

## Water Quality Work Group Meeting

New York-New Jersey Harbor & Estuary Program

June 20, 2018 10:30 AM –1:00 PM

Location: Hudson River Foundation

### Minutes

Attendees: Phil DeGaetano (WQWG Chair), Evelyn Powers (IEC), Clay Sherman, Marzooq (Marco) Alebus, Susan Rosenwinkel, Armando Alfonso (NJDEP), Mick DeGraeve (NJHDG/GLEC), Rob Pirani, Rosana Da Silva, Jim Lodge, Isabelle Stinnette (HRF/HEP), Chrissy Remein (Riverkeeper), Keith Mahoney, Pinar Balci, Anand Kumaraswamy (NYCDEP), Shino Tanikawa (NYC SWIM/CAC), Rick Winfield, Rosella O'Connor (USEPA),

By Phone: Biswarup Guha, Helen Pang, Frank Klapinski (NJDEP), Amanda Levy, Maria Colon, Noreen Gallagher (NYCDOHMH), and Jason Fagel (NYSDEC)

Next Meeting: Thursday, September 20<sup>th</sup> from 10:30 AM to 2:00 PM

#### 1. Welcome, Introductions and Overview of Agenda (Phil DeGaetano)

Phil DeGaetano opened the meeting and reviewed the agenda.

#### 2. Long Island Sound Comprehensive Integrated Model Framework Study Update

Pinar Balci updated the group on the meetings held by the technical advisory committee (TAC) who are charged in drafting a guidance document to improve the modeling platform. The TAC, with input from NJDEP and NJHDG, has suggested the modeling platform is not as important as the refinement of the grid used in the model. The current model used in the LIS does not accurately predict nutrients (Nitrogen levels) to identify hypoxic conditions. Mick DeGraeve addressed there is interest from the NJHDG in this process and is strongly encouraging the state to support the effort to incorporate the shared-waters. Susan Rosenwinkel and Marco Alebus echoed concerns that NJ is focused on pathogens, not nutrients, and further understanding of the objectives of the model would need to be detailed. In addition, the cost of populating the data into a new model should be considered as part of the scope.

##### **Action:**

- (1) Pinar to share the draft report with the Water Quality Work Group
- (2) NYCDEP to continue dialogue with NJDEP, NJHDG, and EPA for shared-waters
- (3) EPA to present on shared-waters roadmap at the next Water Quality Work Group

#### 3. CSO LTCP and MS4 Permits: Green and Grey Infrastructure Balance (WQ-B-2)

*3.1. Planning and Technical Support for Incorporating Green Infrastructure in LTCPs: Perth Amboy, NJ Case Study, Rob Pirani*

Rob Pirani presented on the Perth Amboy case study which found a 23% reduction on average peak flow for selected sewersheds using a green infrastructure scenario. Perth Amboy was selected due to the fact it is a community collaborative initiative focus for

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NJDEP and have an active municipal action team (Perth Amboy SWIM) established by Rutgers and NY/NJ Baykeeper. Armando Alfonso suggested Perth Amboy was a good community to highlight the issues faced by NJ CSO communities – limited capacity at the MUA, the existence of a beach with no swimming signs (ignored by public), and densely populated. It is expected that Perth Amboy will be limited to green infrastructure, satellite, and storage alternatives under the LTCP.

**Recommendations:** Susan Rosenwinkel recommended the study run models using 2004 rainfall data as the average year for NJ rainfall.

### 3.2. *NYC Green Infrastructure and Integrated Water Management, Pinar Balci*

Pinar Balci shared lessons learned by NYC DEP when evaluating green infrastructure into the LTCP process. Her recommendations included:

- (1) Avoid adding green infrastructure to the baseline to allow effective evaluation of all alternatives and then add green infrastructure;
- (2) The assumption that costs reduce for green infrastructure has not been proven. Contractors know NYC is under a consent decree and are required to implement green infrastructure projects have increased costs;
- (3) Consider starting green infrastructure projects on public locations first that have on-site management. This will require constant communication, but these sites are better maintained than the right of way projects that attract litter and less ownership;
- (4) Work out a path forward for public-private partnerships and do not wait to do this. Partnerships with anchor institutions have been the most successful due to deed restrictions (30 year leases and issue with private loan approvals);
- (5) Expand green infrastructure projects to include receiving waters;

Concerns were raised on the fixed lump sum for private development incentives and whether the cost per square foot is too low. There was also concern on the procurement process taking over two years and the hopefulness of going through a 3<sup>rd</sup> party administrator to reduce the length of time for implementation.

### 3.3. *Green Infrastructure throughout the State of New Jersey, Armando Alfonso*

Armando Alfonso provided a brief overview of the state's MS4 and CSO permits. One focus of the department is on the stormwater management rule. The rule, as designed, is intended for a suburban and rural community. This creates issues for municipalities in urban communities that do not trigger the rule. NJDEP is working with municipalities by supporting their efforts to strengthen ordinances. For example, Princeton has a ½ inch of rain trigger while Franklin Township has a fee structure for maintenance which includes basins. NJDEP is working towards revising the stormwater rule to move to a lower minimum and keeping green infrastructure in mind throughout this process. The current MS4 and CSO permit do not require green infrastructure, but NJDEP is encouraging municipal efforts to implement and evaluate green infrastructure projects.

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### 4. HEP's State of the Estuary Report – Water Quality Overview

Isabelle Stinnette provided an overview of the trend analysis completed for the Water Quality chapter. The group had a general concern with the terminology used on the trend analysis of positive, negative, etc. and requested a review of those terms, regardless of a key.

- Dissolved Oxygen – Recommended to incorporate the change of number of stations in the narrative as well as removing hypoxic term. Less than 3 mg/L should be referenced as chronic and less than 4.8 mg/L described as acute. The group also recommended two versions of the same graph – one displaying two standard grab samples annually and a side-by-side comparison of top and bottom DO.
- Enterococcus – The group agreed showing fecal coliform and removing STV would be better for the general audience to tell the long-term story. Enterococcus should be used to tell the short-term story.
- Nitrogen – Isabelle will reconnect with NJDEP and NYC DEP to further discuss this data. Concerns raised included the connection of eutrophication and hypoxia. Marco Alebus recommended utilizing the impaired waterbodies (303d) list with known nitrogen stressor to identify the selected waterbody analysis. NJ does not have a Nitrogen standard and selecting a low-flushing area many tell the wrong narrative for the State of the Estuary.
- Floatables – The group agreed that there is an assumption of continuous effort amongst the program and that the State of the Estuary should focus on tons per mileage. NJ also has available data on pounds removed from CSOs and as of 2015 street sweeping data.

**Action:** Comments to be provided to Isabelle by Thursday, July 5<sup>th</sup>.

### 5. HEP's Environmental Monitoring Plan Overview

Rosana Da Silva provided an overview of the Environmental Monitoring Plan. The plan will identify current and prospective environmental monitoring efforts, guide users to existing data sources, recommend provisions to continue or expand specific monitoring efforts, and explain activities and their importance. The plan will be two online tools – an interactive map and an esri StoryMap. In addition, a 1-2 page document will be printed to guide users to the online tools and as recommended by other work groups, a second document will be developed to highlight the overall executive recommendations for environmental monitoring efforts.

**Action:** Comments on missing water quality monitoring programs to be provided to Rosana by July 23<sup>rd</sup>.

### 6. Additional Updates

Rosana Da Silva announced the next meeting will be held on Thursday, September 20<sup>th</sup>. In addition, Rosana will be working on harbor-wide water quality report which will prompt a December meeting for this group's review. Rosana will provided a poll to confirm December's meeting date to the group.