

Water Quality Work Group Meeting

New York-New Jersey Harbor & Estuary Program

September 25, 2018

Location: Hudson River Foundation

Minutes

Attendees: Rob Buchanan (NYC Water Trail Association), Shino Tanikawa (NYC SWIM Coalition), Biswarup Guha (NJDEP), Greg Alber (NJHDG/PVSC), Keith Mahoney (NYCDEP), Rob Pirani, Rosana Da Silva (HEP), Phil DeGaetano (Chair), Dennis Suszkowski (HRF), Mike McCann (TNC), Bug Nicholas (FISH/HRF), Judith Weis (Rutgers), Kristina Heinemann, Rick Winfield (EPA), and Mick DeGraeve (NJHDG/GLEC)

By Phone: Rosella O'Connor, Wayne Jackson, Brent Gaylord (EPA), Susan Rosenwinkel, Marco Al-Ebus, Lisa Congiu (NJDEP), Bridget McKenna (NJHDG/PVSC), Chrissy Remein (Riverkeeper), Jason Fagel (NYSDEC), Evelyn Powers (IEC), Amanda Levy (NYCDOHMH), Michele Langa (NY/NJ Baykeeper), and Charlie Dujardin (NJHDG/GLEC)

Next Meeting: Wednesday, December 19th from 10:30 AM to 2:00 PM

1. Welcome, Introductions and Overview of Agenda

Phil DeGaetano opened the meeting and reviewed the agenda.

2. Water Quality Work Group Chair/Co-Chair Succession

Phil DeGaetano has served as the chair of the Water Quality Work Group for the last two years. HEP is seeking a co-chair that will serve with Phil for the next few months to transition his role on to a new chair. Please send nominations or if you have further questions regarding the roles and responsibilities role, please reach out to Phil or Rosana Da Silva.

Action: Mick DeGraeve will regroup with Phil offline regarding recommendations.

3. Long Island Sound Comprehensive Integrated Model Framework Study Update

Keith Mahoney provided an overview and update of the model framework study. In 2000, a model was developed and used throughout the harbor and the Long Island Sound where issues and deficient were identified. To address these issues, a technical advisory committee was formed to evaluate the model. The first phase of funding looks at evaluating and improving the current model to address deficiencies looking only in the Long Island Sound. The second phase will evaluate the entire model and look towards changing the grid resolutions. The third phase will evaluate a new user-friendly model option. The RfP is drafted and will go out for approval, though NYCDEP is looking at 12-18 months before a contract is issued which will include both the Long Island Sound and the harbor. Although the model will not have any implications on the LTCPs, resolution near-shore and the outfalls have been improved to model conditions more accurately. The model will be calibrated on existing data with possibly rolling out a future sampling program for recalibration.

Action:

- (1) If interested in review the TAC report, please send your request to Rosana
- (2) Phil to report back to the Management Committee of the importance of the project to the Management Committee to engage Port Authority as an important partner

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4. Water Quality Visualization Tool

Michael McCann shared his beta tool that he is seeking input on how the tool can be best used. The tool uses NYCDEP's harbor survey data site by site from 2012-2018. The tool focuses on percentage of violations and includes red lines to indicate the criteria for each parameter. Recommendations provided to improve the tool were as follows:

- Plot the geometric mean for beach action value
- Adjust the criteria line to deal with massive ranges on the Y axis
- Interesting to plot data for similar sites that the NYCWTA conducts monitoring along near-shore areas as well as NYCDOH data
- Incorporate continuous monitoring stations
- Add NJHDG's sites that have similar data starting from 2004

Initially a pet project, the Nature Conservancy is interested in exploring options to invest in the tool. A general comment from the group was whether this tool could become an app for the Harbor-wide Water Quality report that can actively make data analysis available across the harbor and include NYCDEP, NJHDG, NJDEP, and citizen science data.

Action:

- (1) Mick DeGraeve to regroup with Michael on NJHDG's 33 surveyed sites and available data
- (2) Biswarup Guha to regroup with Michael on automating data upload from the open portal and guidance to a path of creating the tool into an opensource tool
- (3) Incorporate this tool as part of the discussion of a subcommittee for the development of the harbor-wide water quality report

5. Near-Shore Pathogen Monitoring Pilot (WQ-C-1)

Rick Winfield shared an update on a pilot program with the Hudson River Park Trust and IEC looking to understand the relationship between near-shore and in channel loads of enterococcus. Over the summer, the pilot program took 25 samples in one day and another day is scheduled for October. Rick hopes to continue the program with IEC next year with USGS in the Harlem River. Rick is also hoping to work on some NJ data with Stevens Institute, NJDEP, and PVSC. The goal is to publish the results of this pilot program. Phil DeGaetano ask how this data gets reported to EPA and the two states to agree upon data analysis and solutions. A systemwide tool consensus would allow for conversations to happen within an engineering framework, but a cost-benefit analysis would need to occur first. Biswarup Guha suggested if the group is interested in expanding this work to look at ideaskill website which regulatory agencies use to help identify and prioritize projects to leverage funds.

6. US EPA's Short-term Action Plan on Consistent WQ Standards Update (WQ-A-2)

Wayne Jackson announced that in March, EPA and the two states agreed to create an action plan of mutually agreed actions to implement over the next 1-3 years to improve the harbor. By October, the plan should be finalized and Wayne is hopeful to share the plan with this group. The plan is short term, but includes EPA's long term vision. Brent Gaylord updated the group that litigation is ongoing between NYSDEC and EPA on pathogen standards. NYSDEC is still utilizing the fecal coliform standard, but made it more stringent than previously.

Action:

- (1) Wayne to present at the December meeting on the shared waters action plan
- (2) Brent to share the letters with Rosana for those in the group interested to review and access

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7. HEP's Environmental Monitoring Plan Update (WQ-E-2)

Rosana Da Silva provided an update of the Environmental Monitoring Plan and shared a beta interactive map for recommendations on user-design of the site. Recommendations included:

- Hovering description of HEP goals and the meaning of what we are measuring
- Easier access to a menu of the parameters that are being monitored and displayed on the map

In addition to the interactive map, the Environmental Monitoring Plan will include an esri StoryMap and a memo of monitoring recommendations. HEP is seeking volunteers to beta test the interactive map and the StoryMap before making the online tools public.

Action: Anyone interested to beta test the online tools, please contact Rosana

8. HEP's Harbor-wide Water Quality Report (WQ-D-1)

Rosana Da Silva shared an overview on past harbor-wide water quality reports to open a discussion on the goals or direction the report should take. The group discussed the parameters that both NYCDEP and NJHDG indicating that Nitrogen, Carbon, pH, Ammonia and Ammonium would be interesting parameters to compare in the harbor. Rob Buchanan questioned if the data scope for the report is only going back to 2010, does fecal coliform provide any additional information that enterococcus doesn't? Dennis Suszkowski asked who is the audience for the report and how does it differ from the State of the Estuary? The key audience is for citizen science groups as agencies would review the report but would seek for the actual date. Mick DeGraeve stated that NJHDG does continue to receive requests for the data. Shino Tanikawa suggested that this report could be the baseline for the shared waters. It was also suggested that an appendix of what ongoing activities between the POTWs, LTCPs, and MS4 effects the water quality in the harbor as well as looking at near-channel and seasonal fluctuations.

Action: Form a subcommittee to vet the goals of the report and provide review. Mike McCann, Phil DeGaetano, Rick Winfield all volunteered to participate. Anyone else interested in being part of the subcommittee, please contact Rosana.

9. Review of Climate Change Effects on Water Quality and Estuarine Biota (WQ-E-1)

Rob Pirani announced the final report has been completed by David Yazzo and is available if anyone is interested in reviewing the report. The report has been used by the Hudson River Foundation to guide the next round of grant funding opportunities based on the recommendations of the report. In addition, the Hudson River Foundation and HEP commissioned a preliminary evaluation of the potential physical influences that large barriers could have on the estuary. Drs. Philip M. Orton and David Ralston's report, *[Preliminary Evaluation of the Physical Influences of Storm Surge Barriers on the Hudson River Estuary](#)*, will be shared at an upcoming seminar at the Foundation on October 12th at 10:30am. The seminar will be broadcasted via webinar, but to access the information, registration is required. Please visit www.hudsonriver.org or call 212.483.7667 to register.

10. Tracking Enclosed and Confined Waterways TEC

Isabelle Stinnette, representing the Restoration Work Group, seeking assistance on how to best track enclosed and confined waterways (an indicator from the CRIP). There is limited guidance on this indicator but would include upstream waters from a dam and currently the indicator is solely being tracked by the delisting of 303(d) waterways which is problematic. The group suggested creating a list of 15 to 20 confined waterbodies that may have changed in the last 20 years from bad to better

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standards. This would then help vet what can be captured by this indicator and create a priority list to generate interest to help collect data.

Action: Rob Buchanan to assist Isabelle in generating a list of waterbodies that deserve more study such as the Bushwick Inlet, Bronx Kill, and others that fix the category of closed and confined waterbodies.

11. Additional Updates

The group suggested topics for the next meeting to include an update to the LTCPs, EPA's shared waters action plan, bistate coordinate of fish advisories, and the NYCDOH's beach advisories which had lack of closures when levels of fecal/entero were high.

Dennis Suszkowski suggested that Rick Winfield bring up to the Management/Policy Committee the concern of the lack of transparency between the states and EPA on the shared waterways action plan and the purpose of the Water Quality Work Group.

The Water Quality Work Group can prepare a presentation to the Management Committee on any of these major issues that the group collectively would like to see action be generated.