Long Term Control Plan (LTCP) Hutchinson River Meeting #2 on Alternatives - Summary of Meeting and Public Comments[1]

On September 9, 2014 DEP hosted the second of three public meetings for the water quality planning process for long term control of combined sewer overflows (CSOs) in the portion of the Hutchinson River within the boundaries of New York City. The two-hour event, held at the Co-Op City Community Center on Dreiser Loop in the Bronx, provided information about DEP's Long Term Control Plan (LTCP) development for Hutchinson River. DEP presented information on the LTCP process, the Hutchinson River watershed characteristics, and the status of engineering alternatives evaluations, and provided opportunities for public input. The presentation can be found at http://www.nyc.gov/dep/ltcp.

Approximately fifteen people from the public attended the event as well as representatives from the Department of Environmental Protection and the New York State Department of Environmental Conservation. The following summarizes the questions and comments from attendees as well as responses given.

Q. An attendee asked what rain data DEP used for evaluating the impact of existing plans and green infrastructure implementation.

A. DEP replied that the NOAA meteorological station at LaGuardia Airport was closest to the Hutchinson River, but that the Baseline used 2008 rainfall data from JFK Airport as the standard for comparison among alternatives. To further expand: during the model calibration process, the best available rainfall information is used to reproduce the *actual* conditions, whereas a standard rainfall data set is used throughout the city for evaluating alternatives under *typical* conditions. For actual conditions, a temporary rain gauge was installed in the Hutchinson River drainage area and was used for calibration. Calibration is the process of adjusting a model to reasonably reproduce *actual* conditions so that it can provide assurance in its future projections. Typical conditions are then applied to the calibrated model for different alternatives to determine how these potential future systems would perform under the same circumstances. Two sets of typical conditions are used: a 10-year period from 2002 through 2011 from the local NOAA rain gage (in this case LGA), and the 2008 precipitation year measured at JFK airport. That particular single year of data was determined to be most representative of expected average conditions in the 2040s citywide from 30 years of data from the four NOAA gages around the city (Central Park, LaGuardia Airport, JFK Airport, and Newark Liberty Airport) and the Climate Risk Information Report by the New York City Panel on Climate Change (NPCC).

Q. A resident of Co-Op City asked what the DEP would be doing to reduce floatables present in the waterways around Co-Op City. (Slide 21)

A. DEP replied that DEP was considering floatables control technology as part of the LTCP Alternative process.

[1] These notes have been edited after the meeting to provide additional clarification to some of the questions.

Q. An attendee asked for clarification on whether the estimated CSO reduction from green infrastructure and from the two storage tanks would be additive (i.e., 11% for one and 45% for the other would yield a 56% reduction combined).

A. DEP confirmed that this was the case, and noted that it would be necessary to evaluate the water quality impact of any CSO reduction to fully understand the benefit.

Q. An attendee observed that the water quality appears to improve as one progresses towards the mouth of the river but recalled that DEP stated that even complete elimination of CSO does not achieve water quality goals and asked why this might be the case.

A. DEP concurred with the premise of the question, and stated that this has to do with the physical characteristics of the river and tidal influence from the larger waterbody of the East River. DEP also noted that there is a balance that must be established between water quality goals and capital commitments in an era of tight budgets.

Q. An attendee asked what other sources were contributing to the non-attainment given the previous question.

A. DEP stated that all sources of pathogens are included in the modeling, including the inflow from Pelham Lake along with storm water and direct runoff loadings from both NYC and Westchester County. .

Q. An attendee asked whether DEP considered pollutants other than pathogens and dissolved oxygen (DO) in the LTCP.

A. DEP answered that only pathogens and DO are considered because the state water quality standards establish limits for these parameters. The attainment of protected uses is based on whether these limits are achieved, and the health of the waterbody is assessed based on whether it is protective of these uses.

Q. An attendee asked what month of the year experiences the most rainfall.

A. DEP explained that the long-term trends by month do not favor any particular month but in 2008 (the year used for alternatives evaluations) September was the wettest month.

Q. An attendee asked for the definition of an RTB.

A. DEP explained that an RTB is a retention treatment basin, a smaller tank that is used to remove floatables and settle out some of the larger particulates along with getting some CSO storage. Disinfection could also be included with these RTBs to reduce pathogen loadings.

Q. An attendee noted that the City of New Rochelle was forced to remove an RTB from service because it was not permitted.

A. DEP noted that nearly all alternatives rely on an existing, permitted outfall and that the SPDES permit would be updated to reflect a change in discharge characteristics if necessary.

Q. An attendee asked whether all disinfection alternatives include dechlorination.

A. DEP stated that they generally do, but that one alternative that relies on a long pipe to provide chlorine contact time was expected to not require dechlorination since the chlorine would naturally decay during the travel time within the pipe and we'd also be targeting lower chlorine residual concentrations.

Q. An attendee asked which of the outfalls on the Hutchinson River is a Tier 2 outfall.

A. DEP stated that HP-024 was listed as a Tier 2 outfall, and that it is the largest CSO outfall on the Hutchinson River.

Q. An attendee expressed concern regarding potential habitat impacts associated with the alternative that included the construction of a new outfall for HP-024.

A. DEP responded that environmental impacts are evaluated during the design stage, and that every effort to minimize these impacts through design modifications would be made at that time.

Q. An attendee asked what the benefit of the new long outfall for HP-024 was considering that it is not expected to have the same bacteria reduction of many of the other alternatives.

A. DEP stated that it is primarily its cost-effectiveness: cost of a long outfall is an order-of-magnitude lower than certain other alternatives discussed.

Q. An attendee asked whether floatables control facilities must be installed at the outfall or could be installed elsewhere.

A. DEP responded that floatables control facilities can be located right at the outfall, but they can also be installed upstream in the collection system, such as within a regulator chamber.

Q. An attendee asked whether the $20 million floatables control alternative was simply installing a boom.

A. DEP clarified that the $20 million concept was not a single boom, but two screening facilities, one each at HP-023 and HP-024.

Q. An attendee noted the large difference in cost between the RTB and disinfection options at HP-024 and asked whether all of that difference was pumping costs.

A. DEP stated that pumping costs are part of the difference, but the much larger portion of the difference is that the treatment pipe would have a much lower construction cost than the RTB.

Q. An attendee asked if an alternative did not achieve the forecasted goals, would DEP restart the process and identify a new alternative.

A. DEP stated that the process would not revert to the beginning, but design modifications would be considered that satisfy the requirements from DEC regarding CSO mitigation and address whatever problem was causing DEP to question the continuation of that alternative. DEP noted that anything they construct will likely be an improvement and will be subject to the environmental review process.

Q. An attendee asked about the basis of the delineation of the Hutchinson River downstream limit. The attendee noted that the Eastchester Bay beach clubs are thought of as being part of the Hutchinson River for some.

A. DEP stated that the CSO discharges in the Hutchinson River from the New York City line to roughly the Hutchinson River Parkway Bridge contribute to non-attainment of water quality standards in the waterbody, the mitigation of which is the goal of the CSO program. In Eastchester Bay, pathogen concentrations can trigger Health Department actions at the private beaches (e.g., beach closures, wet weather advisories) which have a different standard. In addition, the upper portion is confined and exhibits poor mixing characteristics and is more susceptible to non-attainment during wet weather. It was therefore appropriate for CSO planning purposes to define the Hutchinson River as DEP did, and include Eastchester Bay in the citywide LTCP phase with the ocean beaches where swimming will be the driving use for water quality goals.

Q. An attendee representing Save the Sound questioned the validity of the pathogen data presented and stated that her organization had found higher values at certain locations.

A. DEP requested that the attendee provide her data so that DEP may evaluate how they differ from DEP's. DEP data presented were geometric means, which contains a range of data values above and below the geometric mean, and would thus be likely to be lower than a single elevated value. Another way in which they may differ is that DEP data is taken at various depths and sampling locations in comparison to other data.

Q. An attendee asked how DEP planned to address floatables because this is the biggest water quality issue that residents experience. The attendee also suggested that the modeling should consider adding floatables, especially because the water quality as presented is otherwise not bad in the vicinity.

A. DEP acknowledged that these were valid concerns and reiterated that floatables control is being considered. However, it was noted that there are numeric standards that must be met for dissolved oxygen and pathogens, whereas the standard for floatables control is none in any amount. DEP also noted that there are other sources of floatables other than CSO, for example, trash on the streets gets washed into the catch basins or blows directly overland into the waterbody.

Q. An attendee noted that there is almost no access to the waterfront because of fences.

A. DEP stated that access issues do not fall within its purview and recommended that the local community reach out to their elected officials. It was also clarified that DEP's Green Infrastructure program works with the Parks Department, to incorporate green infrastructure in parkland where feasible.

Q. An attendee asked what occurs with the disinfection facility during the period of non-operation (i.e., outside the May-October window).

A. DEP stated that during this period there would be no disinfection during the period outside of the recreational season, and rain events would be untreated as they are presently.

Q. An attendee noted that New York City will be faced with meeting nutrient targets by 2017, and asked how the LTCP will be addressing nitrogen in particular.

A. DEP stated that nitrogen reduction is being addressed at several of the City's 14 waste water treatment plants (WWTP), and that the City is under consent decree to achieve nitrogen reduction targets on an enforceable schedule. In comparison to the 24/7 discharge of nitrogen from these plants, the episodic and comparatively small volume of CSO contributes a much less significant quantity of nitrogen to the surface waters of the Harbor and therefore for nitrogen, the focus has been on targeting the plant discharges.

Q. An attendee suggested that the CSO outfalls could be extended to below the marsh as a means of reducing the nutrient impact to the marshlands.

A. DEP stated this may be a good idea, but reiterated that non-CSO nitrogen load sources are much larger than the ones CSO discharges generate.

Q. An attendee asked why the ten planning areas are not in compliance.

A. DEP stated that the answers vary by waterbody, and are complicated by overlapping drainage areas and WWTP service areas (the Bronx River, Westchester Creek, and the Hutchinson River are all served by the Hunts Point WWTP). DEP indicated that they have already addressed the most cost-effective CSO reductions, such as Paerdegat Basin where all CSO from the Coney Island WWTP is discharged. DEP also pointed to urbanization, noting that Co-Op City itself was constructed on reclaimed marshland, so that the Hutchinson River no longer has the same ecological viability it once did regardless of CSO discharges.

Q. An attendee stated that research performed by the attendee indicates that wetland loss in the New York Harbor is driven by nitrogen, and that the Hutchinson River has lost 45% of its wetland area from 1974.

A. DEP noted that water quality is trending in the right direction and reiterated that CSO control would not reduce nitrogen in the system significantly. The NYCDEP is also under a nitrogen TMDL in which it is required to reduce all point and non-point sources (CSO and Storm Water) by 58.5%. To date the effluent nitrogen discharges into the East River and its tributaries has been reduced by about 50%.

Q. An attendee asked how the ten waterbody planning areas are prioritized in DEP's capital planning, and how the public might influence that weighting.

A. The schedule for the LTCPs has been established by DEC in the CSO Consent Order. DEP stated that attending public meetings, writing to DEP, email, and data sharing, helps DEP align its priorities with the public's priorities. DEP clarified that its capital program does not work as a fixed pot of money to be allocated among competing waterbodies; DEP identifies capital needs and raises money by issuing bonds. DEP does not receive federal money or other support, so these projects are ultimately funded by the rate payers.

DEP also announced that there will be a citywide public meeting at the end of the calendar year (and annually thereafter) to discuss prioritization of areas, among other topics. DEP also

announced that the Bronx River LTCP public kickoff meeting will be held in January 2015 for a June 2015 LTCP submittal.

Q. An attendee asked whether talks have begun between DEP and Co-Op City regarding green infrastructure.

A. DEP stated that they had begun, and that in the conversation with River Corporation (operators of Co-Op City) it was mentioned that most of Co-Op City is not served by combined sewers and is thus not eligible for certain funding and prioritization of green infrastructure build out. However, DEP noted that some of the buildings may be connected to storm sewers or otherwise influencing CSO discharges and may be good candidates for green infrastructure. DEP indicated that the discussions are ongoing.