

**FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT FOR THE
CROTON WATER TREATMENT PLANT
METHODOLOGIES**

4.	DATA COLLECTION AND IMPACT METHODOLOGIES	1
4.1.	INTRODUCTION	1
4.1.1.	Eastview Site.....	1
4.1.1.1.	Methodology Overview	1
4.1.1.2.	Combined Impacts	3
4.1.2.	Mosholu and Harlem River Sites	3
4.1.3.	Off-Site Facilities.....	3

TABLE 4.1-1:	PROJECTS THAT MAY BE LOCATED ON THE EASTVIEW SITE IN THE FUTURE WITHOUT THE PROJECT.....	2
--------------	---	---

4. DATA COLLECTION AND IMPACT METHODOLOGIES

4.1. INTRODUCTION

This chapter describes the data collection and impact assessment methodologies used to perform and interpret the impact assessments. Wherever applicable, the analyses used the methodologies outlined in the City of New York's 2001 *City Environmental Quality Review (CEQR) Technical Manual*, since the sponsor of the proposed Croton Water Treatment Plant project is a City agency (New York City Department of Environmental Protection [NYCDEP]). The *CEQR Technical Manual* methodologies were applied to the analyses conducted for the Harlem River and Mosholu Sites and off-site work locations including Jerome Park Reservoir and Gate House No. 1, as these sites are located within the City. The *CEQR Technical Manual* methodologies were also applied to proposed work locations in Westchester County; however, since the Eastview Site and off-site work locations, including Gate House Nos. 9, 14 and 18, are located outside of the City in Westchester County, locally and/or State accepted environmental assessment methodologies were applied in cases where the CEQR guidelines were either irrelevant or less stringent.

The Eastview Site has been proposed as the potential location for several NYCDEP projects, including the Catskill/Delaware Ultraviolet Light Facility (Cat/Del UV Facility), a NYCDEP Police Precinct, the Kensico-City Tunnel, and possibly an NYCDEP Administration Building. Although NYCDEP may undertake one or all of these projects at the Eastview Site, during the same general timeframe, the projects are functionally independent and they are not part of the same plan. The Eastview Site is the only location proposed for the Cat/Del UV Facility. In addition, the projects are subject to their own separate independent environmental reviews. The discussion below details the manner in which the Final SEIS analyzes all of the potential projects at the Eastview Site, to the extent to which information is available.

4.1.1. Eastview Site

4.1.1.1. Methodology Overview

Each impact assessment describes Existing Conditions, the Future Without the Proposed Project, and the Future With the Proposed Project (Potential Impacts), including operation and construction of the proposed Croton project. Where potential significant adverse impacts are identified in the Potential Impacts analysis, the assessment describes the proposed mitigation measures that would minimize or avoid the potential impacts to the maximum extent practicable. Wherever applicable, the Existing Conditions and Future Without the Proposed Project sections incorporate relevant data from other environmental assessment documents prepared by NYCDEP for projects on the Eastview Site or in the study area, and was updated, as necessary.

The Future Without the Project considers the anticipated peak year of construction and the first full year of operation (2010) for the proposed project. The peak construction year varies depending on the analysis, e.g., for most of the analyses the relevant peak year is 2008, but it is 2006 for the noise analysis. For each year, two scenarios are assessed: one in which the Cat/Del

UV Facility is not located on the Eastview Site and another in which the Cat/Del UV Facility is located on the site, specifically in the southeast corner of the site. By the peak construction year, two additional NYCDEP projects could be located on the Eastview Site, namely a police precinct and possibly an administration building¹. The police precinct may be located in the southwest corner of the Eastview Site. The administration building is less certain, however, as the Eastview Site is one of several properties currently being evaluated for use as a possible site for that particular building and a siting decision has not been made. In addition to these projects, NYCDEP's Kensico-City Tunnel may be under construction at the Eastview Site starting in 2009. Therefore, the 2010 analysis year considers the possibility of this project. All of these NYCDEP projects are analyzed in this Final SEIS to the extent to which information is available. They are all separate actions from the proposed project and will undergo their own separate independent environmental reviews.

Table 4.1-1 summarizes all of the NYCDEP projects that may be located on the Eastview Site in the Future Without the Project.

TABLE 4.1-1: PROJECTS THAT MAY BE LOCATED ON THE EASTVIEW SITE IN THE FUTURE WITHOUT THE PROJECT

Project	Location	Start/Completion Year	Status
Cat/Del UV Facility	Southeast corner of Eastview Site	Construction to start in 2005 with completion by 2009	Draft EIS released in May 2004.
East-of-Hudson Police Precinct	Southwest corner of Eastview Sit	Construction to start in 2005 with completion by 2006	Site plan application was submitted to the Town in 2003.
East-of-Hudson Administration Building	Location to be determined	Not available	NYCDEP is currently conducting a siting analysis. Eastview Site is one of several properties being considered.
Kensico-City Tunnel	Location to be determined	Construction may start in 2009; 15-year construction period	Feasibility study has been conducted, identifying three alternative alignments. No specific work sites have been identified, although the Eastview Site is likely to be a work site.

Notes: All of these projects would undergo separate and independent environmental reviews.

¹ The location of the Administration Building depends on the results of a siting evaluation which is currently ongoing. The Eastview Site is one of several properties currently being considered as a possible site, and no siting decision has been made. The siting decision will be evaluated and discussed as part of a separate independent environmental review.

4.1.1.2. Combined Impacts

Combined impacts are two or more individual effects on the environment that, when taken together, compound or increase other environmental impacts, which may rise to the level of significance. For the Eastview Site, the Final SEIS examines the potential combined impacts of all of the NYCDEP projects identified above. As compared to the traditional EIS format (e.g., Existing Conditions, Future Without the Project, Future With the Project), the combined impacts assessment considers each NYCDEP project as a “proposed action” or project and compares the combined incremental effects to a Future Without the Project condition where no development would occur on the Eastview Site. In other words, all of the NYCDEP projects are considered in the Future With the Project as opposed to the Future Without the Project.

4.1.2. Mosholu and Harlem River Sites

As was described above for the Eastview Site, each impact assessment describes Existing Conditions, the Future Without the Proposed Project, and the Future With the Proposed Project (Potential Impacts), including operation and construction of the proposed Croton project. Where potential significant adverse impacts are identified in the Potential Impacts analysis, the assessment describes the proposed mitigation measures that would minimize or avoid the potential impacts to the maximum extent practicable. Wherever applicable, the Existing Conditions and Future Without the Proposed Project sections incorporate relevant data from other environmental assessment documents prepared by NYCDEP for projects on the Eastview Site or in the study area, and was updated, as necessary.

The Future Without the Project considers the anticipated peak year of construction and the first full year of operation (2011) for the proposed project. The peak construction year varies depending on the analysis, e.g., for most of the analyses the relevant peak year is 2008, but for noise it varied between sites and analyses. It was 2006 for the stationary source noise analysis and 2007 for the mobile sources at the Mosholu Site, but it was 2006 for the stationary source noise analysis and 2009 for the mobile sources at the Harlem River Site. These differences are due to the differing construction conditions and the proposed use of barges to handle most of the construction traffic for the Harlem River Site alternative..

4.1.3. Off-Site Facilities

The assessment of potential impacts at the off-site facilities also is compared against the Future Without the Project for both construction and operation conditions. For the off-site facilities, which include the NCA, its related shafts, Jerome Park Reservoir, and ancillary facilities around Jerome Park Reservoir, few changes in conditions during operations are planned for most of the facilities. The methods then lead to the conclusion that no impacts would occur at these sites for operation conditions. Construction conditions are compared against the Future Without the Project for each facility.

In order to avoid unnecessary duplication of effort and to simplify the reporting of conclusions, some simplifying assumptions were made for the analyses at the off-site facilities. Most of the sites would have several different years during which construction would take place. For example, work at Shaft No. 14 in the Village of Ardsley could take place 2006-2007 and 2009-2010 for the work associated with a water treatment plant at either the Mosholu or Harlem River sites, but if the NCA is selected to convey treated water from the Eastview Site work would take place at this site from 2011-2015. The maximum work effort would take place for the work associated with the Eastview Site alternative and the required pressurization of the NCA, so the midpoint of this construction, 2013, was chosen for the analysis and this worst case analysis was applied to the other scenarios. In all cases the highest work activity was chosen to select the year of analysis so that the worst case impacts would be disclosed.