Water Quality Work Group Meeting

February 26, 2019

Location: Hudson River Foundation

Minutes

<u>Attendees:</u> Amanda Levy (NYCDOHMH), Anand Kumaraswany (NYCDEP), Biswarup (Roop) Guha (NJDEP), Brett Branco (Brooklyn College), Bryce Wisemiller (USACE), Charlie Dujardin (NJHDG), Dennis Suszkowski (HRF/STAC), Evelyn Powers (IEC), Greg Alber (NJHDG), Jason Fagel (NYSDEC), Jim Lodge (HRF), Mick DeGraeve (NJHDG), Mike McCann (TNC), Noreen Gallagher (NYCDOHMH), Rick Winfield (EPA), Rob Buchanan (NYCWTA), Rob Pirani, Rosana Da Silva (HEP), Shino Tanikawa (NYC SWIM), and Susan Rosenwinkel (NJDEP)

<u>By Phone:</u> Carissa Scarpa (USACE), Chrissy Remein (Riverkeeper), Maria Colon (NYCDOHMH), Michele Langa (NY/NJ Baykeeper), and Phil DeGaetano

<u>Next Meeting:</u> Monday, June 3, 2019 at 10:30 AM

1. **Welcome, Introductions and Overview of Agenda**
   Brett Branco opened the meeting and reviewed the agenda.

2. **Environmental Monitoring Plan Update (WQ-E-2)**
   Rosana Da Silva reviewed the status of the three tools that make up the environmental monitoring plan: interactive map, storymap, and monitoring recommendations report. Based on the STAC, WQWG, CAC, and through the development of the Action Agenda and State of the Estuary, seven monitoring program recommendations were identified. A survey was conducted to prioritize the monitoring recommendations. The top two recommendations include: Launch a near-shore pathogen-monitoring program for regulatory compliance that provides high quality and improves understanding of recreational water quality in the estuary; and establish a new or expand existing continuous monitoring program(s) for dissolved oxygen into the New York Bay and Arthur Kill. All seven recommendations including other science and research needs will be included in the full report. The report will be public on HEP's website, but will be used by the WQWG and partners to begin tackling the recommendations. Evelyn Powers stated the report helped inform IEC's annual work plan and will be able to incorporate future monitoring programs into the annual work plan.

3. **Contamination Assessment and Reduction Project (CARP) II (MA-A-1)**
   Jim Lodge updated the group on the ongoing CARP II project, which is focusing on PCBs and dioxin Harbor Water concentrations' prediction in the 15 to 25 year horizon. A fate and transport model with finer resolution will look at specific areas of the estuary to predict the natural attenuation from various sources in the channel and how clean can we get areas to acceptable levels for the

USACE's Historic Area Remediation Site (HARS). A draft monitoring plan with locations of water column and sediment samples were shared. The sampling will be completed by the end of this summer and will be used to validate the fate and transport model, which is scheduled to be completed in 2022. Sampling includes DOC but no other nutrients. Roop Guha highlighted data gaps in sediment fluxes and indicated CARP II efforts could be leveraged to address those data gaps and calibrate models if funding is available. Rick Winfield indicated that USEPA is working on supporting another REMAP sampling this summer that could be utilized to calibrate the SWEM model, though additional funding is needed.

4. **Harbor-wide Water Quality Report (WQ-D-1)**
   Rosana provided an update on the final outline that will be used to guide the development of the report to discuss water quality harbor-wide, as if the harbor was considered a bathing beach and the regional fact sheets to connect the reader to the status of water quality within the states criteria. A limit of 10 regional waterbody fact sheets can be developed as part of the report. Rick supported the view of identifying fact sheets in terms of public use/access and requested the Hackensack River and Passaic River should be separate fact sheets. Rob Buchanan recommended that the East River be split as the lower part is a focus of recreational use and is quite different from its Western LIS connection. Rob also suggested that the Harlem River could be combined with the East River should fact sheets be limited. Mick DeGraeve encouraged that the report be discussed with educators and how they could utilize it in or out of the classroom.
   Action:
   (1) Rosana will present the report to the CAC for feedback and recommendations for regional fact sheets to assess with the subcommittee.

5. **New York/New Jersey Harbor and Tributaries Focus Area Feasibility Study (WQ-E-1)**
   Bryce Wisemiller provided an update on the scope of the NYNJHATS project in which an approval has been received to extend the timeline and increase funding to support the study phase further. An interim report and its appendices were released in February, and are available on ACE's website: https://www.nan.usace.army.mil/Missions/Civil-Works/Projects-in-New-York/New-York-New-Jersey-Harbor-Tributaries-Focus-Area-Feasibility-Study/. Bryce indicated that the ACE would look to conduct a sensitivity test for coastal storm surge and sea level rise, as sea level rise exacerbates storm surges. Per the presentation and report, the first cut analysis does not identify the tradeoffs between costs, water quality, and environmental and navigational impacts. Further study is needed to estimate the impacts of inflow and infiltration (I&I), storage capacity, other water quality inputs, and identifying the max net benefits with acceptable environmental factors. The ACE is considering the impacts of sea level rise and its effects on continuously impacted areas, but further studies are needed. A number of models were used to inform engineering designs and included permanent structures, islands, bathymetry, and other structural infrastructure. When reviewing the interim report, the model assumed the maximum number of gates to inform design.

This is a work in progress and various confounding impact assessments has not been completed yet. The final report on the preferred alternative will be submitted in 2022, and then will need to be authorized by Congress.

6. **NYC Beach Monitoring and Surveillance Program (WQ-C-1)**

   Amanda Levy presented on NYC's Beach Monitoring program for Tier 1 (high risk, 2x/week sampling), two (2x/week sampling), and three (low risk, biweekly sampling) beaches. The program uses the 1986 EPA FIB criteria to monitor for pathogens (19 illness cases per 1,000 swimmers) as NYC and NYS have not adopted EPA's 2012 RWQ criteria. Baseline weekly sampling begins in April and have a 24-hour turnaround time. Geomeans are reviewed and if the threshold (35 or 104 cfu) is surpassed, the beach is closed. Samples are taken between 6AM-12PM at all public beaches (minus Coney Island and the Rockaways) where three samples (Left-Center-Right) are taken at hip/waist depth by scooping and are iced. Samples are submitted to the lab within an hour and the individual sample, average of the three samples, and geomeans are calculated. Samples are coordinated and inspectors work closely with NYSDEC, NYCDEP, and NYC Parks. During sampling, visual inspections are also conducted and are considered during advisory notifications by the department. Advisories look at precipitation models (same as the CSO precipitation model calibrated on historic water quality data). Advisories are based on sampling data and precipitation levels (reviewed daily). Sampling results are available online, posted weekly at beaches, and raw data is on NYC's open data platform (~2 week lag for raw data upload). Jim Lodge asked if NYC conducted a study to look at sensitivity based on recent literature and Amanda indicated that they have not but do look at clusters of data for illnesses. Rob Buchanan reviewed 2018 raw data and indicated that there should have been more beach closures due to high levels of pathogens in single samples and their averages would have exceeded the threshold. Amanda indicated in those scenarios, an advisory is placed and additional sampling is triggered for assessment before a beach is closed. After collecting survey data from the beach-going public, the DOH revised the notification signage at beaches and developed a mobile text notification system (Know Before You Go).

7. **Discussion: Pathogen-related Anticipated Benefits & the LTCP Process**

   Brett announced this discussion will tabled to the next meeting due to the limited time.

8. **Updates**

   - March 28-29, 2019: Impacts of Microplastics in the Urban Environment Conference will be held at Rutgers University-New Brunswick. Registration is open at https://cues.rutgers.edu/microplastics-conference-2019.html. Conference will focus on a review of the latest scientific findings on microplastic pollution and discuss potential plastic waste management strategies, alternative materials, regulatory issues, critical next steps and the collaborations needed to address the emerging pollutant.

- May 8, 2019: Save the date for the Hudson River Environmental Society conference, which will focus on the climate change impacts.
- Rob Buchanan updated the group on the Brooklyn Bridge and Hudson River Park Trust beach conversations that surround water quality. Although data is limited, the existing data that NYCWTA has indicates that these proposed areas often do meet water quality standards for a bathing beach.
- Dennis Suszkowski updated the group on HRF's biannual grant cycle. 70 preproposals were received and 28 were asked to send full proposals. Of the 28, nine focus on water quality concerns: four on pathogens, one on microplastics, and four consisting of PFAs, PCBs, metals, and chlorination. Within the next couple of weeks, a docket of proposals will be presented to the HRF board.