ALLEY CREEK FINAL PUBLIC COMMENT RESPONSE SUMMARY

Public Letters Received:

1. Henry Euler via email, December 17, 2015. Comment, Alley Creek and Little Neck Bay CSA.
2. Nicole Zehr via email, December 17, 2015. Alley Creek Long Term Control Plan - Comments from Queens Residents.
3. Queens College CUNY, School of Earth and Environmental Sciences, December 17, 2015. Alley Creek/Little Neck Bay Long Term Control Plan.
4. Save the Sound, December 17, 2015. Alley Creek/Little Neck Bay CSO Long-Term Control Plan—Save the Sound Comments.
5. S.W.I.M. Coalition, December 17, 2015. Alley Creek and Little Neck Bay CSO Long Term Control Plan.

1. The LTCP focuses on seasonal water quality attainment over year round attainment.

Response:

- *In accordance with direction from DEC, the LTCPs assess the recommended plan against attainment of primary contact WQ criteria during the recreational season (May 1 to October 31), the time period in which most water recreational uses occur. In addition, the LTCP assesses attainment of primary contact WQ criteria during the annual period. Furthermore, the LTCPs analyze the "Time to Recover" to determine how long after the end of a rainfall a waterbody will recover and return to concentrations less than 1000 cfu/100 ml for fecal coliform. These assessments are presented in Section 8 of the May 2015 CSO LTCP for Alley Creek and Little Neck Bay Supplemental Documentation.*

2. Updating pathogen water quality criteria to meet EPA's 2012 recommended recreational water quality criteria (RWQC).

Response:

- *Under the NYS Environmental Conservation Law, DEC is the entity with the statutory authority to promulgate water quality standards, such as the RWQC. To date, DEC has not adopted that standard.*

- *DEP evaluated compliance with EPA's 2012 recommended recreational water quality criteria (RWQC) for both Alley Creek and Little Neck Bay in the LTCP. These evaluations are presented in Sections 6 and 8 of the May 2015 CSO LTCP for Alley Creek and Little Neck Bay Supplemental Documentation.*

3. Evaluating LTCPs based on the recently updated by NYSDEC Class I water quality standard (Class I and Class SD must attain water quality suitable for primary contact recreation and protection of aquatic life).

Response:

- *All LTCPs, including the Alley Creek/Little Neck Bay LTCP, evaluated attainment of the fecal coliform criterion of a monthly geometric mean of 200 cfu/100mL and applicable DO WQS, which reflects DEC's current WQS for these waterbodies. These evaluations are presented in Sections 6 and 8 of the May 2015 CSO LTCP for Alley Creek and Little Neck Bay Supplemental Documentation.*

4. **Recovery time and wet-weather advisories should be more fully vetted with recreational users of the City's water, to ensure the analysis reflects the realities of how people actually use the waterways and use the best communication strategies to inform people of advisories.**

Response:

- *The target for time to recover was developed in coordination with DEC. DEP's wet weather advisories comply with DEC regulations.*

5. **The LTCP showed Alley Creek and Little Neck Bay to be in compliance with dissolved oxygen criteria, but these waterbodies were listed as impaired for dissolved oxygen on DEC's 2014 303(d) list.**

Response:

- *The current 2016 NYS 303(d) list includes Alley Creek/Little Neck Bay Tributary as "Waterbodies for which TMDLs Are Deferred (Pending Development/ Implementation/ Evaluation of Other Restoration Measures)" due to pathogens and dissolved oxygen. The LTCP for Alley Creek and Little Neck Bay was approved by DEC on March 7, 2017. The required control measures are expected to result in attainment of applicable water quality standards.*

6. **The LTCP asserts that there are no "sensitive areas" because there are no "primary contact" uses of the waterbody. Recreation such as kayaking and canoeing involves a substantial likelihood of significant contact with the water.**

Response:

- *Under 21 NYCRR 550.2(d), Primary Contact Recreation is defined as "activity that involves significant ingestion risk, including but not limited to wading, swimming, diving, surfing and water skiing". Secondary contact recreation is defined as "activity in which the probability of significant contact with the water or water ingestion is minimal, including but not limited to boating, fishing, and shoreline recreational activity involving limited contact with surface waters."*

7. **Use Attainability Analysis (UAA) is insufficient.**

Response:

- *The UAA submitted with the Alley Creek LTCP, for DEC's consideration, complies with applicable DEC regulations. The UAA is included as Attachment 4 (Revised Appendix E) of the May 2015 CSO LTCP for Alley Creek and Little Neck Bay Supplemental Documentation.*

8. The LTCP existing water quality data collected during late fall/early winter should not be considered a baseline. Harbor Survey 2014-2015 YTD water quality data show higher geometric means.

Response:

- *"Baseline Conditions" are a defined set of modeled conditions that serve as a common basis for evaluating CSO control alternatives. LTCP baseline conditions are not the same as the conditions that existed when the water quality data presented in Section 2 of the LTCP were collected. For the LTCPs, baseline conditions include projected dry weather sewage flows based on projected water use/demand for the year 2040, completion of cost-effective grey infrastructure projects recommended in the Waterbody/Watershed Facilities Plans, and stormwater runoff capture by green infrastructure. System performance under LTCP baseline conditions is assessed using a defined "typical year" of rainfall (2008 rainfall from a rain gage at JFK Airport), and a representative 10-year rainfall period (2002 to 2011) based on JFK rainfall. Refer to Section 6 of the May 2015 CSO LTCP for Alley Creek and Little Neck Bay Supplemental Documentation for further discussion of Baseline conditions.*

- *Actual water quality conditions in the waterbodies monitored by the Harbor Survey Monitoring Program will vary from year to year based on differences in rainfall as well as operational conditions within DEP's collection and treatment system (e.g. status of various construction projects at wastewater treatment plants and in the collection/transport system). By assessing baseline conditions over a 10-year period, the calibrated sewer system and water quality models can take into account year-to-year variations in rainfall conditions.*

9. No reduction of CSO volume for recommended plan.

Response:

- *DEP has been actively working to improve water quality in Alley Creek, and over the past decade, DEP has committed $130 million toward this effort. Water quality improvement projects include the construction of a 5-million-gallon underground CSO storage tank, sewer improvements to alleviate flooding, and ecological enhancements, including restoration of tidal wetlands and coastal grassland habitat. These improvements have reduced the average annual volume of CSO discharged to Alley Creek by about 50 percent.*

- *The Alley Creek LTCP recommended plan is to provide disinfection at the existing CSO storage tank facility, located near the head end of Alley Creek. Pursuant to the DEC approval letter for the Alley Creek LTCP, DEP will also construct and operate a dechlorination system. Disinfection is projected to reduce the amount of pathogen bacteria in the treated discharge by approximately 99% during the recreational season (May 1st to October 31st), and by about 50% on an annual basis.*

- *Section 8 of the May 2015 CSO LTCP for Alley Creek and Little Neck Bay Supplemental Documentation presented the evaluation of opportunities to further reduce CSO volume to Alley Creek. These opportunities were limited by issues of siting, hydraulics, and cost-effectiveness.*

10. Effect of chlorination on aquatic ecosystem.

Response:

- *Disinfection of CSO outfalls will present challenges to DEP that will be specific to each outfall and waterbody where disinfection will be utilized. Alley Creek has low flow tidal conditions, which DEP will take into account in the design and operation of a chlorination/dechlorination system. DEP will also conduct an environmental review to consider, among other things, the potential impact of a disinfection system on Alley Creek's aquatic system.*

11. Coordination with MS4 and TMDL programs and reduction of other pollution sources.

Response:

- *DEP's MS4 and CSO LTCP's programs are closely coordinated with EPA and DEC's TMDL programs.*

12. The LTCP should maximize the use of cost-effective green infrastructure (GI) to reduce CSOs.

Response:

- *DEP's strategy is to utilize GI where it provides the highest benefits for water quality and other co-benefits for both public and private property retrofits in a cost effective manner.*

13. DEP should investigate illicit sewage discharges from CSO Outfall TI-024. DEP should investigate dry weather flows along Shore Road in Douglas Manor (possibly from home sewers).

Response:

- *Through its Compliance Monitoring Section and the Sentinel Monitoring Program, DEP regularly monitors the waters in and around New York City for evidence of dry weather discharges of sewage. Sentinel Monitoring Program sampling station S-1 is located at the mouth of Alley Creek. DEP also has an active enforcement program to compel compliance from sites with illegal connections to the sewer system.*

14. Improve Public Outreach.

Response:

- *Based on comments received, DEP has implemented several enhancements to its Public Participation Program including streamlining presentations and securing larger venues for meetings.*