



**Bronx River Alliance's Comments on the Long Term Control Plan  
June 16, 2015**

Thank you for the opportunity to comment on the proposed alternatives for the Bronx River Long Term Control Plan. The Bronx River Alliance serves as a coordinated voice for the river and works in harmonious partnership to protect, improve and restore the Bronx River corridor so that it can be a healthy ecological, recreational, educational and economic resource for the communities through which the river flows.

We appreciate the DEP's efforts at developing a series of six options for reducing CSOs in the Bronx River. There has been a tremendous amount of investment in the Bronx River over the past few years, including the recent installation of a fish passage at the 182<sup>nd</sup> Street dam to connect migratory river herring to the upstream freshwater habitat they require for spawning. The Alliance has been working with the New York City Parks Department and the Wildlife Conservation Society to assess baseline populations of American eels in the river, which are being considered for addition to the endangered species list. An experimental oyster reef has been installed at the mouth of the river, and the results so far have been promising, including the recruitment of native oysters. An increasing number of community members enjoy recreational activities such as boating and fishing, as well as year-round educational programming including water quality monitoring. To protect these extensive investments and the progress we have achieved, the plan should outline steps to reduce pathogens, maintain dissolved oxygen at levels that support aquatic life, control floatables and sustain zero discharge of chlorine into the river.

Nutrient Load and Dissolved Oxygen

The estuary section of the lower Bronx River is included on the 2014 303(d) list for dissolved oxygen, essential for protecting the ecological health of the river. This spring, high numbers of dead menhaden herring and turtles have been seen in the Bronx River as well as in waterbodies around the region. This has raised serious questions about excess nitrogen fueling algal blooms which in turn cause dissolved oxygen levels to plummet. Any option selected for the LTCP should reduce nutrient loadings that contribute to high oxygen demand and threaten wildlife. We therefore urge DEP to reduce combined sewage overflow volume as much as possible.

Chlorination

Absent the availability of studies analyzing disinfection impacts on river ecology, we are concerned about the impact of discharges of any residual chlorine on wildlife in the river. DEP has indicated that a study will be conducted on the management of discharges resulting from this type of treatment, with the results to be available in two years. We look forward to seeing the results of this study that will determine how well the discharges can be controlled and whether de-chlorination will be required to prevent chlorine from entering the water. However, without a complete understanding of the impacts

of chlorination on aquatic ecosystems, the discharge of residual chlorine into the Bronx River should be kept at zero. Furthermore, in considering chlorination as an option in the Bronx River Long Term Control Plan, we urge DEP to:

1. Perform daily monitoring using grab samples at all outfalls when disinfection is actively in use.
2. Conduct baseline ecological surveys of each area being treated at disinfection outfall to track any long-term effects of chlorination
3. Install de-chlorination facilities, if necessary, to maintain zero discharge limit
4. Reduce volume as much as possible to realize co-benefits such as reduced nutrient load discussed above.

### Green Infrastructure

The Bronx community has been an early advocate of green infrastructure from the beginning of DEP's program, supporting the benefits it provides for the entire watershed. In addition to the alternatives being proposed for the LTCP, green infrastructure opportunities should be broadened for the Bronx River, employing technologies beyond bioswales such as green roofs, pervious pavers, and incentivizing green infrastructure on private property. Expanding green infrastructure into upstream areas covered by MS4 permits will provide additional water quality benefits, along with co-benefits for the community such as cooling, air quality improvements and beautification.

Implementing the Long Term Control Plan represents a major investment in upgrading New York City's infrastructure, as well as an opportunity for providing community benefits. Instituting workforce requirements that promote training and hiring local workers will benefit the community by providing jobs and encouraging local stewardship after construction.

As currently proposed, DEP investment in green infrastructure represents a fraction of the cost to implement the alternatives being considered for the LTCP. Just imagine the impact of a \$65 million dollar investment in green roofs along the Bronx River. While both green and grey are good for the waterbody, green is better for the watershed and the community.