

2019 Citywide/Open Waters LTCP Stakeholder Meeting

Summary of Meeting and Public Comments

On April 16, 2019, the New York City Department of Environmental Protection (DEP) hosted a public meeting to provide an update on the Citywide/Open Waters Combined Sewer Overflow (CSO) Long Term Control Plan (LTCP). Over 50 stakeholders from different non-profit, community, planning, environmental, economic development, and governmental organizations and the broader public attended the event, as did representatives from DEP and the New York State Department of Environmental Conservation (DEC). The two-hour event, held at the CUNY Law School in Long Island City, provided stakeholders with information on the following topics:

- Overview of LTCP Program and Citywide/Open Waters LTCP
- LTCP Milestone Status
- Public Outreach Update
- Update on Citywide/Open Waters Schedule
- Outline of the Citywide/Open Waters LTCP Executive Summary
- Overview of the Citywide/Open Waters LTCP Progress

Mikelle Adgate, DEP's Bureau of Public Affairs' Senior Advisor for Strategic Planning, opened the meeting with a welcome and introductions. She presented a general update on the LTCP program and public outreach, and an outline for the Citywide/Open Waters LTCP Executive Summary. DEP senior staff, Keith Mahoney and Pinar Balci, provided the overview of the Citywide/Open Waters LTCP Progress including an update on DEC Water Quality Standards (WQS) revisions, BMP regulator flow monitoring, collection system and water quality modeling, WQS attainment, and preliminary alternatives evaluations. DEP responded to questions from the audience following the presentation. Mikelle Adgate indicated that written comments on the presentation are due by May 17th. DEP will provide written responses to the questions asked during the meeting, as well as the written comments received.

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 stated that two CSOs are located near Bushwick inlet, where a park is being developed along with access to the water. The LTCP for Newtown Creek will result in increased overflows at these CSOs, and community testing shows high levels of bacteria in this area. What has DEP done for sampling in Bushwick inlet, and could more sampling be done?

A1: DEP referenced their website, which provides details of the sampling conducted under the Citywide/Open Waters LTCP. DEP did include near shore sampling sites in their Citywide LTCP program, which were used to calibrate and validate the water quality models. The LTCP is assessing water access points as part of the LTCP and may assess additional public access points based on feedback received at the public meetings and in subsequent comments. *DEP is moving ahead with improvements to the modelling and public notifications system and are currently running a beta version of the NYC Waterbody Advisory System that can be found on DEP's website. DEP intends to continue to seek to further refine its water quality advisories for public access points.*

Q2: An attendee asked when the water quality sampling was conducted and if Harbor Survey Monitoring (HSM) data for 2018 will be included in the analysis, given that 2017 was a relatively

dry year and 2018 was a wet year. The attendee felt that more recent years will be more representative of climate change.

A2: DEP stated that the Citywide/Open Waters sampling program was conducted in 2016 and 2017, and that 2018 HSM data is considered in the model calibration. The typical rainfall year used for modeling is the 2008 JFK rainfall, which remains a good representation of current average rainfall conditions. DEP selected the 2008 JFK rainfall as the typical year based on a statistical review of 30 years of rainfall records from four different gauges around the city. The average annual rainfall depth from 2010 to 2018 was less than the total annual rainfall from the 2008 JFK typical year rainfall. The LTCPs also evaluate performance over a 10-year rainfall period of 2002 to 2011, allowing for assessment over a range of rainfall conditions.

Statistic	Mean (1969-2010)	JFK 2008	Mean (2008-2018)
<i>Annual Rainfall Depth (inches)</i>	45.5	46.3	43.8
<i>July Rainfall Depth (inches)</i>	4.3	3.3	3.5
<i>November Rainfall Depth (inches)</i>	3.7	3.3	2.9
<i>Number of Very Wet Days > 2"</i>	2.4	3	2.1
<i>Average Peak Storm Intensity (inches/hour)</i>	0.15	0.15	0.06

Q3: An attendee mentioned that the Gowanus Canal project information included in the Improving New York City’s Waterways brochure should show that the tanks might be replaced with a tunnel.

A3: DEP acknowledged that the brochures were last updated in December 2018, and also acknowledged the recent discussions about a Gowanus Canal tunnel. The next version of the Improving New York City’s Waterways brochure will include this and other updates.

Q4: An attendee asked what the timeframe is for the \$5 billion investment, given that sea level rise will continue.

A4: DEP stated that DEP has design guidelines that they follow to consider sea level rise when planning/designing infrastructure. DEP completed the NYC Wastewater Resiliency Plan in 2013 and resiliency projects at the Wastewater Resource Recovery Facilities (WRRF) are being implemented now.

Q5: An attendee expressed concern that smaller waterbodies (e.g. Bowery Bay, Luyster Creek) are going to be “pushed under the rug” since they do not have groups specifically advocating for them. The concern is that they get lumped in with the larger open waters waterbodies, and the localized impacts will not be considered.

A5: DEP stated that the first 10 LTCPs targeted at the major tributaries, and the last LTCP will address the remaining Citywide/Open Waters waterbodies. The Citywide/Open Waters LTCP is intended to include these smaller waterbodies. This LTCP will look holistically at the Citywide/Open Waters waterbodies in terms of sensitive areas and access points. Ultimately, DEP is targeting CSOs that affect WQS.

Q6: An attendee noted that the city has distributed only \$14 million to private property owners through the GI Grant Program, and asked if the DEP thinks the current GI Grant program needs to change due to low participation.

A6: DEP stated that the GI Grant program is funded by capital funding, which requires a restrictive covenant that is not suitable for all properties. For this reason DEP has started a few new initiatives that will utilize expense funding, which does not carry the same restrictions, and allows DEP to aggregate the property applications and facilitate funding. A third-party administrator will implement the program and focus on aggregating large properties. The first initiative is for properties greater than 50k SF and the contract will include incentive payments to encourage the administrator to finish quicker. Through this program DEP is targeting 200 acres in 5 years at an incentive rate of \$250k/acre. The second initiative is called GIFT (Green Infrastructure for Tomorrow) for properties less than 50,000 square feet. This program is currently under development and funding will be requested for implementation. DEP is also working on developing a city-wide stormwater rule to provide additional stormwater management and resiliency.

Q7: An attendee asked what landside modeling entails, and whether or not it incorporates current and projected GI projects.

A7: DEP stated that the modeling process for the Citywide/Open Waters LTCP is the same as used in other parts of the City for the previous LTCPs. The models include the larger pipes, with runoff coefficients computed for each defined subcatchment area based on an assessment of impervious area. Current and planned GI is included in the models. DEP explained the process of area wide contracts for GI. Soil maps show where infiltration practices can be implemented. GI is then incorporated into the collection models to see what the CSO reduction would be.

Q8: An attendee asked how much rainfall GI captures, and could they capture larger rainfall events. The attendee stated that capturing a 1-inch storm is not enough.

A8: DEP stated that the GI Program plan is to achieve a 1.67 BG annual CSO reduction City-wide upon full implementation. That targeted CSO reduction is based on a variety of practices being implemented, including right-of-way (ROW) GI, which are typically designed for a 1-inch storm event and on-site GI, which are typically designed for events between 1-2 inches, depending on the opportunities available. DEP noted that the 1-inch storm is 90th percentile storm and trying to capture a larger storm makes implementation much more difficult due to the presence of underground utilities and other siting conflicts. DEP stated that on-site GI projects have the potential to capture larger storms because more space is typically available than in the ROW. DEP has some Cloudburst projects that are able of capturing a 4-inch storm event. Where space is available, DEP assesses the feasibility of increasing the dimensions of rain gardens to capture more stormwater and have implemented non-standard raingardens on public right of way where space is available.

Q9: An attendee stated that the Citywide/Open Waters Executive Summary is not sufficient, and they want to see the whole report prior to its submittal to DEC in March 2020. The attendee further stated that \$5 billion is not sufficient to do what is needed, and wants to see more GI and equitable rates. The attendee also asked if the water quality samples are weighted given the different timeframes that the sampling was conducted.

A9: DEP explained that a public meeting will be held in early 2020 so that the public can review and comment on the proposed recommendations prior to the LTCP submission to NYSDEC. This will include

the all green infrastructure built and planned with in the EROW watershed, including Tibbets Brook project. DEP also stated that the timing of the extensive water quality sampling was limited by schedule constraints necessary to complete the LTCP in accordance with the CSO Order schedule. The model is calibrated to the sampling data, and the model inputs of temperature, tide, bacteria die-off rates and rainfall account for the seasonal variations for periods that were not sampled.

Q10: An attendee asked if the Citywide/Open Waters LTCP will provide a spot-by-spot analysis of locations where recreation is occurring, particularly in locations were relocated CSO flows will increase.

A10: DEP stated that the resolution of the model grid was expanded in a number of areas along the shoreline, but they will have to check the resolution of the model in the specific areas questioned. The LTCP Appendices include the overflow volumes by outfall. DEP will evaluate ways to mitigate CSOs in sensitive areas and areas where volume is increased. DEP also said that it is willing to work with the public to identify recreation access points to include in this analysis.

Q11: An attendee asked if population projections in the model incorporate new zoning and how often it is updated.

A11: DEP explained that there is ongoing coordination with the Mayor's Office, the Department of City Planning and the Economic Development Corporation prior to and during all rezonings. Data and project plans are shared regularly to ensure that the most-updated information is being shared. DEP stated that some, but not all, rezoning is included in the LTCP models. DEP stated that population is reassessed every 5 years based on new demand projections. DEP also stated that redevelopment is an opportunity for stormwater management.

Q12: An attendee asked what DEP is doing about underground streams; whether they were trying to mitigate, or take advantage by diverting to them.

A12: DEP stated that they have not thought about diverting to underground streams. DEP indicated the question will be passed onto DEP's Bureau of Water and Sewer Operations (BWSO).