NY-NJ HEP Water Quality Workgroup Meeting Notes

Date: 4/18/2016

Time: 10:00 am – 12:00 pm

Attendees: Ashley Slagle (PVSC/NJHDG), Rob Buchanan (NYCWTA), Rick Winfield (EPA), Rosella O’Connor (EPA), Wayne Jackson (EPA), Dana Flint (EPA), Alyssa Arcaya (EPA), Nesmarie Negron (EPA), Rick Balla (EPA), Jim Lodge (HRF), Jeff Myers (NYSDEC), Mick DeGraeve (GLEC/NJHDG), Dennis Suszkowski (HRF), Sean Dixon (Riverkeeper), Judith Weis (Rutgers), Evelyn Powers (IEC), Rob Pirani (HEP). By phone: Andrea Leshak (NY/NJ Baykeeper), Debbie Mans (NY/NJ Baykeeper), Phil DeGaetano (NYSDEC), Marco Al-Ebus (NJDEP), Pilar Patterson (NJDEP), Roop Guha (NJDEP).

1. Welcome, Introductions, Purpose of Workgroup and Chair
   - Dennis Suszkowski is continuing to act as chair of the group until his replacement(s) are identified.
   - The immediate purpose of this workgroup is to define short-term goals for HEP’s Action Agenda over the next year. It is anticipated that the group will continue to work together to advance these priorities once they are identified.

2. EPA Overview of Water Quality History and Regulatory Status (Wayne Jackson)
   - A significant amount of effort was spent on advancing TMDL efforts in the Harbor. EPA is still interested in seeing progress toward identifying and remedying impairments. Much has been accomplished by the States, utilities and local government, but many waters still do not support fish propagation and primary contact recreation.
   - The ultimate goal is still for all waters in the Harbor to meet fishable and swimmable. However along with that we need to determine what the “right” standards are and what the highest attainable use is, whether it’s a use attainability analysis (UAA) or not.
   - Typically a UAA is perceived negatively, as they are administratively burdensome and often viewed as “final” although in reality they are supposed to be reviewed every 3 years. Two UAAs were done for the Harbor in 1985. The updated regulations include new “variances” language which is more flexible than UAAs.
   - The term “fishable” refers to all aquatic life, i.e. fish, shellfish and invertebrates. The criteria that come into play include DO and toxics as well as total and fecal coliform.
   - There are slight differences in the DO criteria/standards between NY and NJ as well as in the toxics endpoints. However for toxics the inconsistencies are not as much of a concern because the standards are extremely low. The science advisory board at NJDEP is currently looking into the marine DO criteria.
   - As far as pathogens go, the criteria are very variable depending on the waterbody classifications. EPA promulgated a 30-day geometric mean of 35 and a single sample maximum of 104 for
enterococcus in 2004, leaving the averaging period up to the states (historically the averaging period is May 15 – October 15). After discussions with the states a seasonal averaging period of 124 days was selected. However most open waters did not meet the 30-day geometric mean and the Passaic and Hackensack did not meet the 124 day averages.

- In 2012 EPA revised the recreational recommendations after reviewing illness rates. A statistical threshold value (STV) of 10% was included in this revision. Two sets of criteria were crafted based on an illness rate of 32 or 36 per 1,000 users with the option of 30 to 90 days for the averaging period.

3. EPA overview of TMDL Efforts (Rosella O’Connor)

- Recap of nutrients TMDL work:
  - Carbon as well as nitrogen was causing DO impairment. Not all waters of the Harbor were addressed by implementing the plan. The Bight isn’t included but there are DO issues there. Many forthcoming improvements were factored into the calculations; NJ CSOs were not included but they don’t contribute much nitrogen to the system. The only way to achieve attainment in the Hackensack is to remove all anthropogenic sources. Even going beyond the limit of technology doesn’t improve much. But the marine DO standard is achievable in most places.
  - There is a significant cost discrepancy between NY & NJ because of the pre-existing upgrades to NY plants from the Long Island Sound TMDL and Jamaica Bay. The Yonkers and North River plants are the only relevant ones - others further north are considered de minimus.

- Recap of toxics TMDL work:
  - CARP was started in the mid-1990s to understand sources of contamination and relative contributions. A model was developed and a large amount of data was collected. EPA took advantage of this effort and evaluated 63 contaminants while looking at state, EPA and fish tissue criteria. EPA selected a list of contaminants to move forward with a TMDL.
  - The main conclusion was that the sediments drive all exceedances and are the main source. However after cleaning up all sediments a 99% reduction of all sources is still needed because the standards are so low. The model runs went out 100 years and showed eventual, although slow, re-contamination following sediment removal but the re-contamination does not reach previous levels.
  - Metals were not a particular problem although there were some localized issues with mercury, but the issues were not Harbor-wide.
4. Brief update on the GLEC DO project (Mick DeGraeve)
   - This project is based on available information and one of the goals is to determine the effects of projected DO deficits on organisms.
   - This work will lead to recommendations for additional investigations. In the Chesapeake, this type of work has led to specific use designations and different criteria associated with these.
   - One possibility for the Harbor would be to have limited fish propagation modeled after the Chesapeake.

5. Follow-up, next steps, and items for the group to think about: Please forward any thoughts or ideas on these topics to Ariane
   - Discussions about a permanent chair are continuing.
   - An in-depth conversation needs to occur on pharmaceuticals and other emerging contaminants as well as microplastics.
   - Consider inviting someone from the Chesapeake Bay program to talk about their use designations and criteria.
   - The next meeting is scheduled for June 2nd and we will be discussing preliminary priorities to have a better idea of items to cover with the policy committee in July. The workgroup will then meet in August following the policy committee meeting.