

# Chapter 12 : WATER AND SEWER INFRASTRUCTURE

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## A. INTRODUCTION

This chapter assesses the potential effects of the Proposed Action on the City's water supply, wastewater treatment, and stormwater management infrastructure in order to assure that these systems have adequate capacity to accommodate land use or density changes. According to City Environmental Quality Review (CEQR) Technical Manual, only projects that increase density or change drainage conditions on a large site require an infrastructure analysis. The Proposed Action would affect zoning regulations on a citywide basis and would result in changes to the height, bulk, and parking regulations for multi-family residential, inclusionary housing, affordable senior housing and long term care facilities. These changes warrant an assessment on determining the likelihood of impacts on water and sewer infrastructure.

## B. PRINCIPAL CONCLUSIONS

The Proposed Action would not result in significant adverse impacts on water and sewer infrastructure. In accordance with the *CEQR Technical Manual*, a screening analysis was conducted. Since the Proposed Action is a "Generic Action" and there are no specific development sites, to produce a reasonable analysis of likely effect of the Proposed Action, 27 representative development prototypes have been identified and used for analysis, as described in Chapter 2, Analytical Framework.

### **Water Supply**

The Proposed Action would not result in significant adverse impacts on water supply. The screening analysis concluded that the effects of the Proposed Action would not be great enough to warrant a preliminary analysis of water supply, and therefore would not result in significant adverse impacts to water supply.

### **Wastewater and Stormwater Conveyance and Treatment**

The Proposed Action would not result in significant adverse impacts on wastewater and stormwater conveyance and treatment. The preliminary assessment shows that the incremental development that may occur at any one prototypical development site would fall well below the CEQR thresholds except for the two prototypes. However, the increment is insignificant to result in any significant adverse impacts on wastewater and stormwater conveyance and treatment.

## C. SCREENING ANALYSIS

The Proposed Action is a "Generic Action", and there are no known developments at this time. To produce a reasonable analysis of the likely effects of the Proposed Action, 27 Prototypes were established as described in Chapter 2, Analytical Framework. In accordance with the methodology outlined in the *CEQR Technical Manual*, a screening analysis of the potential for the Proposed Action to affect the adequacy of the City's infrastructure systems has been performed.

### **Water Supply**

A preliminary water supply assessment would be required if a project results in an exceptionally large demand of more than one million gallons of water per day, including power plants, large cooling systems, or large developments. A preliminary water supply assessment would also be necessary if the project is located in an area that experiences low water pressure.

The Proposed Action is not expected to result in an exceptionally large demand of more than one million gallons of water per day and does not involve the development of a power plant, large cooling system, or large developments. As discussed in the description of the Proposed Action, most components of this proposal are not expected to induce development on a lot where development would not also be expected to occur as part of the No Action scenario. While the individual sites to which the Proposed Action would apply would be located throughout the city's five boroughs, and may potentially include areas that experience low water pressure, any incremental density is expected to fall well below the threshold. Therefore, the Proposed Action would not result in significant adverse impacts of water supply, and a preliminary assessment is not warranted.

#### ***Wastewater and Stormwater Conveyance and Treatment***

Although most projects would not require a preliminary assessment on wastewater and stormwater conveyance and treatment, the *CEQR Technical Manual* indicates that a preliminary assessment would be needed if a project is located in a combined sewer area and would exceed the following incremental development of residential units or commercial space above the predicted No-Action condition:

- (a) 1,000 residential units or 250,000 sf of commercial space or more in Manhattan; or
- (b) 400 residential units or 150,000 sf of commercial space or more in the Bronx, Brooklyn, Staten Island, or Queens.

A preliminary assessment would also be need if a project located in a separately sewered area and would exceed:

- (a) 25 residential units or 50,000 sq. ft. of commercial public and institution/community facility use in R1, R2, or R3 Zoning Districts;
- (b) 50 residential units or 100,000 sq. ft. of commercial public and institution/community facility use in R4, and R5 Zoning Districts; and
- (c) 100 residential units or 100,000 sq. ft. of commercial public and institution/community facility use in all remaining zoning designations, including C, M, and Mixed-use districts.

Analysis may also be warranted if a project is located is partially sewered or currently unsewered; or involves development on a site five acres or larger where the amount of impervious surface would increase; or involve development on a site one acre or larger where the amount of impervious surface would increase, and located in either Jamaica Bay watershed, or in certain specific drainage areas including: Bronx River, Coney Island Creek, Flushing Bay and Creek, Gowanus Canal, Hutchinson River, Newtown Creek, and Westchester Creek; or involves construction of a new stormwater outfall that requires federal and/or state permits.

As mentioned above, the Proposed Action is a "Generic Action," and there are no known potential or projected as of right development sites and, due to the Proposed Action's broad applicability, it is difficult to predict the sites where development would be facilitated. To produce a reasonable analysis of likely effect of the Proposed Action, 27 representative development prototypes have been identified for analysis. Prototypical analysis shows that the incremental development that may occur at any one prototypical development site would fall well below the thresholds described above except for the two prototypes. Prototypes 26 and 27 are assumed to be located in R4 and R5 zoning districts consecutively and would have an increment of 50 and 51 residential units, respectively, which are at or slightly above the 50 residential unit threshold if located in a separately sewered area. While it is difficult to predict the sites where the development may be facilitated by the Proposed Action, there is potential for some development at or above the thresholds to be located in a separately sewered area; however the effect of such minor incremental development is expected to be insignificant due to the following reasons:

- The Proposed Action is only expected to induce new development or affect the overall amount or type of development in a neighborhood on a very limited basis. While the individual sites to which the Proposed Action would apply would be located throughout the city's five boroughs but cannot be specifically identified for analysis purposes, most components of this proposal are not expected to induce development on a lot where development would not also be expected to occur as part of the No Action scenario.
- Separated sewer areas are primarily located along the waterways and account for less than 20% of the city.

- Partially sewerred and unsewerred areas are even less prevalent than separated sewer areas.
- In a scenario where either Prototype 26 or 27 would potentially be developed in a separated sewer area or a partially or unsewerred area, the construction of new sanitary sewers would be coordinated with the New York City Department of Environmental Protection and are heavily regulated under their site connection approval process.