

3.9 NATURAL RESOURCES

INTRODUCTION

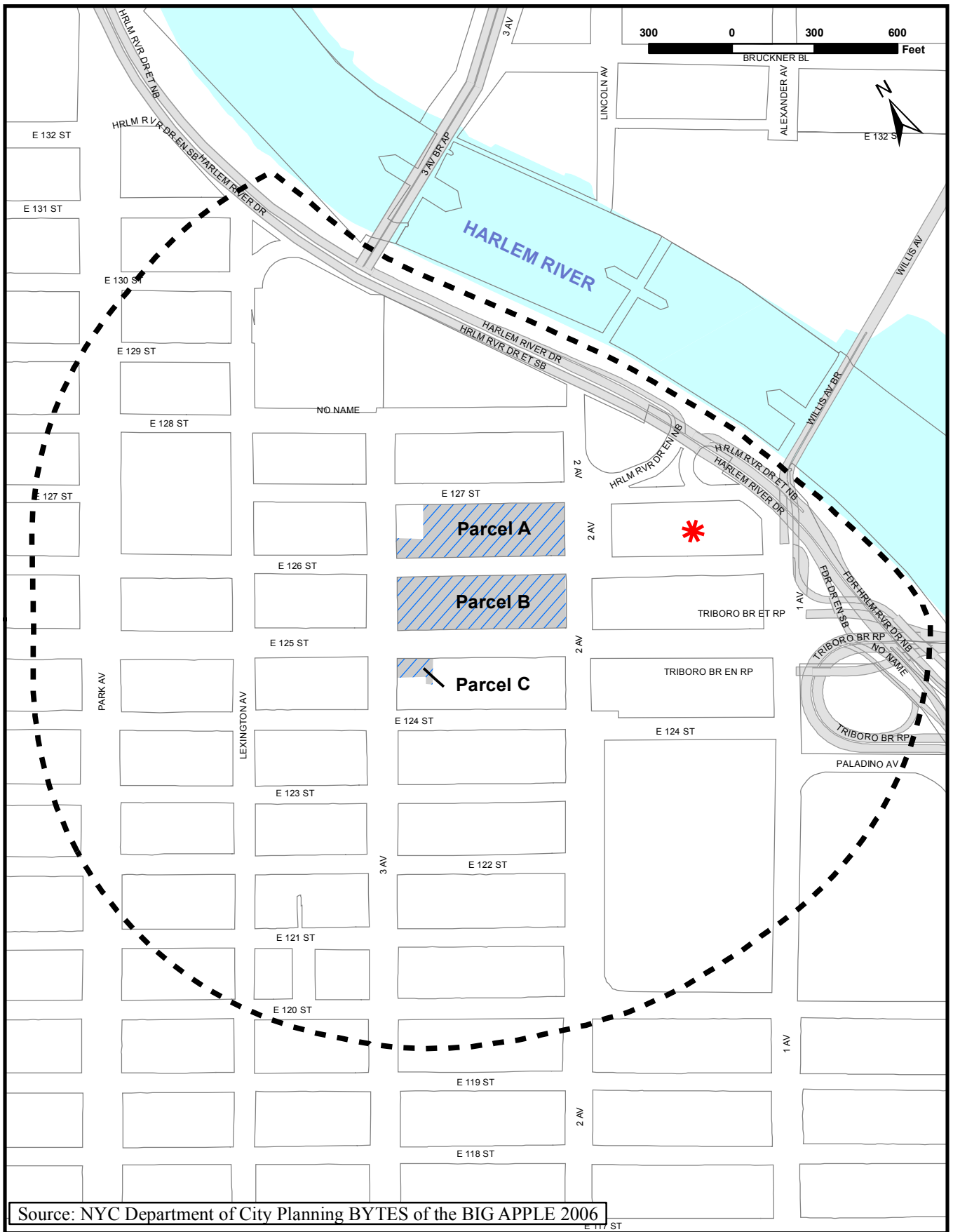
This chapter examines the potential for project-related impacts on natural resources. As defined in the *CEQR Technical Manual*, a natural resource is a plant or animal species, or any area capable of providing habitat for plant and animal species or capable of functioning to support environmental systems and maintain the City's environmental balance. Such resources include surface and groundwater, soils, drainage systems, wetlands, dunes, beaches, grasslands, woodlands, landscaped areas, gardens, and parks and built structures used by wildlife. An assessment of any given natural resource is appropriate if that natural resource exists on or near the site of the proposed action, or if an action involves disturbance of that resource.

The East 125th Street Development study area for natural resources comprises the project site as described in Chapter 2.0, Project Description, and surrounding areas within approximately ¼-mile. No portion of the project site is within the City's designated coastal zone. As the proposed East 125th Street Development would not result in any new development in the coastal zone, no assessment for conformity with New York City's Local Waterfront Revitalization Program is necessary.

The ¼-mile study area for assessment of natural resource impacts includes the area from approximately East 131st Street on the north to East 120th Street on the south, and from the FDR Drive on the east to Park Avenue on the west. Collectively, the project site and larger study area are referred to as the "study area" (see Figure 3.9-1).

The study area is urbanized and has been completely developed and disturbed, and neither contains natural features of significance, nor is adjacent to any natural resources. No habitat for rare, threatened or endangered species exists within the study area. The study area does not include any of the following ecological resources: surface waterbodies, wetlands, beaches, dunes, bluffs, thickets, significant grasslands, meadows, woodlands or forests. The *CEQR Technical Manual* lists a number of areas that contain natural resources designated by a governmental agency as significant, sensitive or worthy of protection: the study area is not located within or immediately adjacent to any of these natural resources areas.

As described in Chapter 3.10, the project site contains subsurface contaminants. Prior to redevelopment construction activities, the selected developer will perform additional investigation and remediation to complete the characterization of extant hazardous materials and identify the proper remedial and/or health and safety measures to be implemented during redevelopment.



Source: NYC Department of City Planning BYTES of the BIG APPLE 2006

Legend




-  Project Site
-  Approximate 1/4-mile Radius
-  MTA Bus Depot

Figure 3.9-1 - Natural Resources Study Area

*East 125th Street Development EIS
 NYC Economic Development Corporation*

3.9.1 EXISTING CONDITIONS

This section describes the existing conditions of the natural resources of the East 125th Street Development study area. Using guidance from the *CEQR Technical Manual*, potential areas of concern include surface water, ground water, floodplains, coastal resources, wildlife, wetlands, upland resources, built resources, and significant, sensitive, or designated resources.

Surface Water

Surface water in the vicinity of the study area includes the Harlem River to the east, separated from the project site by Second Avenue and the FDR Drive. The Harlem River is not a true river, as it has neither headwaters nor a mouth. Rather, it is a tidal strait, flowing eight miles between the East River and the Hudson River. The Harlem River separates the boroughs of Manhattan and the Bronx. The river course underwent significant modification as a shipping channel in the 19th century through realignment, landfilling, bulkheading and dredging. The edges of the river have also been modified with bulkheads and revetments to support roadways. Near the northern tip of Manhattan, a portion of the current course of the Harlem River, referred to as the Harlem River Ship Canal, runs somewhat south of the former course of the river, isolating a small portion of Manhattan (Marble Hill) on the Bronx side of the river.

Groundwater

Groundwater within Manhattan is not used for potable water supply. Reservoirs located in the Croton, Catskill, and Delaware watersheds provide potable water to Manhattan. Groundwater generally occurs within the unconsolidated sediments at average depths of 10 to 20 feet below ground surface. The groundwater sampling program conducted as part of the Phase II Environmental Site Investigation (ESI) described in Chapter 3.10 indicates depth to groundwater below the project site of approximately 15 feet below ground surface. For the Phase II ESI, groundwater samples were collected at six boring locations to identify the nature of groundwater. Estimated groundwater levels and/or flow direction(s) vary due to seasonal fluctuations in precipitation, local usage demands, geology, underground structures, or dewatering operations, but, as indicated in Chapter 3.10, groundwater is inferred to flow in an easterly direction towards the Harlem River.

Floodplains

Floodplains are defined as areas that are low enough in elevation to hold flood waters during significant storm events. Regulated floodplains are defined by the Federal Emergency Management Agency (FEMA) and include areas that flood during storms that have a one percent chance of occurring in any given year, which is equivalent to the likelihood of a storm occurring once every 100 years (100-year storm). The Federal Emergency Management Agency also maps the 500-year floodplain, but these areas are not regulated. At the local level, New York City's Local Law 33 of 1988 regulates construction in the 100-year floodplain and requires that habitable structures be flood-proof or elevated within the 100-year floodplain.

Figure 3.9-3 depicts FEMA's Flood Insurance Rate Map for the eastern portion of the project area and indicates that the extent of the 100-year floodplain north of East 124th Street is limited to the area adjacent to the Harlem River. A portion of the 500-year floodplain Zone B slightly touches on the upland area of Parcel A of the project site. Nevertheless, the proposed action is not expected to result in significant adverse impacts on floodplains.

Coastal Resources

As noted above, the East 125th Street Development project site does not fall within New York City's designated Coastal Zone. However, there are several blocks of the waterside portion of the ¼-mile study area that are located within New York City's coastal zone boundary as outlined by the New York City Department of City Planning (DCP). See Chapter 3.11, "Waterfront Revitalization Program." The following portions of the study area fall within the coastal zone boundary:

- North of the project site, from East 131st Street to East 128th Street between the FDR Drive and Park Avenue.
- East of the project site, from the FDR Drive to East 126th Street between First Avenue and Second Avenue. This area includes the adjacent MTA Bus Depot block and Harlem River Park blocks.
- East and south of the project site, from East 126th Street to approximately East 120th Street between the FDR Drive and First Avenue.

As defined in the *CEQR Technical Manual*, these portions of the natural resources study area are considered relative to the City's LWRP. However, the study area is not in the Significant Coastal Fish/Wildlife Habitat Designation; Wetlands/Erosion Hazard Area; or the significant Maritime/Industrial areas. The water quality goal is consistent for Fishing. Therefore, the study area is in none of the major LWRP categories.

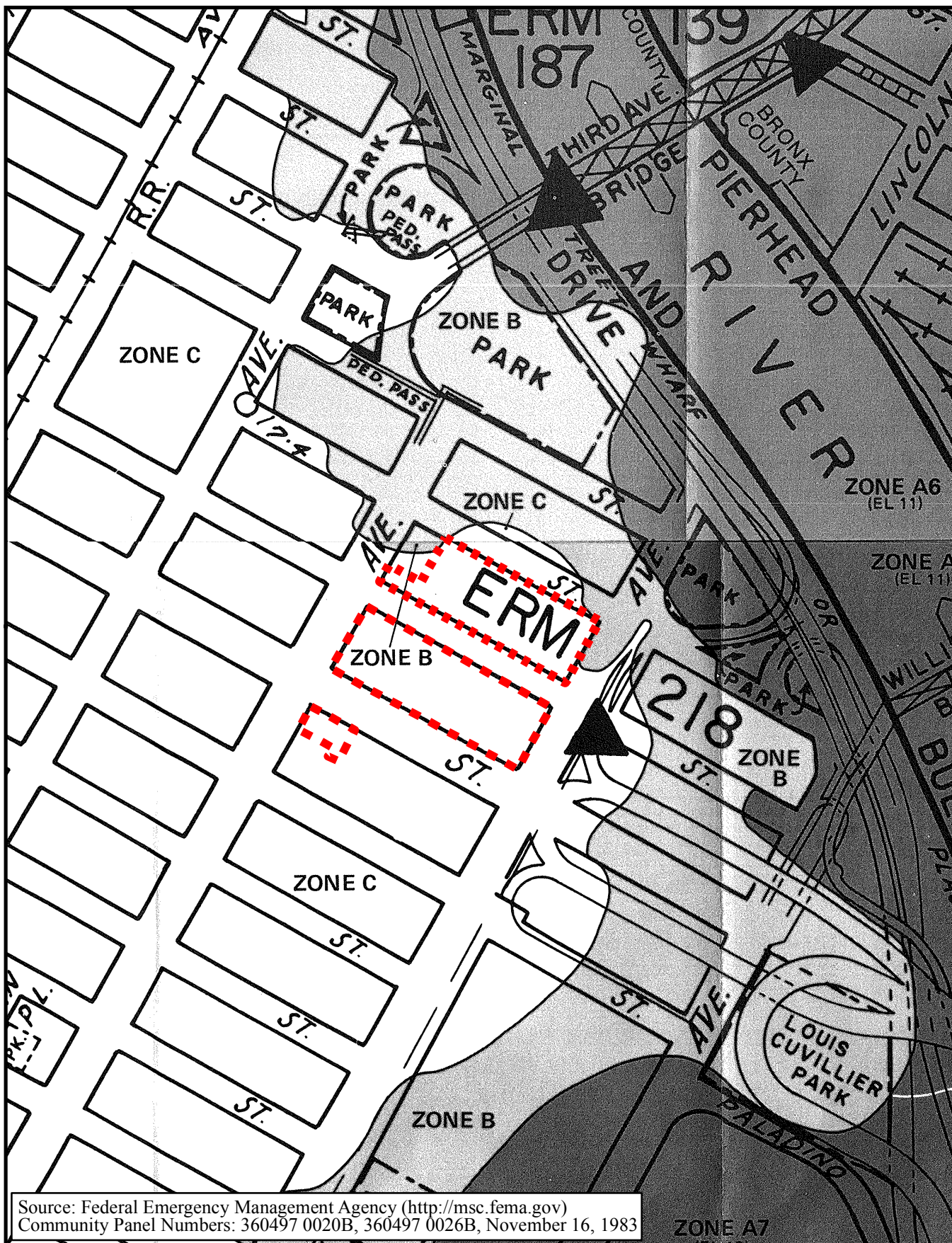
Wildlife

Wildlife species within the study area primarily consist of avian species found in and around the Harlem River. New York City is within an important migration corridor and provides stopover habitat for migrating birds. Surveys of migrating birds in open spaces in the metropolitan area have revealed a high abundance and diversity of such birds. However, the Harlem River area is not home to known nesting populations.

Both the New York State Department of Environmental Conservation (NYSDEC) and the United States Fish and Wildlife Service (USFWS) were contacted to ascertain the potential presence of species or habitat within the study area. No habitat for rare or endangered species exists within or adjacent to the study area. Coordination has been undertaken with both NYSDEC Natural Heritage Program and the USFWS. The New York State Department of Environmental Conservation has responded that they have no records of known occurrences of rare or state-listed animals or plants, significant natural communities, or other significant habitats, on or in the

immediate vicinity of the site (see Appendix C).¹



¹ Tara Seoane, NYCDEC, Information Services, New York Natural Heritage Program, letter dated June 13, 2007.



Legend

 Project Site

Flood Zones

-  Zone A - Areas of 100-year Flood
-  Zone B - Areas of 500-year Flood

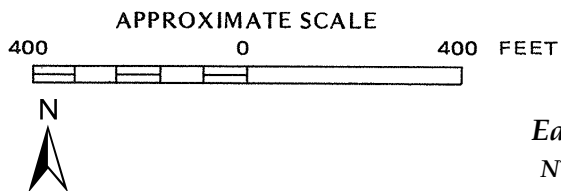


Figure 3.9-2 - Flood Insurance Rate Map

*East 125th Street Development EIS
 NYC Economic Development Corporation*

Upon direction of the U.S. Fish and Wildlife Service (see letter in Appendix C)², the most recent listing of Federally Listed Endangered and Threatened Species and Candidate Species in New York (by County) was examined. According to the listing, it was determined that no Federally-listed or proposed endangered or threatened species under the jurisdiction of the USFWS are known to exist within the project impact area.

Wetlands

According to NYSDEC freshwater and tidal wetland maps³ and the USFWS National Wetland Inventory Maps³, there are no freshwater wetlands or tidal wetlands located within the study area.

Upland Resources

Upland resources include all natural areas that are not water or wetland resources. These encompass a variety of habitats that are generally defined by vegetation types. The proposed project area and adjoining area by the Harlem River shoreline support little vegetation, as most of the area has been developed or is comprised of impervious surfaces. Similar to conditions in most other areas of Manhattan, existing vegetation includes predominantly ornamental and invasive tree/shrub species that do not provide habitat for wildlife species other than typical urban species (e.g., mice, rats, pigeons). Upland resources in the study area include only one park that is outside of the study area, but within several blocks of the project site. This is the 20.2-acre Marcus Garvey Memorial Park, bounded by Madison Avenue/Mount Morris Park East on the east, Mount Morris Park West on the west, and extending from East 120th to East 124th Streets. The park is landscaped and has expanses of mature trees, and its rock outcropping has been preserved. Its facilities include a number of structures and recreational improvements, including a community center and child health station.

Built Resources

There are no piers, waterfront structures, old piers, pile fields, ruins, beach protection structures or flood protection structures located within the study area. Within the study area, the Harlem River is bulkheaded, exhibiting multiple conditions, including sheet piling, rip-rap and gabion bulkheading somewhat north of the study area.

Significant, Sensitive, or Designated Resources

According to the *CEQR Technical Manual*, there are no Significant, Sensitive, or Designated Resources within the project area, but the study area is adjacent to certain limited resources. State and federal interest is generally focused on the City's coastal areas, but the City also

² Steven T. Papa, Senior Fish & Wildlife Biologist, USFWS, letter dated July 20, 2007.

³ New York State Department of Environmental Conservation, Digital 1974 Tidal Wetlands Inventory, twi.ligis.org.

⁴ U.S. Fish & Wildlife Service, National Wetland Inventory, www.fws.gov/nwi.

recognizes a number of upland areas as having significant value. In addition to waters, as discussed below, such resources include the Jameco and Magothy aquifers, coastal resources, the Gateway Natural Recreation Area, Jamaica Bay and other State Significant coastal fish and wildlife habitats that are designated significant, sensitive or worthy of protection. None of these resources, surface water resources, or coastal resource are located near the project study area.

There are no known state or federally listed or proposed endangered or threatened species in the area, except for occasional transient individuals. In addition, there is no habitat under provisions of the Endangered Species Act that is under the jurisdiction of the USFWS, or designated or proposed habitat within the study area.

3.9.2 FUTURE WITHOUT THE PROPOSED ACTION

As the project site and upland areas of the study area are generally urbanized and largely devoid of natural resources, development under the Future Without the Action within the study area would not be expected to result in significant adverse impacts on the condition of natural resources in the study area. Chapter 3.1, Land Use, Zoning and Public Policy, provides a description of developments expected to occur by the 2012 anticipated year of completion. The most significant among these for the purposes of natural resources assessment would be DCP's adjacent 125th Street Rezoning and Related Actions project.

As no significant natural resources exist on the project site or within the study area, new developments and other changes in the future without the proposed action would not result in significant adverse impacts on groundwater, floodplains, coastal resources, wildlife, wetlands, uplands, built resources, and significant, sensitive, or designated resources.

Potential Effects of Tall Structures on Migratory Birds

Avian nighttime collisions with buildings and towers are more common than daytime collisions. Most species of migratory birds use the stars to navigate at night, and brightly illuminated buildings and broadcast towers attract birds, particularly when poor weather conditions cause birds to fly at lower altitudes. The height or altitude of migration is an important factor in the determination of the potential for collisions with structures. Migration altitudes vary depending on species, location, geographic features, season, time of day, and weather⁴. According to published reports, approximately 75 percent of neotropical migratory birds fly at altitudes between 500 and 6,000 feet during migration. Shorebirds generally migrate at altitudes of between 1,000 and 13,000 feet⁵.

In the future condition without the proposed action, the existing zoning controls of the project site would remain in place and the existing MTA bus storage facility would remain at-grade on Parcel A. The existing mapped zoning districts on the project site and in its surrounding vicinity

⁴ Evans-Ogden, 1996; *also* Jason Jones, Charles M. Francis (2003) The Effects of Light Characteristics on Avian Mortality at Lighthouses, *Journal of Avian Biology*, 34 (4), 328–333.

⁵ *Ibid.*

include a C4-4 general commercial district, a M1-2 low density manufacturing district, and the R7-2 general residential district. None of these districts have a building height maximum, and towers for the highest density district (C4-4) could reasonably be expected to exceed 360 feet in height. Structures of this height and greater could result in a strike hazard for migratory birds. However, to the extent that the height characteristics of other new developments are known within the study area, the number of collisions and resulting bird mortality is expected to be insignificant when compared to the total numbers of birds migrating along the Atlantic Flyway.

3.9.3 FUTURE WITH THE PROPOSED ACTION

Because it is located in an urbanized area that does not contain significant natural resources, the East 125th Street Development is not expected to result in significant adverse impacts on natural resources. The larger study area neither contains natural resources of significance, nor -- with the exception of the somewhat distant Marcus Garvey Park, and the Harlem River immediately adjacent to the study area -- is it located adjacent to natural resources of significance.

Groundwater

As presented in Chapter 3.10, groundwater resources of the project site were evaluated as part of the assessment of hazardous materials pursuant to preliminary screening criteria contained in Title 15, rules of the City of New York, Chapter 24, Section 4, and Hazardous Materials Appendix 5 of the *CEQR Technical Manual Appendices*. A Phase II Environmental Site Investigation (ESI) was prepared by STV, Inc., in July 2007 to investigate areas of environmental concern identified in a Phase I ESA prepared by Metcalf & Eddy, Inc., and dated November 2006. A Phase II ESI Work Plan identified the methods for investigation in the Phase II ESI and characterization of site soils and groundwater, potential USTs, and subsurface soil vapor, and also described quality assurance/quality control (QA/QC) protocols to be followed during the investigation activities. Three general areas of environmental concern were identified as a result of the Phase II ESI, dated July 6, 2007, as follows:

- Environmental impacts to the project site due to the known petroleum spill associated with an active gasoline station at 255 East 125th Street (Block 1790, Lot 24);
- The presence of two former gasoline USTs at the northeast corner lot of Third Avenue and 126th Street (southwest corner of Block 1791); and,
- Presence of soil vapor attributed in part to the dry cleaners at 2315 Third Avenue (Block 1790, Lot 46), the gasoline station at 255 East 125th Street, and any other similar off-site nearby potential sources.

Under conditions with the proposed action, the developer would be obliged to prepare and submit plans for site remediation, for NYCDEP approval. Along with these plans, a Site Management Plan (SMP) and a Construction Health and Safety Plan (HASP) would be required, in accordance with standard industry practice. In addition, it is expected that the selected

developer would apply for inclusion in the NYSDEC Brownfields Cleanup Program (BCP), and would also be required to prepare the documentation required by NYSDEC and the New York State Department of Health (NYSDOH) to support that application. Remediation efforts required for the project sites are described in Chapter 3.10, including additional soil and groundwater investigations; removal of former gasoline USTs in accordance with NYSDEC tank closure regulations; inspection of existing buildings by a licensed asbestos inspector and identification and removal of Asbestos Contaminated Materials (ACMs) prior to demolition in accordance with applicable federal, State, and local requirements; and, inspection of existing buildings prior to demolition for the presence of lead-based paint (LBP), to be removed and disposed of as required by the Occupational Safety and Health Administration (OSHA). Additionally, in accordance with industry practice, incorporation of soil vapor barriers or other vapor mitigation procedures is recommended for new buildings. Other recommended practices include characterization of soils if shallow soils are excavated during construction activities and identification of material handling requirements, and waste disposal requirements in accordance with federal, state and local regulations; capping at-grade landscaped areas with at least two feet of certified clean fill cap; sampling of groundwater at the locations of dewatering and identification of pretreatment assessed prior to discharge to the sewer; and, adherence to a SMP and a HASP.

Potential Effects of Tall Structures on Migratory Birds

As noted in the previous sections, avian nighttime collisions with buildings and towers are more common than daytime collisions. Most species of migratory birds use the stars to navigate at night, and brightly illuminated buildings and broadcast towers attract birds, particularly when poor weather conditions cause birds to fly at lower altitudes. The height or altitude of migration is an important factor in the determination of the potential for collisions with structures.

With the Proposed East 125th Street Development, more restrictive building height limitations would be established. The proposed maximum building height of 210 feet would be substantially less than that which could be allowed under existing conditions or conditions in the future without the action. While there would continue to be a strike hazard for migratory birds, it is likely that, with the proposed East 125th Street Development, the opportunity for strike hazard would be substantially reduced in comparison to development that might otherwise be allowed pursuant to existing zoning.

Built Resources

The proposed action does not include any projected developments that would modify existing waterfront structures nor, does it have the potential to have such effects. As such, no impacts to built resources that are important to the natural environment are anticipated.

Significant, Sensitive, or Designated Resources

Threatened and Endangered Species

As noted under Section 3.9.1, Existing Conditions, there are no known state or federally listed or

proposed endangered or threatened species in the project area, except for occasional transient individuals. In addition, no habitat within the study area is under provisions of the Endangered Species Act, under the jurisdiction of the USFWS, or is designated or proposed as a critical habitat.

Additionally, no construction activity in the Harlem River is proposed as a result of the proposed action. Therefore, no significant impacts to surface water quality or impacts to threatened or endangered species within the nearby Harlem or East Rivers would result from the proposed action.

Essential Fish Habitat (EFH)

With no construction within the Harlem River resulting from the proposed action, no direct impact on EFH is anticipated.

Since no significant natural resources exist on the project site or within the study area, the proposed action would not be expected to have any significant impacts on natural resources. The development sites are located in upland, urbanized areas already occupied by buildings, structures and paved areas. New developments and other changes in the future with the proposed action in the project study area are not expected to have any significant impacts on natural resources, including ground water, floodplains, coastal resources, wildlife, wetlands, uplands, built resources, and significant, sensitive, or designated resources.