Roberto Clemente State Park Shoreline and Park Improvements

Environmental Assessment

New York State Homes and Community Renewal

GOVERNOR'S OFFICE OF STORM RECOVERY

August 6, 2014

Roberto Clemente State Park
Shoreline and Park Improvements

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Project Name:	Roberto Clemente State Park Shoreline and Park Improvements	
Project Location:	Roberto Clemente State Park, Corner of West Tremont Avenue and Matthewson Road	
HTFC SHARS #:	N/A	
Federal Agency:	US Department of Housing and Urban Development (HUD)	
Responsible Entity:	New York State Homes and Community Renewal	
Responsible Agency's Certifying Officer:	Thomas J. King, Legal Counsel and Certifying Environmental Officer	
Project Sponsor:	New York State Office of Parks, Recreation, and Historic Preservation (OPRHP)	
Primary Contact:	Mr. Marc Talluto, Director of Operations	
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Project NEPA Classification:	24 CFR 58.36 (Environmental Assessment)	
Environmental Finding:	☒ Finding of No Significant Impact - The project will not result in a significant impact on the quality of the human environment.	
	☐ Finding of Significant Impact - The project may significantly affect the quality of the human environment.	
	The undersigned hereby certifies that New York State Homes and Community Renewal has conducted an environmental review of the project identified above and prepared the attached environmental review record in compliance with all applicable provisions of the National Environmental Policy Act of 1969, as amended (42 USC Sec. 4321 et seq.) and its implementing regulations at 24 CFR Part 58.	
	Thomas J. King	
Environmental Assessment Prepared By:	AKRF, Inc. 7250 Parkway Drive, Suite 210 Hanover, MD 21076	Carter Ledyard & Milburn LLP Two Wall Street New York, NY 10005

TABLE OF CONTENTS

Project Description 1
Background 1
Purpose and Need for the Proposed Project 2
Existing Conditions on the Project Site and Potential Impacts 2
Construction/implementation of the Proposed Project 13
Summary of Findings and Conclusions 14
Conditions for Permit Approval 17
List of Sources, Agencies, and Persons Consulted 18
Literature Cited 19
Environmental Assessment Checklist 21
Compliance with Statutes and Regulations listed at 24 CFR 58.6 26
Compliance with Statutes and Regulations listed at 24 CFR 58.5 27
Determination 33

FIGURES

Figure 1: Project Location USGS Topographic Map
Figures 2 through 4: Site Plans
Figures 5 through 15: Representative Photographs—Natural Resources
Figure 16: FEMA Effective FIRM Flood Hazard Areas
Figure 17: FEMA Preliminary Work Maps Flood Hazard Areas
Figure 18: NYSDEC Wetlands
Figure 19: NWI Wetlands
Figure 20: Coastal Barrier Resources System
Figure 21: Airports in the Vicinity of the Project Site

APPENDICES

Appendix A: SEQR Environmental Assessment Form and Attachments
Appendix B: USACE Permit
Appendix C: NMFS, USFWS, and NYSDEC Correspondence
Appendix D: SHPO and Tribal Correspondence
Appendix E: NYSDOS and NYCDCP Correspondence
Appendix F: Floodplain Management Documentation
Appendix G: General Conformity Determination

PROJECT DESCRIPTION

The New York State Office of Parks, Recreation and Historic Preservation (OPRHP) is proposing improvements within an approximately 16-acre portion of Roberto Clemente State Park (project site), located on the eastern shore of the Harlem River just north of West Tremont Avenue and west of the Major Deegan Expressway in the Bronx, New York (**Figure 1**).

Improvements to be funded with up to $46.5 million of Community Development Block Grant – Disaster Recovery (CDBG-DR) program funds would include replacement of the existing sheet pile bulkhead that is in critical condition and reconstruction of the adjacent esplanade; creation of a tidal/intertidal habitat from uplands as part of the bulkhead replacement; enhancements to the Lower Plaza area that will reduce hardscape and improve it as a public gathering space; repair of the south stair entrance; regrading and replanting with native plant species on portions of the remaining shoreline that is not stabilized with sheet pile.

Other improvements include refurbishment of the existing natural turf baseball field; construction of a new artificial turf baseball field; construction of an artificial turf athletic field; construction of a natural turf soccer field; rehabilitation of the maintenance building and adjacent plaza; and upland placement of clean soil suitable for landscaping to improve the southern pedestrian entrance to the Park from the existing riverfront trail.

Collectively these improvements are referred to as the "Proposed Project." (See **Figures 2, 3 and 4**).

BACKGROUND

Roberto Clemente State Park is a 25-acre park with 3,700 linear feet of waterfront along the Harlem River. Approximately 2,000 linear feet of the waterfront is bulkheaded, and the remainder consists of unstructured revetements and rip rap shoreline. The bulkhead at the center of the Park provides coastal defense for extensive park infrastructure; the adjacent River Park Towers residential complex that is home to about 5,000 residents in 1,600 units; two public school buildings serving 650 elementary and middle school students; and a major power transmission line serving the Bronx. As such, it is an essential component to protecting lives and infrastructure from the impacts of severe storms, flooding, wave and tidal action.

The Park experienced about three feet of flooding over the top of the bulkhead during Superstorm Sandy. Following the storm, inspection of the 40-year old bulkhead revealed severe corrosion and loss of backfill beneath the park esplanade. The condition has led to the closing of the esplanade to pedestrians and emergency vehicles that use it to respond to emergencies at the River Park Towers complex or on the Harlem River. Along the Park's shoreline north of the bulkhead, the unstructured revetment also experienced significant erosion, with the shoreline receding closer to the adjacent recreational facilities. In addition, electrical infrastructure and lighting throughout the Park, including in the Park's Lower Plaza and esplanade, were destroyed by salt water flooding.

The Proposed Project will enable OPRHP to rebuild the bulkhead with a more resilient design and enhance the adjacent esplanade area. The redesigned waterfront will provide enhanced flood protection; storm resilience and green infrastructure. The outdated esplanade will be rehabilitated into a more park-like setting, featuring new plantings and a scenic 9,000-square-foot inter-tidal area to provide natural habitat and absorb heavy rainfall. The funds will also stabilize 1,400 feet of eroded shoreline located directly north of the bulkhead, protecting park facilities including baseball fields and recreational fields. This project will provide for a resilient shoreline and park facilities, and restore tidal wetlands that help mitigate floodwaters.

The Governor's Office of Storm Recovery (GOSR), operating under the auspices of New York State's Office of Homes and Community Renewal's Housing Trust Fund Corporation, is the responsible entity for

direct administration of the U.S. Department of Housing and Urban Development (HUD) Community Development Block Grant – Disaster Recovery (CDBG-DR) program. GOSR's decision whether to provide CDBG-DR funding for the application is a discretionary action which requires review under the National Environmental Policy Act of 1969 (NEPA) pursuant to 24 CFR Part 58 and the State Environmental Quality Review Act (SEQRA). This Environmental Assessment (EA) is being prepared to assist GOSR in its determination whether to grant funding to OPRHP for the proposed project. As part of this project, GOSR is undertaking the decision making process required by Executive Order 11988 in accordance with HUD regulations at 24 CFR 55.20 (*Subpart C - Procedures for Making Determinations on Floodplain Management*) to determine the potential effect that the proposed project would have on the 100-year floodplain encompassing the project site. OPRHP prepared the Environmental Assessment Form (EAF) as the lead agency under SEQRA. The EAF is included as **Appendix A** to this EA.

OPRHP has submitted a permit application and supplemental materials to NYSDEC, which are currently under review, and has received a permit from the United States Army Corps of Engineers (USACE); this permit is included in **Appendix B**. As part of its permitting process, OPRHP consulted with the United States Department of the Interior Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS), as required by Section 7 of the Endangered Species Act of 1973. AKRF, on behalf of GOSR and OPRHP, corresponded with USFWS, NMFS and NYSDEC with respect to threatened or endangered species for SEQR; this correspondence is included in **Appendix C**. Subsequently, due to the more recent consideration of the Northern long-eared bat as a candidate species for the federal endangered species list, OPRHP consulted with NYSDEC, the State Fish and Wildlife Agency with authority under State Law and Federal Authority under Section 6 of the Federal Endangered Species Act to manage federally-listed species. GOSR has considered the information provided by USFWS, NMFS, and NYSDEC as part of this EA. The New York State Department of State (NYSDOS) has also made a determination about the project's consistency with the state's Coastal Management Program; and the New York City Department of City Planning (NYCDCP) has made a determination with respect to the project's consistency with the City's Waterfront Revitalization Program. NYSDOS and NYCDCP correspondence is included in **Appendix E**.

Finally, documentation of the 8-step decision-making process required by 24 CFR 55.20 to determine whether alternatives to construction within the floodplain would meet the purpose and need of the proposed project is included in **Appendix F**.

PURPOSE AND NEED FOR THE PROPOSED PROJECT

The purpose of the Proposed Project is to improve the Park's resiliency to future storm events, ensure the stabilization of the shoreline, allow the re-opening of the closed esplanade following bulkhead repairs, improve recreational facilities offered within the Park, enhance the visitor experience along the shoreline of the Harlem River, enhance the benthic habitats present within the Park, and create environmental education opportunities.

EXISTING CONDITIONS ON THE PROJECT SITE AND POTENTIAL IMPACTS

Roberto Clemente State Park is an approximately 25-acre open space owned and operated by OPRHP. The Park opened in 1973 as the Harlem River Bronx State Park and was later renamed after Roberto Clemente, the first Latino-American inducted into the Baseball Hall of Fame. The Park is bounded to the west by the Harlem River, to the east by the railway tracks of Metro North's Hudson line, and to the south by the recently built Bridge Park. Access to the Park is provided by two bridges over the railway tracks and Major Deegan Expressway: the Harlem River Park Bridge and the West Tremont Avenue Bridge, and from the south by the waterfront trail developed as part of Bridge Park.

The northern portion of the project site contains a waterfront pathway; the Lower Plaza area with gazebo, picnic, and barbeque areas; two ball fields; and a maintenance building. In the southern portion of the site, amenities include a concrete waterfront promenade that is in poor condition and an open field south of the River Park Towers residential development. Amenities within the Park but outside of

the project site include basketball courts, a playground, a swimming pool complex, a non-motorized boat launch and a recreation building that contains a gymnasium, fitness room, locker rooms, classrooms, a conference room, and a game room.

CULTURAL RESOURCES

The Park was constructed on relatively recent landfill. There are no known or potential archaeological or architectural resources on the project site. The Proposed Project would therefore have no effect on cultural resources. This determination was confirmed by State Historic Preservation Office (SHPO) in correspondence dated July 1, 2014 (see **Appendix D**). Tribal Historic Preservation offices of the Mohican Tribe, Delaware Tribe, Delaware Nation, and Shinnecock Tribe concurred with SHPO's findings of no effect on cultural resources (see **Appendix D**). OPRHP has prepared an Unanticipated Discoveries Protocol for the Proposed Project to be implemented should new or additional cultural resources be found after construction has begun on the Proposed Project (see **Appendix D**).

NATURAL RESOURCES

Ecological communities of the project site would be best described as "terrestrial cultural," which are those that are "either created and maintained by human activities, or are modified by human influence to such a degree that the physical conformation of the substrate, or the biological composition of the resident community is substantially different from the character of the substrate or community as it existed prior to human influence" (Edinger et al. 2002). There are several subsystems of this community and a small number of these are present within the project site including mowed lawn, mowed lawn with trees, flower/herb garden, and paved road/path (see Figures 5 through 15). With the exception of a southern successional hardwoods community along the shoreline, all of these subsystems are associated with landscaped portions of the Park.

Birds observed during the field investigation are extremely common, disturbance-tolerant, urban species including European starling (*Sturnus vulgaris*), American robin (*Turdus migratorius*), house sparrow (*Passer domesticus*), Canada goose (*Branta Canadensis*), rock pigeon (*Columbia livia*), double-crested cormorant (*Phalacrocorax auritus*), and a mallard (*Aix sponsa*) with chicks. All but the double-crested cormorant would be expected to breed within the project site. The winter bird community is expected to be similar, with the exception of American robin, double-crested cormorant, and mallard. Some of the more common migratory bird species that pass through the City during spring and fall may briefly occur in the project site, including northern parula (*Parula americana*), ovenbird (*Seiurus aurocapillus*), white-throated sparrow (*Zonotrichia albicollis*), ruby-crowned kinglet (*Regulus calendula*), golden-crowned kinglet (*Regulus satrapa*), and dark-eyed junco (*Junco hyemalis*).

Mammals with the potential to occur on the project site are typical urban species with a high tolerance to human disturbance and none would be dependent upon habitats specific to the project site. Species with the potential to occur include small mammals such as Norway rat (*Rattus norvegicus*), house mouse (*Mus musculus*), moles (*Scalpous* sp.), and gray squirrel (*Sciurus carolinensis*). The gray squirrel was observed during the field investigation. **Appendix A** provides a detailed discussion of the terrestrial natural resources within the project site.

The removal of lawn area and associated trees for construction of the synthetic turf athletic fields would result in short-term adverse effects to terrestrial resources but would not result in long-term adverse impact to this ecological community. Approximately 24 trees, including pin oaks and Norway maples would be removed as part of the construction of the most northern synthetic turf athletic field. Approximately 18 trees would be removed as part of the construction of the synthetic turf baseball field and approximately 23 trees would be removed as part of the construction of the natural turf soccer field. An additional 10 trees would be removed for the purposes of path re-alignment. These trees are common and the removal of these species as a result of the Proposed Project would not represent a

significant adverse impact to trees of the region. Additionally, after construction, 102 trees comprising native species indigenous to this region of New York would be replanted, replacing those that were removed, resulting in long-term improvements to terrestrial habitat and wildlife within the park.

Along the shoreline, the invasive species within the successional southern hardwoods community would be selectively removed as part of the shoreline improvements and habitat enhancements, as described above. These losses of non-native and invasive species would not result in an adverse impact. Instead, the replacement with native species would result in a beneficial impact to the ecological communities of the shoreline. Therefore, the Proposed Project would benefit the ecological communities and wildlife of the project site.

The placement of sand and topsoil along a portion of vacant land just south of the Park boundary would provide a growing medium for native landscaping. This area is primarily vacant with limited vegetation and the placement of sand and planting medium followed by landscaping would not adversely impact vegetation or wildlife.

Aquatic Natural Resources

Primary Producers and Benthic Macroinvertebrates

No submerged aquatic vegetation was observed in the Harlem River adjacent to the project site during the field investigation; however, macroalgae was observed on riprap and construction and demolition debris along the shoreline. Dominant zooplankton species in the Harbor Estuary include the copepods *Acartia tonsa, Acartia hudsonica, Eurytemora affinis,* and *Temora longicornis,* with each species being prevalent in certain seasons. In a 2002 survey conducted in the Harlem River south of the project site near East 129th Street, Second Avenue, Manhattan, large numbers of pollution-tolerant benthic invertebrates (primarily polychaetes in the families Capitellidae and Spionidae) were collected (FTA and MTA 2003). Other invertebrate species collected included a snail, an amphipod, a clam, shrimp, cumaceans, nemerteans, nematodes, and isopods. Additionally, rock crabs, polychaete worms, snails, and clams were observed during a survey of the interpier area to the east of the Oak Point Link rail that was conducted in November 2003 for the Gateway Center at Bronx Terminal Market project. Vertical surfaces at the project site such as riprap, construction and demolition debris, and outfalls may offer some habitat for attached invertebrates such as mussels or barnacles.

Fish

The finfish community in the Harbor Estuary is typical of large coastal estuaries along the Mid-Atlantic Bight, supporting a variety of estuarine, marine, and anadromous fish species that use the area for spawning habitat, as a migratory pathway, and as a nursery and foraging area. Populations of numerically dominant fish within the Harbor Estuary, such as hogchoker (*Trinectes maculatus*), winter flounder (*Pseudopluronectes americanus*), white perch (*Morone americana*), and striped bass (*Morone saxatilis*), remain relatively stable from year to year (Woodhead 1990).

Estuarine species are year-round residents of the Harbor Estuary and use the different habitats available for shelter and food during various life stages. Examples of estuarine species include Atlantic silverside (*Menidia menidia*), mummichog (*Fundulus heteroclitus*), striped killifish (*Fundulus majalis*), and three-spined stickleback (*Gasterosteus aculeatus*), all of which provide an important forage base for larger predatory fish species (USFWS 1997).

Anadromous fish migrate through the Harbor Estuary on the way to spawning areas in the Hudson River or its tributaries and on their seaward migration out of the estuary. Blueback herring (*Alosa aestivalis*), alewife (*Alosa pseudoharengus*), American shad (*Alosa sapidissima*), striped bass, Atlantic tomcod (*Microgadus tomcod*), and Atlantic sturgeon (*Acipenser oxyrhynchus*) are examples of anadromous fish that occur in the estuary (Woodhead 1990). Fish that use the estuary for nursery and forage habitat include striped bass, winter flounder, bluefish, summer flounder (*Paralichthys dentatus*), weakfish (*Cynoscion regalis*), Atlantic menhaden (*Brevoortia tyrannus*), and mullet (*Mugil* sp.) (USFWS 1997).

American eel (*Anguilla rostrata*) is the only catadromous species that occurs in the Harbor Estuary. Eels spawn at sea and the young move into the estuary as elvers in the spring, typically in February and March (EEA 1988). American eels are opportunistic feeders and juveniles eat crustaceans, polychaetes, bivalves, and fish (Ogden 1970, Wenner and Musick 1975). They grow slowly and at sexual maturity move down the estuary in the fall and out to sea (Bigelow and Schroeder 1953). **Appendix A** provides a detailed discussion of the aquatic resources within the vicinity of the project site.

Two types of bulkhead replacement have been proposed—placement of new sheet pile bulkhead off-shore of the existing bulkhead for approximately 1,370 linear feet in the southern portion of the bulkhead replacement (Type 1), and placement of the new sheet pile bulkhead inshore of the existing bulkhead along with creation of a tidal/intertidal habitat complex for approximately 556 linear feet at the northern end of the bulkhead replacement (Type 2) (See **Appendix A**). The construction of the Type I bulkhead replacement, the replacement of the bulkhead and concrete steps with bulkhead and the repair of the concrete gravity wall within the cove, would result in the placement of fill (approximately 39,226 cubic feet below mean high water spring (MHWS)) within approximately 3,288 square feet (0.07 acres) of bottom habitat. However, this would be offset by a ratio of 3 to 1 by the 945 square feet of bottom habitat restored through the inboard replacement of sheet pile, and creation of approximately 9,000 square feet of tidal/intertidal habitat from uplands along the northern portion of the sheet pile bulkhead. Therefore the Proposed Project would result in a net increase of approximately 6,657 square feet square feet of aquatic habitat at the project site, increasing the diversity of aquatic habitat for benthic macroinvertebrates and fish available within the project site, and would not result in adverse impacts to aquatic biota.

As discussed in detail in **Appendix A**, installation of the Type 1 steel sheet pile bulkhead (i.e., sheet pile bulkhead installed off-shore of the existing bulkhead), installation of sheet pile bulkhead inboard of the existing steel sheet pile that supports the waterward edge of the concrete steps in the cove, and installation of the sheet pile inboard of the existing sheet pile adjacent to the proposed tidal/intertidal habitat complex, have the potential to result in short-term construction related impacts to water quality and aquatic biota that would not result in adverse impacts to aquatic biota. Short-term changes may include localized increases in suspended sediment and re-suspension of contaminated sediments, temporary loss of fish habitat, and disturbance to benthic communities during the installation of the shoreline stabilization features. Water quality changes associated with these increases in suspended sediment would be expected to be minimal and temporary, limited to the immediate area of the activity. The removal of approximately 2,215 square feet of benthic habitat due to the construction of the Type 1 bulkhead installation, and an additional 356 square feet due to the repair of the concrete bulkhead would result in the loss of some benthic macroinvertebrates unable to move from within these footprints. The loss of some macroinvertebrates during the installation of the new bulkhead and concrete bulkhead repair would not result in adverse impacts to populations of macroinvertebrates, nor would it significantly impact the food supply for fish foraging in the area.

Threatened and Endangered Species

The Harlem River is not considered Significant Coastal Fish and Wildlife Habitat by New York State Department of State (NYSDOS) (1992). NYSDEC has no current records of rare or state listed animals or plants, significant natural communities or other significant habitats, on or in the immediate vicinity of the project site (see **Appendix B**). The state-threatened plant Yellow Giant-hyssop (*Agastache nepetoides*), listed as occurring within Bronx County on the New York Nature Explorer data search for Roberto Clemente Park (NYSDEC 2014), was last confirmed for the county in 1997. Results of data search using the USFWS Information, Planning and Conservation System (IPAC) (see **Appendix B**) identify two federally listed species whose ranges extend over the New York City metropolitan area, including the project site: piping plover (*Charadrius melodus*, threatened), and northern long-eared bat (*Myotis septentrionalis*, proposed endangered) (USFWS 2013a). National Marine Fisheries Service (NMFS) (2011) indicated that no shortnose sturgeon occur in the Harlem River. While the NMFS

(http://www.nero.noaa.gov/protected/section7/guidence/maps/atlanticsturgeon.pdf) identifies the Harlem River as a waterbody accessible to the endangered Atlantic sturgeon (*Acipenser oxyrinchus*) it is not confirmed as being present in the river. In addition, the Breeding Bird Atlas lists one state-listed special concern bird, the Cooper's hawk, as a breeding bird for Block 5852D and NYCDEP lists the state-listed endangered Peregrine falcon as occurring within the City year-round (NYCDEP 2011). Brief descriptions of these species and those for marine turtles and mammals that would only have the potential to occur in the Harlem River as transient individuals are provided below

Shortnose Sturgeon

The federally and state-listed endangered shortnose sturgeon is an anadromous bottom-feeding fish that can be found throughout the Hudson River system. These fish spawn, develop, and overwinter in the Hudson River well upriver of its confluence with the Harlem River, and prefer colder, deeper waters for all life stages. Although larvae can be found in brackish areas of the river, the juveniles (fish ranging from 2 to 8 years old) are predominately confined to freshwater reaches above the downstream saline area. The primary summer habitat for shortnose sturgeon in the middle section of the Hudson River Estuary (far upriver of the Harlem River) is the deep river channel (43 to 138 feet). The river channel downstream of this middle estuary area is 59 to 157 feet (Peterson and Bain 2002). Individuals are only expected to use the lower Hudson River when traveling to or from the upriver spawning, nursery and overwintering areas (Bain 2004). Similarly, shortnose sturgeon would only be expected to use the Harlem River when traveling to or from the Hudson River spawning, nursery, or overwintering areas. Because of this species' preference for deeper water, occasional individuals using the Harlem River would only be expected to occur in the navigation channel located west of the project site. The Harlem River channel is much shallower (15 to 18 feet) than the channel areas of the Hudson River.

It is unlikely that shortnose sturgeon would occur within the Harlem River, except as an occasional transient. Correspondence from NMFS dated September 13, 2011 indicated that shortnose sturgeon do not occur within the Harlem River. Furthermore, no adverse impacts would occur to the water quality of the Harlem River, and no adverse impacts are expected to occur to shortnose sturgeon.

Atlantic Sturgeon

The endangered Atlantic sturgeon is the largest sturgeon found in New York, occasionally weighing over 200 pounds and measuring 6 to 8 feet long (Stegemann 1999). This anadromous species occurs within New York Harbor (Woodhead 1990) and the Hudson River Estuary. In the Hudson River, Atlantic sturgeon are found in the deeper portions and do not occur further upstream than Hudson, New York. Atlantic sturgeon migrate from the ocean upriver to spawn above the salt front from April to early July (Smith 1985, Stegemann 1999). Female sturgeon move out of the river following spawning, but the males may remain in the river until October or November.

It is unlikely that Atlantic sturgeon would occur within the Harlem River, except as an occasional transient. Furthermore, no adverse impacts would occur to the water quality of the Harlem River, and therefore, no adverse impacts are expected to occur to Atlantic sturgeon.

Marine Mammals

Marine mammals use the waters of the New York Bight, and occasionally come into New York Harbor, but are not commonly observed in the Lower Hudson River Estuary. The most commonly observed marine mammal in the Bight is the harbor seal (*Phoca vitulina*) which winters in the Harbor and hauls out onto islands in Jamaica Bay, Sandy Hook, Staten Island, and the Westchester and Connecticut shorelines of Long Island Sound. Less frequently, but seen in similar locations, is the grey seal (*Halichoerus grypus*). A harp seal (*Pagophilus groenlandicus*) was observed within the Hudson River Park in the winter of 2005. The occasional sightings of cetaceans (e.g., dolphins and whales) in the Harbor are generally of individuals that are likely to be unhealthy and/or lost. Historic records indicate the harbor porpoise (*Phocoena phocoena*) may have once been a regular visitor to the Harbor (USFWS 1997).

Marine mammals are not commonly observed in the Harbor Estuary or the Harlem River, and it is unlikely that they would occur in the Harlem River unless they were unhealthy and/or lost. Therefore, no adverse impacts to marine mammals would occur as a result of the Proposed Project.

Marine Turtles

Four species of marine turtles—loggerhead (*Caretta caretta*), green (*Chelonia mydas*), Kemp's ridley (*Lepidochelys kempii*), and leatherback (*Dermochelys coriacea)*—all state- and federally- listed (NYSDEC 2010b; USFWS 2010), can occur in the Harbor Estuary. Juvenile Kemp's ridley and large loggerhead turtles enter the New York Harbor and bays in the summer and fall. The other two species, green sea turtle and leatherback sea turtle, are usually restricted to the higher salinity areas of the Harbor (USFWS 1997). In general, however, these four turtles mostly inhabit Long Island Sound and Peconic and Southern Bays. They neither nest in the New York Harbor Estuary, nor reside there year-round (Morreale and Standora 1993). Turtles leaving Long Island Sound for the winter usually do so by heading east to the Atlantic Ocean before turning south (Standora et al. 1990).

Since they do not nest and are not year-round residents in the vicinity of the project site, it is unlikely that these turtle species would occur in the lower Hudson River or Harlem River except as occasional transients, and therefore no adverse impacts would occur as a result of the Proposed Project.

Peregrine Falcon

The peregrine falcon (*Falco peregrines*) is globally widespread and common in many areas (White et al. 2002), but remains listed as endangered in New York as populations continue to recover from declines experienced in the 1960s and 1970s. Peregrine falcons traditionally nest on cliff ledges, but will also commonly nest on bridges, buildings, and other tall artificial structures, often in cities. Peregrine falcons generally prefer open landscapes, particularly for foraging, and occupy similar areas during the breeding and non-breeding periods (White et al. 2002).

Although tall buildings border the project site, peregrine falcons are unlikely to use these buildings for nesting habitat, since better nesting and foraging habitat is located elsewhere in the region, and they are not likely to be found in the project site, which lacks tall structures preferred by the falcons for nesting. Therefore, no adverse impacts to the peregrine falcon would occur.

Cooper's Hawk

Cooper's hawk (*Accipiter cooperii*) is one of North America's most widespread and common raptors. Cooper's hawk populations in the eastern U.S. appear to have fully recovered from population declines experienced in the mid-1900s (Curtis et al. 2006). In New York State specifically, the density and range of both breeding and overwintering Cooper's hawks have increased markedly in recent decades (NYBBA, Curtis et al. 2006), but the species remains a state-listed species of special concern. Cooper's hawks generally nest in deep interior deciduous and mixed forests, but they are considered relatively tolerant of human disturbance and fragmentation, and are occasionally found nesting in small woodlots and even urban parks (DeCandido and Allen 2005, Curtis et al. 2006). During migration and winter, Cooper's hawks will utilize a variety of forest habitats, ranging from large woodland tracts to agricultural shelter belts and small parks.

The project site does not contain deep interior forest that is preferred by Cooper's hawks for nesting, and no Cooper's hawks were observed during the field investigation. The Cooper's hawk is unlikely to nest in the project, particularly since there are more suitable habitats nearby (i.e., Bronx Park), and no adverse impacts would occur.

Piping Plover

Piping plovers breed on dry sandy beaches, or in areas where dredged sand has been deposited, often near dunes in areas with little or no beach grass (http://www.dec.ny.gov/animals/7086.html). Nesting of piping plovers within New York City is limited to small colonies on Rockaway Peninsula and occasional, individual nesting pairs within the Jamaica Bay complex (Wells 1996, Boretti et al. 2007, Wasilco 2008),

many miles from the project site. Piping plovers overwinter along the coast from Texas to North Carolina (http://www.dec.ny.gov/animals/7086.html). Heavy levels of human activity and development near the project site make the area unsuitable habitat for piping plovers, which are highly sensitive to disturbance (Elliot-Smith and Haig 2004).

Piping plovers are not considered to have the potential to occur near the project site, and the proposed project would therefore have no effect on the species or its habitat. No piping plovers were found during the 2011 site visit, nor does suitable habitat for this species exist within the park (Lundgren 2014). Correspondence from NYSDEC dated July 3, 2014 indicates that this species does not occur at or near the project site, and that proposed activities would have no effect on piping plover (**Appendix C**).

Northern Long-Eared Bat

The northern long-eared bat is a temperate, insectivorous bat whose life cycle can be coarsely divided into two primary phases – reproduction and hibernation. Northern long-eared bats hibernate in caves or mines during winter and then emerge in early spring, with males dispersing and remaining solitary until mating season at the end of the summer, and pregnant females forming maternity colonies in which to rear young. Summer habitat of the northern long-eared bat generally includes upland and riparian forest within predominantly forested landscapes (Ford et al. 2005, Henderson et al. 2008, USFWS 2013). The long-eared bat is considered a forest-dependent species that is sensitive to fragmentation and requires interior forest for both foraging and breeding (Foster and Kurta 1999, Broders et al. 2006, Henderson et al. 2008). They tend to feed in forested hillsides and ridges (USFWS 2013b). Although they may occur in urbanized areas (Whitaker et al. 2004, Johnson et al. 2008) and will occasionally utilize buildings and other artificial structures rather than trees for roosting (Timpone et al. 2010, USFWS 2013b), urban northern long-eared bats tend to occur near large, forested parks or other green spaces with abundant tree cover (Johnson et al. 2008), which are not present in close proximity to the proposed project site.

Until additional occurrence information is gathered, northern long-eared bats are assumed to occur anywhere in New York State. USFWS recommends tree removal to be completed between October 1st and March 31st while northern long-eared bats are still in hibernation to avoid direct impacts during their active season (April through September) (Stilwell 2014). In addition, USFWS recommends retaining standing live trees greater than 12 inches dbh that have exfoliating bark, as well as snags and trees with cavities. The construction contractor would be required to include these measures to the greatest extent practicable, notwithstanding hazard trees. Due to the urban nature of the park, much of the area would be subject to hazard tree inspection, and OPRHP must remove such trees on an as-needed basis to protect the safety of staff and patrons.

Since the bats rely on feeding in forested hillsides and ridges, it is unlikely there is appropriate habitat for them in the Park. Northern long-eared bats are not considered to have the potential to occur in the area during either the breeding or non-breeding period. Correspondence from NYSDEC dated July 3, 2014 indicates that this species does not occur at or near the project site, and that proposed activities would have no effect on northern long-eared bat (**Appendix C**).

Yellow Giant-Hyssop

The yellow giant-hyssop (http://www.acris.nynhp.org/report.php?id=9122) is a state-listed threatened plant that is ranked as "S2S3"[1] by NYNHP. In New York, this species is found in a diversity of habitats that include weedy or early-successional areas such as roadsides, railroads, and thickets but also open deciduous woods, meadows, and lowland woods, with many of the known sites being located on limestone-derived soils that support plant species associated with rich sites (NYNHP Conservation Guide – Yellow Giant-hyssop (*Agastache nepetoides*) http://www.acris.nynhp.org/report.php?id=9122).

[1] S2—Typically 6 to 20 occurrences, few remaining individuals, acres, or miles of stream, or factors demonstrably making it very vulnerable in New York State. S3—Typically 21 to 100 occurrences, limited acreage, or miles of stream in New York State.

Habitat for this plant species does not appear to be present within the predominantly landscaped habitats within the project site, or along the shoreline within the primarily invasive plant community. It was not observed during the reconnaissance survey.

Willow Oak

The willow oak is a state-listed endangered plant species that is ranked as "S1" by NYNHP, indicating that it is critically imperiled in the state because of extreme rarity (i.e., five or fewer sites or very few remaining individuals) (Young 2010). The range of the willow oak is limited to New York City and portions of Long Island as this species is more commonly known to occur south of New York State (USDA 2011). This species occurs mostly on the coastal plain in moist soils or swamps (Gleason and Cronquist 1963).

Three willow oaks (~8 to 12 in dbh) were observed in a linear arrangement in raised beds along the esplanade in the vicinity of the Roberto Clemente State Park facilities and office building indicating that these trees were planted. In addition, one smaller willow oak (~4 in dbh) was observed along the shoreline of the southern portion of the site in the vicinity of the existing combined sewer outfall. In personal communication, Julie Lundgren of NYNHP has indicated that, due to the likely planted origin of these trees, although the species is state-listed, this would not qualify as an NYNHP rare-species record.

Essential Fish Habitat (EFH)

There are a number of EFH designated species in the vicinity of the Harlem River (see **Table 1**). The Proposed Project would not result in any significant adverse impacts to EFH in the Harlem River, and would not result in a significant loss of fish habitat or forage species. The replacement of sheet pile bulkhead and 850 linear feet of non-engineered shoreline improvements would be conducted according to federal and state permit requirements to protect water quality and benthic habitat. The net increase in aquatic habitat that would result from the Proposed Project, and the increased diversity of habitat resulting from the creation of the tidal/intertidal habitat complex would be expected to provide some additional habitat for use by aquatic organisms, including EFH species.

By complying with the terms and conditions in the USACE and NYSDEC permits, and in consideration of the information provided as part of the communication with USFWS, NMFS, and NYSDEC, the proposed project is not expected to result in significant adverse impacts to natural resources.

Table 1
Essential Fish Habitat Designated Species in the Vicinity of the Harlem River

Species	Eggs	Larvae	Juveniles	Adults
Pollock (*Pollachius virens*)			X	X
Red hake (*Urophycis chuss*)		x	X	X
Redfish (*Sebastes fasciatus*)	n/a			
Winter flounder (*Pseudopleuronectes americanus*)	X	x	X	X
Windowpane flounder (*Scopthalmus aquosus*)	X	x	X	x
Atlantic sea herring (*Clupea harengus*)		x	X	x
Bluefish (*Pomatomus saltatrix*)			X	x
Atlantic butterfish (*Peprilus triacanthus*)		x	X	x
Atlantic mackerel (*Scomber scombrus*)			X	x
Summer flounder (*Paralicthys dentatus*)		x	X	x
Scup (*Stenotomus chrysops*)	X	x	X	x
Black sea bass (*Centropristus striata*)	n/a		X	x
King mackerel (*Scomberomorus cavalla*)	X	x	X	x
Spanish mackerel (*Scomberomorus maculatus*)	X	x	X	x
Cobia (*Rachycentron canadum*)	X	x	X	x
Clearnose skate (*Raja eglanteria*)			X	x
Little skate (*Leucoraja erinacea*)			X	x
Winter skate (*Leucoraja ocellata*)			X	x
Sand tiger shark (*Odontaspis taurus*)		x(1)		
Dusky shark (*Charcharinus obscurus*)		x(1)		
Sandbar shark (*Charcharinus plumbeus*)		x(1)		x

Notes:
n/a – insufficient data for this lifestage exists and no EFH designation has been made.
(1) Neither of these species have a free-swimming larval stage; rather they are live bearers that give birth to fully formed juveniles. For the purposes of this table, "larvae" for sand tiger and sandbar sharks refers to neonates and early juveniles.
Source:
National Marine Fisheries Service. "Summary of Essential Fish Habitat (EFH) Designation" posted on the Internet at http://www.nero.noaa.gov/hcd/STATES4/conn_li_ny/40407350.html and http://www.nero.noaa.gov/hcd/skateefhmaps.htm
National Marine Fisheries Service EFH Mapper accessed online at http://www.habitat.noaa.gov/protection/efh/habitatmapper.html

FLOODPLAINS AND WETLANDS

The replacement of the sheet pile bulkhead, shoreline improvements, creation of the tidal/intertidal complex, Lower Plaza area, proposed natural turf soccer field, proposed synthetic turf baseball field, portions of the maintenance building and adjacent plaza, and portions of the existing baseball field renovation and synthetic turf athletic field would be located within the 100-year floodplain. The soil placement area in the southern portion of the project site and the south stair repair would not be located within the 100-year floodplain indicated on the FEMA preliminary work maps. All of the Proposed Project would be located within the effective 500-year floodplain (**Figures 16 and 17**). The floodplain within and adjacent to the project site is affected by coastal flooding, which is influenced by astronomic tide and meteorological forces (e.g., northeasters and hurricanes [FEMA 2013]), and therefore would not be affected by the proposed project. The continued use of this portion of the 100-year floodplain for open space areas would not exacerbate flooding conditions and would not adversely affect the floodplain.

The Harlem River shoreline within the project site is mapped by NYSDEC as littoral zone tidal wetlands (LZ) (**Figure 18**). These LZ wetlands are also mapped by the NWI as estuarine wetlands with unconsolidated bottoms that have a subtidal water regime (E1UBL) (**Figure 19**). No freshwater wetlands are present on the project site.

The construction of the Type I bulkhead replacement (sheet pile installed outboard of existing sheet pile), repair of concrete gravity wall, and replacement of the sheet pile and concrete steps within the

cove would result in the placement of fill within approximately 3,288 square feet (0.07 acres) of bottom habitat within NYSDEC littoral zone tidal wetlands and aquatic habitat in the Harlem River. However, this minimal loss would be offset by a ratio of 3 to 1 by the 945 square feet of bottom habitat restored through the inboard replacement of sheet pile, and creation of approximately 9,000 square feet of tidal/intertidal habitat from uplands along the shoreline adjacent to the northern portion of the sheet pile bulkhead. Therefore the Proposed Project would result in a net increase of approximately 6,657 square feet of aquatic habitat, some of which would be expected to be littoral zone habitat, and would not result in adverse impacts to this type of wetland within this region of New York. Therefore, the Proposed Project would be consistent with Executive Order 11990. Additionally, the project would comply with all conditions of the NYSDEC Tidal Wetlands permit (as listed below in section *Conditions for Approval*).

COASTAL ZONE MANAGEMENT ACT

A letter of General Concurrence with New York State's coastal policies for the project as described in the Joint Application and subsequent submissions of additional information was received from NYSDOS on April 10, 2014 (**Appendix E**). Additionally, the New York City Department of City Planning (DCP) found the project to be consistent with the Local Waterfront Revitalization Program (WRP) in an email dated April 23, 2014 (**Appendix E**).

AIR QUALITY

The Proposed Project would not generate any additional vehicle trips and would not increase the number of parking spaces at the project site. Therefore, the Proposed Project would not result in adverse impacts to air quality.

General conformity with Clean Air Act Requirements

The project would not create any permanent sources of emissions although construction-related emissions would be expected. Construction-related emissions were estimated, as detailed in **Appendix G**, in order to determine if the federal funding of the project components would require a conformity analysis under the federal general conformity rules. Estimates of construction related emissions indicate that the Proposed Project would not meet the threshold for a formal conformity analysis. The Proposed Project involves maintenance and repair of the Park's facilities, including maintenance dredging with no new depths and debris disposal in accordance NYSDEC requirements, which are acknowledged to result in *de minimis* increases in emissions and are not subject to conformity determinations.

NOISE AND VIBRATION

The Proposed Project would not generate any additional vehicle trips and would not increase the number of parking spaces at the project site. Consequently, it would not have the potential to result in a significant noise impact.

Due to the Park's proximity to the heavily-trafficked Major Deegan Expressway, existing and future noise levels at some locations within the Park may exceed the 55 dBA $L_{10(1)}$ noise level guideline included in the CEQR *Technical Manual* for outdoor areas requiring serenity and quiet. The 65 dBA L_{dn} acceptable noise-level included in the HUD noise guidelines applies to noise sensitive uses, which are not proposed as part of this project. The noise levels at the project site are comparable to or lower than noise levels in a number of open space areas that are within range of substantial noise sources (e.g., roadways, aircraft, etc.), including Hudson River Park, Riverside Park, and Bryant Park. Due to the level of activity present at most open space areas throughout the city, the relatively low 55 dBA level is often not achieved. Consequently, noise levels in the Park, while potentially exceeding the applicable guideline thresholds, would not constitute an adverse impact.

HAZARDOUS MATERIALS

The Proposed Project is not expected to create any exposure pathways to hazardous substances that could have adverse effects on the health and safety of the users of the Park or conflict with its continued use as public parkland. Although there are low levels of certain semivolatile organic compounds (SVOCs) and metals present in some of the subsurface soil to be excavated for creation of the tidal/intertidal habitat – levels that are consistent with urban fill throughout the region – any such disturbed soil would be removed, handled and disposed of in accordance with applicable state and local regulatory requirements, workers would be protected through implementation of a construction health and safety plan (CHASP), and resulting disturbed surfaces would be covered with at least 2 feet of clean fill material, pavement or other non-hazardous surface treatments. Thus, the Proposed Project is not expected to cause any adverse impacts associated with exposure to hazardous materials.

OPRHP's environmental consultant conducted both a Phase I and Phase II investigation on the project site. The scope of the Phase II investigation was conducted in consultation with the New York State Department of Environmental Conservation (DEC), and focused on characterizing the soil to be excavated to create the planned tidal/intertidal habitat.

According to historical records, most of the project site was created as a result of filling in the early to late 1900s. The site was used primarily for the manufacturing of marine vessels and the storage of coal and fuel to support these vessels. The source of the fill material is unknown, and was therefore assumed to contain contaminated materials. There are no active spills for the project site on the NYSDEC Spills Incidents database.

Phase II Environmental Site Assessment

For the Phase II investigation, eight borings approximately 11 feet below grade were made on the project site, including five in the proposed tidal/intertidal habitat area and three to the east of that area. No significant evidence of contamination (i.e. odors, staining or photoionization detector (PID) readings) were noted in the sampled soil. Sixteen soil samples were collected for laboratory analysis of volatile organic compounds (VOC), SVOCs, and Target Analyte List (TAL) metals.

None of the sixteen samples contained VOCs at concentrations that exceeded DEC's Part 375 Soil Cleanup Objectives, and only one of the sixteen samples contained SVOCs at such concentrations. All of the samples contained metals. Four samples contained arsenic, copper, lead and nickel in concentrations that exceeded the Part 375 restricted residential soil cleanup objectives. Such levels are consistent with urban fill material, which typically has highly variable concentrations of metals. For a more detailed description of the Phase II Investigation, See Appendix A, SEQR Environmental Assessment Form (EAF) and Attachments, Appendix D to the EAF.

Disposal of Soil

Soil encountered during the Proposed Project will be assumed to contain VOCs, SVOCs and metals at levels typical of urban fill material, and will be removed in accordance with a Remedial Action Plan and a Construction Health and Safety Plan. Removed materials will be tested and disposed of at a licensed facility in accordance with all regulatory requirements. Disturbed subsoil will be covered with at least 2 feet of clean fill material, pavement, or other nontoxic surfaces. As all potentially contaminated soil that is proposed to be disturbed will either be removed or covered, the Proposed Project is not expected to have adverse effects on the health or safety of Park users or to conflict with the site's continued use as a Public Park.

TRANSPORTATION

The Proposed Project was screened for potential effects to transportation in accordance with the City Environmental Quality Review (CEQR) Technical Manual, which is the methodology appropriate for considering traffic effects within New York City. The Proposed Project would result in improvements to existing parkland and would not result in any new uses or development that would generate traffic and

would not generate substantial pedestrian, transit, or vehicle trips. According to the CEQR Technical Manual, the Proposed Project would not exceed the minimum development densities that would trigger a more detailed traffic and parking analysis. Development below these densities is considered to have insignificant environmental impacts. Therefore, the Proposed Project would not be expected to result in any significant adverse transportation impacts, or result in the need for additional parking capacity. Currently, most park users are from the surrounding community, arriving at the park on foot or via mass transit, the focus of the programming at the park is to provide as much active and passive recreational opportunities possible within the park property.

OTHER ENVIRONMENTAL IMPACT AREAS

The above and other impacts areas are analyzed in the Environmental Assessment Checklist attached hereto which shows that the proposed project will not result in adverse impacts in any of these impact areas.

CONSTRUCTION/IMPLEMENTATION OF THE PROPOSED PROJECT

The Proposed Project would be constructed in three phases over the course of approximately 5 years. The first phase would be the construction of the new bulkhead/esplanade with the tidal/intertidal complex area, the Lower Plaza enhancements, and the south stair entrance repair. The second phase would be the northern shoreline improvements, ballfields construction, and repair/expansion of the maintenance building. The third phase presently anticipates a soccer field and landscaping at the southern area of the park and would be further informed by additional planning and public input. Construction activities, described in detail in **Appendix A**, include the following improvements:

CDBG-DR Funded Improvements

- Replacement of approximately 1,926 linear feet of the existing steel sheet pile bulkhead and cast-in-place reinforced concrete cap, and reconstruction of the existing esplanade adjacent to approximately 1,370 linear feet of bulkhead.
- Repair approximately 89 linear feet of eroding concrete gravity wall within the eastern portion of the cove with offshore sheet pile. Repair would comprise installation of new sheet pile and concrete pile cap and filling the void between the abutment wall and new sheet pile with concrete.
- Replacement of approximately 61 linear feet of steel sheet pile bulkhead and concrete steps within the northeast portion of the cove with sheet pile and fill. The concrete steps, overhanging wood deck and support columns, existing tie-rods, and concrete deadman system would be removed, and the backfill behind the steps excavated.
- Improvement to the approximately 1.5-acre Lower Plaza area to increase landscaping and pervious surfaces, repair and expand the barbeque areas, replace the gazebo with a new viewing platform for the tidal pool, remove asphalt and replace with new paved surfaces and planting areas, and maintain all healthy trees with a plan for replacing unhealthy trees in time. Improvements would result in an approximate 25% reduction in impervious area through the addition of permeable surfaces and planting areas.
- Repair of the south stair entrance in-kind; some electrical infrastructure would be raised further off the ground.
- Removal of invasive plant species and the existing chain link fence, minimal regrading and replanting with native plant species of approximately 850 linear feet of shoreline adjacent to the existing baseball field and proposed synthetic turf athletic field, as habitat enhancement and to improve the setting for park visitors.

Improvements Funded Through Other Sources

- Refurbishment of an existing natural turf baseball field, including new infield surfacing, natural turf outfield, fencing, site furnishings, drainage, and irrigation.
- Construction of an approximately 63,000 square-foot permeable synthetic turf athletic field within an existing grass covered recreational field with scattered shade trees.
- Construction of an approximately 18,000 square-foot permeable synthetic turf baseball field within an existing grass covered multi-use field with scattered shade trees.
- Repair of the existing 10,000 square-foot maintenance building and repair to the adjacent plaza are being considered to support the activities of the adjacent athletic fields.
- Construction of an approximately 30,000 square-foot natural turf soccer field within an existing grass covered area on the southern portion of the project site.
- Habitat enhancement in the vicinity of the existing turf baseball field, proposed synthetic turf athletic field and baseball field, and natural turf soccer field. Approximately 75 trees would be removed for construction purposes. After construction, 102 trees comprising native species would be planted, replacing those that were removed.
- Placement of approximately 956 cubic yards of topsoil and sand within a 17,200 square-foot upland area on the southern portion of the project site to create a growing medium for installation of native landscaping at the southern pedestrian entrance to the Park along the riverfront.

While the three phases of the Proposed Project would be constructed over a period of 60 months, the impacts of this construction period would be phased and would impact different parts of the park at different times. The anticipated construction period for the bulkhead/esplanade phase would be approximately 20 months and would be phased with construction occurring in sections along the shoreline. The same approach to construction would be true of the northern shoreline phase. Finally, the southern soccer field and soil placement phase would be very short. Measures would be taken during all three phases to maintain access to as much of the park as possible and to shield the visual impacts of construction.

All work will be conducted in accordance with the permit conditions summarized below under the section *Conditions for Approval*.

SUMMARY OF FINDINGS AND CONCLUSIONS

The proposed project would be consistent with surrounding land uses in that it would comprise improvements to a damaged bulkhead and an existing park and associated recreational facilities. As shown below in the *Environmental Assessment Checklist*, no land development, neighborhood, socioeconomic, or community facility impacts would result from the proposed project. Impacts to natural resources would be avoided and/or minimized through the permit conditions summarized above. As shown below in the *Statutory Checklist*, the proposed project would comply with all relevant regulations listed in 24 CFR subparts 58.5 and 58.6.

Alternatives and Project Modifications Considered [24 CFR 58.40(e), Ref. 40 CFR 1508.9]

The conceptual design approach for the restoration of the bulkhead and stabilization of the shoreline at Roberto Clemente State Park included consideration of several alternatives for rehabilitation and replacement, including a shoreline stabilization alternative and four bulkhead alternatives, not including the preferred alternative described above.

BULKHEAD ALTERNATIVES

Bulkhead Replacement Offshore of the Existing Bulkhead: Installation of a new steel sheet pile bulkhead offshore of the existing bulkhead would require excavation behind the existing bulkhead to expose each tie-rod, demolition of the existing bulkhead to an elevation below the tie-rod elevation, installation of a new steel sheet pile bulkhead offshore of the existing bulkhead, and extending the existing tie-rod to the new bulkhead wall. This alternative minimizes the impact on the upland park area through reduced upland demolition and excavation work and also represents the most cost efficient alternative. However, this alternative also represents the greatest environmental impact with the new sheet pile bulkhead placed offshore of the existing resulting in a net loss of approximately 3,150 square feet of benthic habitat.

Bulkhead Replacement Inshore of the Existing Bulkhead: Installation of a new bulkhead inshore or in place of the existing structure would require extensive excavation inshore of the bulkhead to relieve lateral pressure from the structure while also representing an even larger upland impact due to loss of existing uplands and park elements, than if the bulkhead were to be installed offshore of the existing wall. The potential area of upland excavation currently contains existing structures, such as buildings, walls, and other permanent features along the esplanade which would interfere with this alternative. The construction sequencing to unload the existing wall to allow the tie-rods to be disconnected is complex, leaving the potential for collapse of the existing bulkhead during the process. The consequences of a collapse could include uncontrolled fill loss into the waterway, upland fill material that would be exposed to the river's tides and currents, and the potential for construction debris to enter the waterway.

Partial Inshore Bulkhead Replacement and Partial Offshore Bulkhead Replacement: This alternative comprised the best features of the offshore and inshore replacement alternatives, while eliminating their cost and environmentally prohibitive elements. The northern 625 feet of the bulkhead replacement area would be replaced inshore of the existing bulkhead, while the southern 1,375 feet of the existing bulkhead would be replaced offshore. In the northern section, 2,553 square feet of benthic habitat would be restored, and in the southern section 1,375 square feet of benthic habitat would be lost, resulting in a net increase of 366 square feet of restored benthic habitat. While this alternative would provide some offset for the loss of bottom habitat, the offset would be less than in the tidal/intertidal area alternative. This alternative would also adversely affect Park programming because it would result in a larger reduction in useable park space, would not provide the opportunity for environmental education or for patrons to access the river.

Partial Replacement of Bulkhead Within Same Footprint and Partial Inshore Bulkhead Replacement with Creation of Tidal/Intertidal Area: This alternative would be the same as the preferred alternative but instead of replacing the sheet pile offshore from the existing bulkhead, would replace it within the existing sheet pile footprint. However, the existing steel sheet pile within this section of the shoreline is corroded and contains large holes up to four feet in diameter. Extruding the sheet pile from the shoreline under this condition would be time consuming and costly; the corroded sections would likely snap, posing a risk of fill from behind the sheet pile falling into the Harlem River. The steel sheet pile could be burned at the mudline, but the section under the mud would remain in place and the new steel sheet pile wall would not be able to be driven with the existing sections still under the mud.

SHORELINE STABILIZATION ALTERNATIVE

A discounted concept for stabilization of the shoreline north of the bulkhead included installation of an engineered riprap revetment along the shoreline. Following review of the condition of the existing shoreline and consideration of environmental factors, including current, wave activity, and boat traffic, it has been determined that the existing shoreline stabilization is generally good with isolated areas requiring regrading to reduce slope and stabilize the existing earth embankment. The placement of additional riprap stone within the waterway along the slope was determined to be unnecessary.

No Action Alternative [24 CFR 58.40(e)]

In the No Action Alternative, none of the proposed improvements to Roberto Clemente State Park would be implemented. Resiliency of the Park to future storm events would not be improved. The existing steel sheet pile bulkhead – which is in critical condition – concrete cap, and adjacent bulkhead would not be replaced. It is assumed that the corrosion of the steel elements of the bulkhead would continue in this scenario, leading to eventual failure. The tidal/intertidal habitat would not be created, and improvements to the Lower Plaza area would not occur. The non-structured portion of the shoreline would not be regraded or replanted with native plant species and invasive plant species and existing chain link fencing would not be removed. The south stair entrance would not be repaired. No tidal wetlands or aquatic habitat would be restored; the athletic field, new baseball field, and new soccer field would not be constructed; and the existing baseball field would not be rehabilitated. The existing baseball field, which is in disrepair due to heavy use, would be expected to continue in that condition. This alternative would not address the purpose and need for the Proposed Project.

Measures Incorporated to Minimize Impacts [24 CFR 58.40(d), 40 CFR 1508.20]

As noted above, a number of measures to protect natural resources on and around the project site are incorporated into the design of the project activities and are outlined in prescribed permit conditions summarized below.

CONDITIONS FOR PERMIT APPROVAL

USACE Permit Conditions

USACE issued Permit #NAN-2013-01606-EOF under Nationwide Permit 3 on February 20, 2014 for the proposed shoreline stabilization and park improvement activities detailed above. The Nationwide Permit 3 requirements applicable to the Proposed Project include the following:

- Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date.
- Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to a NWP authorization.
- Each permittee who receives a NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and any required compensatory mitigation.
- Unless specifically approved otherwise through issuance of a waiver by the District Engineer, appropriate BMPs must be implemented to the maximum degree practicable, to minimize erosion, migration of sediments, and adverse environmental impacts.

NYSDEC Permit Conditions

Permits are required from the New York State Department of Environmental Conservation for excavation and fill in navigable waters and tidal wetlands, activities within the tidal wetland adjacent area, a 401 water quality certification, and a state pollutant discharge elimination system (SPDES) general permit for the discharge of stormwater from construction activities.

Applications for these permits have been submitted to NYSDEC and are currently under review. The Proposed Project will comply with any and all conditions set forth by these permits once they are issued.

LIST OF SOURCES, AGENCIES AND PERSONS CONSULTED

New York State Office of Parks, Recreation and Historic Preservation, Division for Historic Preservation
Letter dated August 26, 2011 to Chip Place, OPRHP.

New York State Department of State, Division of Coastal Resources
Letter dated April 10, 2014 to AKRF.

New York State Department of Environmental Conservation, Division of Fish, Wildlife and Marine Resources
Letter dated July 3, 2014 to OPRHP

New York City Department of City Planning
Electronic communication dated April 23, 2014, to AKRF.

New York Natural Heritage Program, Information Services
Letter dated September 19, 2011 to AKRF.

United States Department of the Interior, Fish and Wildlife Service
Letter dated November 27, 2013.

Delaware Tribe Historic Preservation Representatives
Letter dated July 7, 2014 to SHPO.

ESRI, ArcGIS, various data.

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http://www.rivers.gov/new-york.php
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http://www.dec.ny.gov/permits/53826.html
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ENVIRONMENTAL ASSESSMENT CHECKLIST

Evaluate the significance of the effects of the proposal on the character, features and resources of the project area. Enter relevant base data and verifiable source documentation to support the finding. Then enter the appropriate impact code from the following list to make a determination of impact. **Impact Codes: (1)** - No impact anticipated; **(2)** - Potentially beneficial**; (3)** - Potentially adverse; **(4)** - Requires mitigation; **(5)** - Requires project modification. Note names, dates of contact, telephone numbers and page references. Attach additional material as appropriate. Note conditions or mitigation measures required.

Land Development	Code	Source or Documentation
Conformance with Comprehensive Plans and Zoning	2	The Proposed Project involves the reconstruction of an existing bulkhead and improvements to an existing park and would not result in changes to land use. Zoning does not apply in the project site, which is within a State Park. The proposed project is consistent with the New York State Coastal Management Program, as discussed by the New York State Department of State (NYSDOS) in a letter dated April 10, 2014, and with the Local Waterfront Revitalization Plan, as discussed by NYSDOS in correspondence dated April 10, 2014 and the New York City Department of City Planning electronic correspondence dated April 23, 2014 (see **Appendix E**).
Compatibility and Urban Impact	2	The Proposed Project would be compatible with existing land use on the project site since it would involve the reconstruction of an existing bulkhead and improvements to an existing park. The site improvements would provide an urban design and compatibility benefit by revitalizing and enhancing the park and stabilizing the shoreline.
Slope	2	The Proposed Project would require some minor adjustment to slope; regrading would be required to reduce slope and stabilize localized areas of the existing earth embankment along the shoreline. Significant expansion of the existing bulkhead structure would not occur, and therefore, adverse effects to slope are not anticipated.
Erosion	2	As noted above, a major element of the Proposed Project is to reconstruct a damaged bulkhead. Repairs would stabilize the shoreline and reduce the potential for erosion from current and wave activity and from boat traffic on the river. The Proposed Project would incorporate BMPs imposed by Nationwide Permit 3 and NYSDEC to avoid and minimize erosion impacts during construction.
Soil Suitability	1	The Proposed Project would rebuild the esplanade, construct the tidal /intertidal habitat, conduct enhancement of the Lower Plaza, and construct synthetic and natural turf athletic fields. Overall, the soils within the project site are suitable for the proposed project.
Hazards and Nuisances including Site Safety	1	The Proposed Project would not result in any hazards, nuisances, or threats to public safety. The project site is located in an area vulnerable to flooding and storm impacts, however the project would not introduce any new occupied structures. While the Proposed Project would help restore a public recreation facility, the project is not expected to generate new users that would be affected by hazards, nuisances, or other public safety concerns.

Energy Consumption	1	Fossil fuel energy consumption would occur via the use of construction equipment and shipment of materials required for the shoreline stabilization and park improvements. However, the Proposed Project would not introduce new facilities and therefore would not increase long-term energy consumption.

Neighborhood Impact	Code	Source or Documentation
Noise - Contribution to Community Noise Levels	1	The Proposed Project would not result in a new permanent facility that would generate noise on the project site. Noises and increased human activity that would be generated during the construction of the proposed project would likely cause disturbances to and displace some wildlife, but these effects would be temporary and localized to the specific segments of the project site undergoing construction activities.
Air Quality Effects of Ambient Air Quality on Project and Contribution to Community Pollution Levels	1	The Proposed Project would not generate any new stationary or mobile sources of air pollutants and therefore has no potential to affect air quality. Equipment used in the construction activities will be permitted by relevant agencies and will utilize appropriate measures to minimize pollutant emissions.
Environmental Design Visual Quality - Coherence, Diversity, Compatible Use and Scale	2	Habitat enhancement and park improvements are stated goals of the proposed project and therefore the proposed project would not introduce any new elements out of character with the Park. Roberto Clemente State Park is already used for recreational purposes, and therefore the proposed project is not expected to induce any subsequent growth. Park improvements such as removal of the chain link fence along the shoreline and planting of native plant species, construction of new turf fields, and rehabilitation of the stairs for water access, for example, would enhance the visual quality of the Park. As shown in **Appendix D**, SHPO has concurred that the project would have no effects on cultural resources. The Tribal Historic Preservation offices of the Mohican Tribe, Delaware Tribe, Delaware Nation, and Shinnechock Tribe concurred with SHPO's findings of no effect on cultural resources (see **Appendix D**).

Socioeconomic	Code	Source or Documentation
Demographic Character Changes	1	The proposed project is designed protect a public resource in a low-income neighborhood. In addition to protecting park amenities, the replacement of the damaged bulkhead will protect the approximately 1,600 units of low-income housing that is adjacent to the park and set back only 20 feet at certain points from the bulkhead. Since the actions comprising the proposed project consist of shoreline stabilization and improvements to an existing park, the proposed project has no potential to affect the demographic characteristics of nearby communities or alter residential, commercial, or industrial uses, or harm community institutions.
Displacement	1	The actions comprising the Proposed Project are limited to park improvements and stabilization of the shoreline and have no potential to displace individuals or families; destroy jobs, local businesses, or community facilities; or disproportionately affect particular populations.
Employment and Income Patterns	1	The actions comprising the Proposed Project are limited to park improvements and stabilization of the shoreline and have no potential to affect employment opportunities or income patterns.

Community Facilities and Services	Code	Source or Documentation
Educational Facilities	2	The Proposed Project would not introduce any new populations that would increase the student population of the area. The project would create environmental educational opportunities through the construction of the tidal/intertidal habitat. As a result, the Proposed Project has no potential to affect educational facilities other than in a beneficial way.
Commercial Facilities	1	The Proposed Project is limited to park improvements and stabilization of the shoreline and would not introduce any new development that would require retail services or other commercial facilities.
Health Care	1	The Proposed Project is limited to park improvements and stabilization of the shoreline and would not introduce any new development that would require the availability of routine or emergency health services.
Social Services	1	The Proposed Project is limited to park improvements and stabilization of the shoreline and would not introduce any new development that would require the proximity of social services. The proposed project would not introduce any new populations that would overburden existing facilities.
Solid Waste	1	The Proposed Project is limited to park improvements and stabilization of the shoreline and would not introduce any new development that would generate solid waste.
Waste Water	1	The Proposed Project is limited to park improvements and stabilization of the shoreline and would not introduce any new development that would generate any wastewater.
Storm Water	2	The Proposed Project would not adversely affect stormwater runoff,

		and may in fact reduce runoff through the reduction of impervious surfaces at the project site. Park improvements include collection of stormwater runoff through catch basins, which would then be piped to the tidal/intertidal habitat complex, permeable pavers, planted areas, and a rain garden that would capture runoff from the esplanade. Impervious surfaces within the Lower Plaza and Esplanade areas would be reduced by at least 25% and 50%, respectively. The synthetic turf athletic fields would allow infiltration and provide some stormwater detention before discharging to existing Park stormwater outfalls.
Water Supply	1	The Proposed Project is limited to park improvements and stabilization of the shoreline and would not introduce any new development that would generate any demand for water supply.
Public Safety - Police	1	The Proposed Project is limited to park improvements and stabilization of the shoreline and would not add any new demand on police services.
- Fire	1	The Proposed Project is limited to park improvements and stabilization of the shoreline and would not add any new demand on fire department services.
- Emergency Medical	1	The Proposed Project is limited to park improvements and stabilization of the shoreline and would not add any new demand on emergency medical services.
Open Space and Recreation - Open Space	2	A goal of the Proposed Project is to rehabilitate and improve a valuable open space resource (Roberto Clemente State Park). The restoration of the Park is not expected to add a significant number of new users and therefore, the Proposed Project is not expected to overburden existing open space resources.
- Recreation	2	The reconstructed bulkhead and park improvements are not expected to add a significant number of new users of the Park and therefore, the Proposed Project is not expected to overburden existing recreational resources. As noted above, stated goals of the Proposed Project include improving the resiliency of the park to flood events and reopening closed portions of the park to ensure that it can continue to be used as a recreational resource.
- Cultural Facilities	1	Roberto Clemente State Park was built on a relatively recent landfill and there are no known architectural or archeological resources on site. As documented in Appendix D, SHPO has concurred that the Proposed Project would have no effect on eligible resources.
Transportation	1	The Proposed Project would not introduce any new development that would require new or improved transportation connections and would not add any new demand on transportation services

Natural Features	**Code**	**Source or Documentation**
Water Resources	1	The Proposed Project would not introduce any new development and therefore would not generate any demand for groundwater as water supply nor would the project introduce new septic systems that may affect groundwater in the area.
Surface Water	1	The Proposed Project would not result in any development that would require the discharge of sewage effluent into nearby

		waterbodies, increase impervious surface area, or affect water levels in surface water bodies. The in-water construction activities associated with the Proposed Project would temporarily increase turbidity in the Harlem River but this effect is expected to be temporary and would not affect surface water quality. Additionally, BMPs would be employed during construction in accordance with permit conditions to avoid and minimize any potential effects to aquatic resources.
Unique Natural Features and Agricultural Lands	1	There are no unique natural features or agricultural lands located on the project site and therefore the Proposed Project has no potential to affect these resources.
Vegetation and Wildlife	3	As noted throughout this EA, the Proposed Project may affect but is not likely to adversely affect species present on and near the project site. Although there are state or federally listed threatened or endangered species with the potential to occur in the vicinity of the Park (see Appendix A), according to consultation with NMFS and NYNHP, it is not likely that these species would occur in the project site. Overall, the habitat enhancement activities and tidal/intertidal habitat creation associated with the Proposed Project would provide additional habitat for the area's vegetation and wildlife.

COMPLIANCE with STATUTES and REGULATIONS listed at 24 CFR 58.6

FLOOD INSURANCE / FLOOD DISASTER PROTECTION ACT

1. Does the project involve the acquisition, construction or rehabilitation of structures, buildings or mobile homes?

☐ No; flood insurance is not required. The review of this factor is completed.

☒ Yes; continue.

2. Is the structure or part of the structure located in a FEMA designated Special Flood Hazard Area?

☐ No. Source Document (FEMA/FIRM floodplain zone designation, panel number, date): _ (Factor review completed).

☒ Yes. Source Document (FEMA/FIRM floodplain zone designation, panel number, date). (Continue review). **FIRM Preliminary Work Map Panel Number 3604970081G, December 2013, Flood Zone: AE, AE/VE 1% Static Base Flood Elevation (where applicable): 10.00 (NAV88 ft), see Appendix F**

3. Is the community participating in the National Insurance Program (or has less than one year passed since FEMA notification of Special Flood Hazards)?

☒ Yes - Flood Insurance under the National Flood Insurance Program must be obtained and maintained or the economic life of the project, in the amount of the total project cost. A copy of the flood insurance policy declaration must be kept in the Environmental Review Record. **The project takes place on land owned by the State of New York, through the OPRHP. New York State has a policy of self-retention that has been accepted by FEMA by rulemaking (see 44 CFR 75.14) pursuant to 24 CFR 58.6(a)(4).**

☐ No (Federal assistance may not be used in the Special Flood Hazards Area).

COASTAL BARRIERS RESOURCES ACT

1. Is the project located in a coastal barrier resource area

☒ No; Cite Source Documentation: CBRS Map, see **Figure 20**.
(This element is completed).

☐ Yes; Federal assistance may not be used in such an area.

AIRPORT RUNWAY CLEAR ZONES AND CLEAR ZONES DISCLOSURES

1. Does the project involve the sale or acquisition of existing property within a Civil Airport's Runway Clear Zone, Approach Protection Zone or a Military Installation's Clear Zone?

☒ No; Cite Source Documentation: Please see **Figure 21**.
Project complies with 24 CFR 51.303(a)(3).

☐ Yes; Disclosure statement must be provided to buyer and a copy of the signed disclosure statement must be maintained in this Environmental Review Record.

COMPLIANCE with STATUTES and REGULATIONS listed at 24 CFR 58.5

DIRECTIONS - Once the review process for each compliance factor has been completed, the Statutory Checklist must then be filled out. Specifically, the RE must indicate whether the activity does or does not affect the resources under consideration. Consult the guidance provided in the table below or the web sites. Indicate **Status "A"** on the worksheet if the project does not require formal consultation with an outside agency and does not affect the resource in question. Document the determination made and the sources of information were used—information sources are provided in the guidance. If the activity triggers formal compliance consultation with the oversight agency or affects the resource, indicate **Status as "B".** Any compliance documentation should also be attached to the Checklist and included in the ERR.

Compliance Factors:

Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5	Status A/B	Compliance Documentation
Historic Preservation [36 CFR Part 800]	A	Roberto Clemente State Park does not contain any resources eligible for listing on the State and National Registers of Historic Places. As documented in Appendix D, in a letter dated July 1, 2014, SHPO has concurred that the project would have no effect on cultural or historic resources. The Tribal Historic Preservation offices of the Mohican Tribe, Delaware Tribe, Delaware Nation, and Shinnecock Tribe concurred with SHPO's findings of no effect on cultural resources (see **Appendix D**).
Floodplain Management [Executive Order 11988; 24 CFR Part 55]	B	As noted previously, the project site is located within the 100-year floodplain. Because the purpose of the Proposed Project is to stabilize the shoreline and make park improvements within Roberto Clemente State Park, there is no practicable alternative to conducting this activity in a 100-year floodplain. However, because the Proposed Project is limited to shoreline stabilization, park improvements, and passive and active recreational facilities that do not include any new building structures within the 100-year flood elevation, or add any new populations that would be put at risk to flooding hazards, the Proposed Project is consistent with Executive Order 11988. Documentation of the 8-step decision-making process required by 24 CFR 55.20 to determine whether alternatives to construction within the floodplain would meet the purpose and need of the Proposed Project is included in **Appendix F**. As required by the applicable regulations, GOSR issued an Early Notice and Public Review of a Proposed Activity in a 100-year Floodplain to all interested agencies, groups, and individuals. The notice, which was issued on June 12, 2014, invited all interested parties to comment on the proposed project and to request further information. The public comment period remained open until June 27, 2014. Appendix

		F provides a summary of public comments received and the project sponsors' responses to these comments.

Wetland Protection [Executive Order 11990; 3 CFR, §§ 2, 5]	B	As shown in Figures 18 and 19, NYSDEC littoral zone tidal wetlands occur along the western edge of the project site as it comprises a riverfront area. There are no wetlands that would fall under the jurisdiction of the USACE within the project site. As noted above, because a purpose of the Proposed Project is to reconstruct the bulkhead and stabilize the shoreline of Roberto Clemente State Park to its pre-Sandy condition, there is no practicable alternative to conducting this activity outside of a NYSDEC littoral zone wetland. OPRHP has submitted a permit application to NYSDEC under Article 25 of New York's Environmental Conservation Law (Tidal Wetlands Act). The Proposed Project will comply with any and all conditions set forth in the permit once issued.

Coastal Zone Management Act [16 U.S.C. 1451, §§ 307(c), (d)]	B	A letter of General Concurrence with New York State's coastal policies for the project received from NYSDOS on April 10, 2014 (**Appendix E**). Additionally, the New York City Department of City Planning (DCP) found the project to be consistent with the Local Waterfront Revitalization Program (WRP) in an email dated April 23, 2014 (**Appendix E**).

Sole Source Aquifers [40 CFR Part 149]	A	The project site is not above a sole source aquifer and would have no potential to adversely affect any designated aquifer sources. http://www.epa.gov/region2/water/aquifer/, http://www.epa.gov/safewater/sourcewater/pubs/qrg_ssamap_reg2.pdf

Endangered Species Act [50 CFR Part 402]	A	As noted above, although there are state or federally listed threatened or endangered species with the potential to occur in the vicinity of the Park (see **Appendices A and C**), according to information provided by NYNHP, USFWS, and NMFS, the proposed project would have no effect on these species for the reasons set forth earlier in this Environmental Assessment. This conclusion was confirmed through site investigations. In a September 13, 2011 letter, NMFS concluded that the Proposed Project is not likely to adversely affect any listed species under NMFS jurisdiction, including shortnose sturgeon, and that no further consultation under section 7 of the ESA is required. In a September 19, 2011 letter, NYSDEC acknowledged that there are no records of rare or state listed species in the vicinity of the project site. Correspondence from NYSDEC dated July 3, 2014 indicates that piping plover and northern long-eared bat do not occur at or near the project

		site, and that proposed activities would have no effect on these species.

Wild and Scenic Rivers Act [16 U.S.C. 1271, §§ 7(b), (c)]	A	There are no nationally designated Wild and Scenic Rivers on or near the project site.

Clean Air Act [40 CFR Parts 6, 51, 93]	A	Bronx County is part of a maintenance area for CO and $PM_{2.5}$. Based on analysis of 2009-2011 monitoring data, on October 2, 2013, New York State recommended that the region be designated as in attainment with the annual average primary standard for $PM_{2.5}$. Bronx County is within a non-attainment zone for the 8-hour ozone standard. The EPA has designated the entire state of New York as "unclassifiable/attainment" for the 1-hour NO_2 standard. During Proposed Project operation—the continued use of Roberto Clemente Park—there would be no increase in air pollutant emissions. The construction of the Proposed Project would result in some emissions from on-site construction equipment and the transport of construction materials. However, based on the expected construction activity and construction costs of the Proposed Project and review of emissions and construction costs for projects involving similar types of construction, the Proposed Project would not exceed General Conformity *de minimis* emissions thresholds. Therefore, the Proposed Project has no potential to affect air quality or affect the New York State Implementation Plan (SIP). See Appendix G.

Farmland Protection Policy Act [7 CFR Part 658]	A	There is no designated farmland located on or near the project site and therefore the Proposed Project has no potential to convert farmland to non-agricultural uses.

Environmental Justice [Executive Order 12898]	A	The Council on Environmental Quality's guidance (*Environmental Justice Guidance under the National Environmental Policy Act*, December 1997) requires minority communities to be identified where the minority population exceeds 50 percent, or where the minority population percentage is meaningfully greater than the minority population in the comparison areas. CEQ guidance does not specify a threshold to be used for identifying clusters of low-income populations. NYSDEC's policy for environmental justice defines "a low-income community" as a census block group or contiguous area where the low-income population or the percentage of individuals living below the poverty threshold as defined by the U.S. Census Bureau is equal to or greater than 23.59 percent of the total population. The entire study area is considered both a minority and low-income community, with 98.7% minority population and 32.6% low-income population. All of the study area's 19 block groups are considered minority communities, and some are

		also low-income communities. The Proposed Project would be in compliance with all applicable environmental justice protections and would not result in any significant adverse impacts on minority or low-income populations. The Proposed Project would ultimately result in positive enhancements to the shoreline and park—improved recreational facilities, enhanced visitor experience along the shoreline, habitat enhancement, and the creation of new environmental education opportunities—that could be used and enjoyed by the area's residents, including minority and/or low-income populations residing within the adjacent areas. See **Appendix A, Attachment B,** for Environmental Justice evaluation

Noise Abatement and Control [24 CFR Part 51, Subpart B]	A	The Proposed Project would not result in a new permanent facility that would generate noise on the project site, nor would it introduce any new or rehabilitate any existing noise sensitive uses. The ambient noise levels in the Park are consistent with parks in urban settings, and less than other parks in New York City.

Explosive and Flammable Operations [24 CFR Part 51, Subpart C]	A	This criterion is applicable to HUD-assisted projects that involve new residential construction, conversion of non-residential buildings to residential use, rehabilitation of residential properties that increase the number of units, or restoration of abandoned properties to habitable condition. As the Proposed Project is limited to shoreline rehabilitation and improvement of a park, the criterion does not apply.

Toxic Chemicals and Radioactive Materials [24CFR Part 58, § 5(i)(2)]	A	This criterion requires that properties proposed for use in HUD programs be free of hazardous materials, contamination, toxic chemicals and gases and radioactive substances where a hazard could affect the health and safety of the site users or conflict with intended utilization of the property. The majority of the area where the project site and Roberto Clemente Park is now located was created through filling of the Harlem River. Fill materials may include ash or other waste materials from industrial processes and demolition debris from pre-existing structures. Prior to construction of the Park, the land was primarily a shipbuilding facility until after World War II. Uses, within both the project site and the remainder of the Park, included fuel storage, heavy machine work, engine testing, chemical engraving, coal storage, a junk yard, and the New York University (NYU) Aerospace Laboratory. The Proposed Project would require construction activities (e.g., excavation or grading) that would disturb soil potentially contaminated from these or other undocumented prior uses. A recent Phase II investigation that involved soil sampling within the footprint of the tidal/intertidal habitat, and within the northern portion of the project site, has indicated no significant evidence of contamination; Semi-volatile Organic Compounds (SVOCs) and

		metals exceeding Part 375 Soil Cleanup Objectives were attributable to the urban fill material. Soil encountered during the Proposed Project will be assumed to contain VOCs, SVOCs and metals at levels typical of urban fill material, and will be removed in accordance with a Remedial Action Plan and a Construction Health and Safety Plan. Removed materials will be tested and disposed of at a licensed facility in accordance with all regulatory requirements. Disturbed subsoil will be covered with at least 2 feet of clean fill material, pavement, or other nontoxic surfaces. The Proposed Project does not involve occupants and would not create exposure pathways that could affect the health and safety of the Park visitors. Any remaining pre-existing contamination does not conflict with the continued use of the project site as a public park.

Airport Clear Zones and Accident Potential Zones [24 CFR Part 51, Subpart D]	A	The Proposed Project is not located within 3,000 feet of a civil airport or within 15,000 feet of a military airfield; therefore, this criterion does not apply. See **Figure 21**.

DETERMINATION

The preparers have complied with all provisions of 24 CFR Part 58, Subpart E—Environmental Review Process: Environmental Assessments, examining alternatives to the project itself, feasible ways to modify the project to eliminate or minimize adverse impacts, and based on steps (a) through (f) found in the regulations, determined the following:

Finding of No Significant Impact (FONSI), whereby the Responsible Entity may proceed to Dissemination and publication of the FONSI, per regulations found at 24 CFR Part 58, sec. **58.43(a).**

PREPARER

Name: Sandra Collins, Vice President (AKRF, Inc.)

Signature: Sandra L Collins

Date: August 6, 2014