Long Term Control Plan (LTCP) Newtown Creek Public Meeting #3 – Review of Alternatives Meeting

Summary of Meeting and Public Comments

On April 26, 2017 the New York City Department of Environmental Protection (DEP) hosted a third public meeting for the water quality planning process for the Long Term Control Plan (LTCP) of combined sewer overflows (CSOs) in Newtown Creek. The three-hour event, held at the Newtown Creek Wastewater Treatment Plant Educational Center in Brooklyn, provided overview information about DEP's LTCP Program, presented information on Newtown Creek's water quality, baseline conditions and performance gaps. The bulk of the presentation focused on DEP's alternatives evaluation. At the end of the presentation, attendees asked questions and gave input on the proposed alternatives.

Approximately 45 people from the public attended the event, as well as representatives from DEP and the New York State Department of Environmental Conservation (DEC). Information presented included:

- Concurrent Newtown Creek Programs;
- Water Quality Standards & LTCP Goals;
- Recap of LTCP Process;
- Water Quality, Baseline Conditions and Performance Gap;
- CSO Control Evaluation Process:
- Newtown Creek Alternatives Toolbox and Overview of Newtown Creek Alternatives;
- CSO Storage Volume, Peak Flow, and Activation vs. Percent Capture;
- BB-026: Borden Avenue Pumping Station Expansion;
- Potential Sites at Dutch Kills;
- NC-077: New Wet Weather PS+ FM to Kent Ave Interceptor;
- NCB-015, NCB-083 and NCQ-077: Parallel Wastewater Interceptor;
- Ecological Restorations;
- Dutch Kills Flushing System Concept;
- Storage Tanks at Each Outfall;
- Retention/Treatment Basins at Each Outfall;
- Tunnel Alternatives A and B;
- Alternatives Summary 2017 Costs;
- Alternatives Summary Escalated Costs;
- Affordability Analysis; and
- LTCP Delivery Schedule.

At the end of the meeting, attendees were given note cards on which to write any questions, after which the questions were collected and read aloud by DEP staff. The following summarizes the questions and comments from attendees, as well as responses given. The presentation can be found at http://www.nyc.gov/dep/ltcp.

Q1: An attendee asked why Dutch Kills was excluded from the 50 percent CSO Control Modeling.

A1: DEP stated that the results shown are preliminary and DEP will examine 25, 50, and 75 percent CSO Control at Dutch Kills.



Q2. An attendee asked about siting storage tanks, eminent domain, and tunnels.

A2. DEP stated that the first phase of site selection is looking at vacant parcels, then parcels where buildings are already in place. Tanks are usually sited on large-scale existing parcels but for the Newtown Creek watershed, this option is impossible due to the number of properties within the area. Tunnels are typically placed in the right-of-way to avoid conflict with properties. The right-of-way tunnel alignment would be preferred due to lower risks to property foundations and soil contamination.

Q3. An attendee asked about Water Tunnel Number 3 and utility lines.

A3. DEP stated that different tunnel routes are being considered. If selected, a tunnel would be placed according to a three-tunnel-depth assumption and contingent on bedrock conditions. A tunnel within NCB-015 and NCB-083 would be approximately 250-ft deep. DEP stated that the preferred route would not be in close proximity to the Water Tunnel.

Q4. An attendee asked why BB-009 is not addressed even though it discharges 47 MG to Dutch Kills.

A4. DEP stated that the LTCP is focusing on the largest CSO outfalls. These outfalls have the biggest impact on water quality due to the volume and frequency of CSO events. However, if more information is needed, BB-009 will be evaluated.

Q5. An attendee asked why more green infrastructure projects are not considered in the vicinity of Newtown Creek.

A5. DEP stated, a lot of green infrastructure is planned, in-construction, or has already been constructed for the Newtown Creek watershed. DEP is working to meet its current Consent Order goals, and will continue to build out and work with other partner agencies to identify feasible projects.

Q6. An attendee asked why High Rate Treatment Clarification was removed from the alternatives.

A6. DEP stated that High Rate Treatment and Retention Treatment Basins (RTB) are similar, but that the High Rate Treatment requires additional chemicals. Therefore, RTB was one of the retained alternatives.

Q7. An attendee asked what causes the Algae Blooms if not CSOs.

A7. DEP stated that the WWTPs provide the largest nutrient loads. Nitrogen is the limiting nutrient for algae growth in saline water; phosphorus is the limiting factor in fresh waters. DEP has invested \$1.1B for nitrogen removal, which has led to lower amounts of nitrogen within the NYC waterbodies.

Q8. An attendee asked what outfall disinfection method DEP examined.

A8. DEP stated that it is currently looking into chlorination. Disinfection using ultraviolet light (UV) is not preferable due to solids removal that is needed prior to UV treatment. DEP looked at peracetic acid as well.

Q9. An attendee asked about the status of the Borden Avenue Pumping Station and if the expansion can be maintained.

A9. DEP stated that the current pump system needs replacement. DEP is currently looking into potential option for Borden Avenue Pumping Station upgrade.



- Q10. An attendee asked if the results of GI on CSO have been quantified.
 - A10. DEP stated that a Performance Metrics Report was developed and is available on the DEP website. DEP looked at CSO reductions based on the current GI implementation rate and ran a model to calculate CSO volume reduction based on a 10 percent implementation rate.
- Q11. An attendee asked if GI analyses are available.
 - A11. DEP stated that GI Performance Metrics and Annual Reports are available online.
- Q12. An attendees suggested areas for additional GI projects, for example: street end of Vernon Blvd. and South of 83rd St.
 - A12. DEP stated that is it open to suggestions.
- Q13. An attendee asked why there are no rain gardens and other GI projects in lower Manhattan since it feeds to Newtown Creek.
 - A13. DEP stated that wastewater from lower Manhattan goes to the Newtown Creek WWTP but only GI within the Newtown Creek watershed would have an impact on CSO reduction in Newtown Creek.
- Q14. An attendee asked how CSO is measured.
 - A14. DEP stated that flow meters were installed at five CSO regulators and flow data was collected for one year.
- Q15. An attendee asked why Bowery Bay WWTP is ideal for flow tipping.
 - A15. DEP stated that it is currently looking into expansion of Borden Avenue Pumping Station, directing the flow from BB-026 into the pumping station and bringing it to Newtown Creek WWTP. The evaluation is underway.
- Q16. An attendee asked why focusing on increasing treatment of current CSO contaminants instead of increasing maximum flow threshold for the system.
 - A16. DEP stated that capacity of Newtown Creek WWTP was already expanded and, as of now, it is not feasible to direct more flow into the plant.
- Q17. An attendee asked why the studies for LTCP projects are under the Superfund timeline.
 - A17. DEP stated that it is working on the two programs simultaneously.
- Q18. An attendee asked if it is feasible to increase the capacity in existing interceptors rather than building a new tunnel.
 - A18. DEP stated that the City always looks at optimizing the existing capacity first. For example, the ongoing bending weirs construction project allows system optimization. The CSO volumes shown during the presentation took system optimization into account.
- Q19. An attendee asked if there are cost savings to new construction with separated grey and black water disposition.
 - A19. DEP stated that there can be cost savings for some projects.
- Q20. An attendee asked if DEP considered roof runoff as contribution to the Creek.
 - A20. DEP stated it does not look at roof runoff as a freshwater contribution to the Creek.



- Q21. An attendee asked if more flow will be going into Flushing Bay and Flushing Creek since it will be pumped away from Bowery Bay WWTP.
 - A21. DEP stated that there will be no flow going to Bowery Bay WWTP. The flow coming from BB-026 will be directed to Newtown Creek WWTP.
- Q22. An attendee asked why the Federal standards for *Enterococci* are not applied in NYC. Are DEP and DEC agreeing on LTCP plans to pre-empt the implementation of the Federal *Enterococci* Standard?
 - A22. DEP stated that the LTCPs are prepared in accordance with the current water quality standards. The *Enterococci* results are run for evaluation and analyses purposes.
- Q23. An attendee asked why only 3.2 percent GI and not 10 percent GI is applied in Newtown Creek watershed.
 - A23. DEP stated that a 3.2 percent GI rate was very ambitious and it will consider more GI when feasible and when it does not conflict with grey projects.
- Q24. An attendee stated that the presented models and plots point towards 50 percent CSO control. Why not mix grey and green infrastructure to get 100 percent CSO control?
 - A24. DEP stated that it is not an easy task to get to 100 percent CSO control given the size of the waterway. DEP's alternatives analysis will make recommendations on the right course of actions.
- Q25. An attendee asked how much money DEP is spending in Gowanus Canal.
 - A25. DEP stated that currently they are spending \$800M for 12 MG storage tanks to capture 74 percent of the CSO.
- Q26. An attendee stated that there may be many toxics coming out of the CSO.
 - A26. DEP stated that the analyses that have been made on the CSO did not show any toxic substances. There are wash-off substances from the street that will contribute to the water quality; however, the concentration is not anticipated to exceed the remedial levels set by EPA.
- Q27. An attendee asked if there is opportunity for GI as a constructed wetland or treatment wetland.
 - A27. DEP stated that it has built wetlands in Dutch Kills as a pilot project and that more wetlands will be constructed in the summer of 2017.
- Q28. An attendee asked how many of the presented ideas are closed due to Superfund.
 - A28. DEP stated that this is difficult to determine because the remedial goals have not yet been determined for the Superfund program.
- Q29. An attendee asked why LaGuardia College parking lot was dismissed from land acquisition.
 - A29. DEP stated that LaGuardia College parking lot is difficult for site acquisition because it is owned by the State Dormitory Authority and is already in use. DEP is targeting sites that are owned by DEP or other City entities.
- Q30. An attendee asked what the prioritization is in getting a property.
 - A30. DEP stated that first the Department is looking into DEP-owned properties, next City-owned properties and, finally, privately-owned properties.



- Q31. An attendee asked how the baseline projection of compliance compares to existing conditions.
 - A31. DEP stated that DEP has made significant improvements, particularly since the Newtown Creek WWTP expansion.
- Q32. An attendee asked how long it will take until the construction will start.
 - A32. DEP stated that they do not know and will look closely into the alternatives. The LTCP will include projected timelines for the final selected alternative.
- Q33. An attendee asked what the tunnel life span is and will it eventually have to be taken off-line for maintenance.
 - A33. DEP stated that a tunnel's typical life span is 100 years. DEP is also reviewing the scalability of the options. Maintenance is usually done once a decade, typically during winter season.
- Q34. An attendee asked how the aeration system built in East Branch will be evaluated in the next years.
 - A34. DEP stated that it continues to evaluate aeration operations and work depends on the seasonal variation of DO.

