#### **Interstate Environmental Commission**

#### **Technical Advisory Committee Kick-Off Meeting**

## **EPA Region 2 Headquarters**

## November 1st, 2016

## **Participants:**

Patricia Sesto (IEC Chair), Evelyn Powers (NEIWPCC-IEC District), Robin Jazxhi (NEIWPCC-IEC), Robert Elburn (NYSDEC Region 2, IEC Commissioner), Rick Winfield (EPA Region 2), Bridget McKenna (PVSC), Bob Schuster (NJDEP-phone) Peter Linderoth (Save the Sound), Jim Ammerman (NEIWPCC, LISO), Richard Friesner (NEIWPCC), Ariane Guidicelli (NY-NJ HEP), Stan Stephansen (EPA Region 2), Biswarup Guha (NJDEP phone), Mark Tedesco (EPA LISO), Beau Ranheim (NYCDEP), Bruce Friedman (NJDEP-phone), Debbie Mans (NY/NJ Baykeeper phone), Kelly Kinder (EPA Region 2); John Kushwara (EPA Region 2); Rachael Graham (EPA Region 2); Shawn Fisher (USGS); Jason Fagel (NYSDEC DOW); Armando Alfonso (NJDEP)

IEC Chair Patricia Sesto welcomed attendees to the meeting and outlined the purpose of the meeting as well as the role of the TAC. IEC is looking toward the future and forming partnerships. IEC hopes the TAC can assist in setting Commission priorities with respect to water quality program priorities and help identify projects to include in, as well as review, the Commission's annual section 106 grant workplan and other grant applications.

IEC Senior Manager Evelyn Powers gave a history of the IEC, including an overview of its structure, funding, and current activities (presentation attached)

# **Discussions:**

The two major areas highlighted throughout the meeting where IEC could lead, support, or assist regional agencies and organizations were 1) Citizen Science coordination and assistance and 2) Analytical capabilities.

## Analytical/Sampling

Rick Winfield (NY-NJ HEP EPA Coordinator) is interested in IEC monitoring tributary and WWTP loads to the harbor, specifically with respect to pathogens and carbon, as well as ultimate BOD (BODu). NYC DEP said they have previously looked into the source of nearshore pathogens and determined the main contributor to be from animals and birds. Nearshore monitoring in open waters/embayments may be more valuable than tributary monitoring as tributary pathogens concentrations are not likely to vary across a transect (a tributary being all "near-shore"). Pheophytin is also of interest to Rick Winfield (EPA) to more accurately measure chlorophyll. PVSC would be interested if IEC developed MST analytical techniques, they would like to hear more about the process. Stanley Stephansen from EPA Region 2 also indicated that the development of MST analytical capability by the IEC laboratory would be useful, in addition to IEC providing support to states, EPA, municipalities and citizen scientists for field sampling, lab analysis, interpretation of results. PVSC indicated they did not have a lot of success with optical brightener analyses. NJDEP indicated that the development of Dissolved Organic Carbon (DOC) analytical capability could be useful. EPA is recommending using biotic ligand models (BLM) for metals such as copper. Until now, the copper criteria was dependent on hardness/temperature etc. but not DOC.

In order that the BLM can be used for metals, it will be useful should States wish to develop BLM for a waterbody to have DOC, salinity, pH and temperature data any time metals data is collected.

Continuous monitors would provide valuable data, but may not be worth time/investment. Continuous monitoring at mid-channel bottom depths are most valuable but cost above \$1 million to install correctly. Continuous monitors anchored on pilings or bulkheads are more practical to install and maintain (\$5000-\$10,000) but the data may not be as useful. Also need to consider the high risk of lost or damaged equipment. Save the Sound would like support in the form of continuous DO data, and chlorophyll a analysis for the Unified Water Study. IEC will look into assessing the coverage of existing continuous monitors to identify potential gaps in continuous DO data in the IEC district.

NY/NJ Baykeeper performed monitoring along the Raritan Bay shore over the summer through the HEP-funded pathogen monitoring project. Baykeeper is contracting with NYS to maintain and retrieve data from two buoys off the south shore of Staten Island for the Rebuild by Design Living Shorelines project. Baykeeper is also interested in EPA and IEC's Passaic and Tributary pathogen trackdown data highlighted in the presentation and the report when available.

#### Citizen Science Coordination

NYSDEC would like IEC to support citizen science in a coordinated volunteer monitoring effort in marine, shared waters. EPA, NYSDEC and IEC began discussing this in 2016 and is included in FY2017 106 workplan as a pilot program in 2017. Goal is to target near-shore areas and tributaries not covered by established monitoring programs.

A role to consider is helping citizen data become approved under a QAPP so other organizations and agencies can use that data for regulatory purposes, assessment purposes, as well as target or highlight areas needing further attention. EPA Region 2 (Edison) has offered QAPP template training in the past. QAPP development has been a challenge for volunteer monitoring (as well as other monitoring programs) but is essential to document the methods used and establish a "blueprint" for the project. Save the Sound expressed interested in IEC's citizen science pilot project for 2017. Training of citizen scientists is important, IEC can potentially partner with Save the Sound to offer citizen science trainings to expand coverage for Unified Water Study. Potentially provide nutrient analyses (second tier) in the future, in particular. Sampling simultaneously (split sampling) with citizen scientists was recommended to validate and compare methods. If IEC develops a role as a coordinator for volunteer monitoring efforts, this should be considered and included during website re-design.

There was discussion regarding what IEC's original compact requires of IEC. Are we acting counter to the intent of the compact by focusing resources on different directions, (i.e citizen science)? IEC's compact focuses on regulations and ensuring the protection of water quality in the IED. These regulations may be modified (last revised in 2000) to be more harmonious but IEC does not intend abandon them or its focus on protecting water quality in the IED.

RIBS- The WLIS/Atlantic Basin will be part of NYSDEC's rotating intensive basin monitoring aspect of the RIBS program (every 5 years). During the WLIS intensive monitoring year, NYSDEC may request IEC to expand the RIBs monitoring program. LIS is scheduled to be part of an intensive study starting in 2017 with a screening year, followed by a monitoring year in 2018 and an assessment year in 2020.

IEC is also involved in EPA Region 2's Trash-Free Waters Partnership Agreement and is a member of the microplastics workgroup.

Next Steps:

- Identify FFY18 workplan match by December 2016
- FFY18 workplan approval from IEC Commission June 2017
- FFY18 workplan is due October 1, 2017
- Next meeting- likely January/February 2017—TAC members encouraged to submit workplan ideas and possibilities for potential match prior to this meeting. These will then be developed into draft workplan for Commission approval in June 2017 Commission meeting.
- Consider joint shared waterways monitoring workgroup/TAC meeting