Bronx River Stakeholders request the New York City Department of Environmental Protection add this recommendation to the June 2007 Watershed Facility Plan, and continue to design and test a model implementing green infrastructure practices up to and including the adoption of a Long Term Control Plan.

We do not believe that the U.S. EPA's April, 2007 Green Infrastructure (GI) Statement of Intent could have been clearer as it relates to consideration of GI for CSO control. Given this national initiative, it is especially important that NY's Waterbody/Watershed Facility Plan and the LTCP for the Bronx River expressly address green infrastructure options including those already brought to the attention of DEP, DEC and their consultants and include cost/benefit analyses of these approaches along with the other hard infrastructure solutions already reviewed.

Recommendation: Recognize and employ green infrastructure as a best management practice for stormwater pollution abatement for the Bronx River.

Develop a model or demonstration program for the use of green infrastructure, soil infiltration and wetland based ecological management practices as a prominent component of the Long Term Control Plan for the Bronx River. The aims of this program will integrate the reduction of stormwater discharge with the enhancement of groundwater recharge, providing stormwater input into parks, street tree and other plantings by connecting hydrology, water quality and habitat of the river. Increased infiltration shall be accomplished through exploring these and other green infrastructure strategies to increase infiltration and connect upland and Bronx River hydrology throughout the watershed.

From our presentation of April 25, 2007 you can review the places and types of models. We suggest you concentrate on one sewershed/basin (*see map attached*) as a demonstration project which uses several of the BMPs listed below at a level enough to reduce storm water so at least half the CSO events are eliminated; and then to compare and contrast Green Infrastructure with conventional engineering.

- 1. Vegetated strips with below grade stormwater retention (i.e., Lafayette St.)
- 2. Green roofs
- 3. Street tree plantings with enhanced stormwater capture and storage (i.e., on city-owned land, such as along the edge of the Bronx River Park in Basin 007 from the city line to West Farms, approximately 11 miles on both sides.)
- 4. Downspout disconnects/ direct roof drains to rain gardens
- 5. Vegetated swales
- 6. Pocket wetlands as appropriate
- 7. Infiltration zones coupled with appropriate soils
- 8. Permeable pavement
- 9. Rain barrels and cisterns
- 10. Reforestation where appropriate
- 11. Drainage swales
- 12. Incorporating compost and mulch to maintain infiltration in parks and other green spaces.

Rationale for this Recommendation

The Bronx River Commission was established in 1907 to acquire the necessary lands, eliminate nuisance conditions and build the Bronx River Parkway as a joint undertaking between New York City and Westchester County. The river was so polluted that its waters were killing animals in the Bronx Zoo.

In 1909, the Bronx Parkway Commission reported that: "during the past year the Bronx River valley has, despite all the efforts of the Commission, suffered considerable injury in its natural features. The city growth is rapidly extending northward, property along the river is coming into the market, and the subdivision into smaller plots makes it more difficult to preserve the river bottom from devastation. Small nuisances are becoming more frequent upon the banks of the river, and the river itself is becoming more foul and polluted. Irreparable loss will result to the communities in Westchester County, through which the river runs, and to the citizens of New York who visit Bronx Park, the Botanical Gardens and the Zoological Gardens, unless steps are taken to preserve the river from further deterioration." [http://www.nycroads.com/roads/bronx-river/]

Although almost a century has passed and, despite the warnings and predictions, we still find ourselves with significant Bronx River water quality issues to address. To reverse a century of neglect, all practicable means including green infrastructure initiatives must be employed. It is time to recognize the Bronx River for the suburban/urban treasure that it is, reverse the trend and protect it for future generations.

For the reasons expressed in our presentation, and based on the information attached, we additionally request that all of the NYC Watershed Facility Plans incorporate Green Infrastructure BMPs. We also request that the NYS Department of Environmental Conservation suggest and request that the Westchester County Towns and Villages along the Bronx River Watershed/Sewershed also adopt Green Infrastructure as a BMP for CSO Abatement and/or other Non Point Source Pollution.

Please respond with your comments and recommendations.

Signed by:

Karen Argenti Dart Westphal Walter Matystik June 7, 2007

c: Suzanne Mattei, NYS DEC Region 2

