is the level of radiation and what happens to the contaminated soil that is shipped out to Michigan? Kathleen indicated that the reading came in at 15.5 pCi and the background comes in at 2.3 pCi, but USACE did get a tested sample that read 347 pCi. The levels do vary throughout the area however, at this level, there is no PPE needed, but workers receive training before being on sites with radiation. Once the material gets to Michigan, it will be disposed of at a US ecological site that is approved for managed landfill for these types of contaminants. Lingard Knutson asked how confident is the USACE that the new 55 ft channel is not going to eat into this site given the erosion? Kathleen noted that they are removing everything because of the channel dredging plans. There is no level of fill that is staying in this footprint. Lingard asked when USACE did their gamma ray detection sample was anything found in water? Kathleen noted that the USACE sampled in the tidal zone. It is reasonable to assume that some material has eroded over time and made its way into the waterway, but the amount is minimal that reads as non-detectable. Isabelle Stinnette asked if there are any natural resources damages expected? Kathleen indicated none that they are aware of. Mick DeGraeve asked when USACE plans to be completed with the site? Kathleen noted USACE started in October and plans to backfill by the end of next week. They will be back on-site next spring to revegetate the site. For more information about this site, visit: <https://www.nan.usace.army.mil/Missions/Environmental/Environmental-Remediation/FUSRAP/Staten-Island-Warehouse/>.