New York City
Department of Environmental Protection
Bureau of Water Supply

Section 4.9; East of Hudson Non-Point Source Pollution Control Program
Stormwater Infrastructure Capacity Evaluation

December 2010

Prepared in accordance with the July 2007 EPA Filtration Avoidance Determination

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Pursuant to the Section 4.9 of the July 2007 USEPA Filtration Avoidance Determination, the New York City Department of Environmental Protection (ñDEPò) provides the following report on the Stormwater Infrastructure Capacity Evaluation.

With the completion of the previously mandated digital mapping and inspection program, DEP has finalized its study to evaluate the adequacy of stormwater infrastructure located in proximity to four (4) East of Hudson CAT/DEL reservoir basins. The resulting report prepared by the Joint Venture of Malcolm Pirnie and Gannett-Fleming (ñJVò) is titled *"Stormwater Infrastructure Screening Analysis Summary of Results and Recommendations, April 2010"* (ñthe Reportò). As directed by DEP, the Report considers the adequacy of existing piping, swales, and drainage structures to safely convey stormwater to receiving waters and suggests potential improvements that may enhance water quality in the Boydôs Corner, Cross River, Croton Falls and West Branch drainage basins.

All available data was reviewed for accuracy and organized in a format which facilitated the incorporation of digital information into DEPôs existing Geographic Information Systems library. As previously reported, the pertinent stormwater conveyance mapping information has been shared with the municipalities/agencies responsible for maintenance of the identified drainage systems. Where necessary to perform the infrastructure assessments, the JV obtained additional ôas-builtô information from a limited number of random site inspections in each of the four (4) basins, and via the New York State Department of Transportation.

The Report includes the results of the infrastructure capacity analyses that were performed using current hydrologic computer modeling software. Software was employed to assess two (2) factors: capacity and the need for scour protection at conveyance outfalls. Criteria for prioritization of the assessed infrastructure were applied and a summary of the sites requiring further evaluation or repair is provided individually per municipality or agency jurisdiction. The Report includes recommendations concerning appropriate corrective measures and maintenance activities and, as such, the Report will be provided to the respective municipalities and agencies for their use and benefit.