Tiered Site-Specific Environmental Assessment

New York City Department of Small Business Services - Coney Island Creek Shoreline Project

DR-4480-0052

Brooklyn, Kings County, New York

May 2025

U.S. Department of Homeland Security
Federal Emergency Management Agency Region 2
26 Federal Plaza, NY, NY 10278

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LIST OF ACRONYMS

°F	Degrees Fahrenheit
BMP	Best Management Practices
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CSO	Combined Sewer Overflow
CWA	Clean Water Act
DHS	U.S. Department of Homeland Security
DHSES	New York State Division of Homeland Security and Emergency Services
DSBS	New York City Department of Small Business Bureau
EIS	Environmental Impact Statement
EO	Executive Order
EPA	U.S. Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FONSI	Finding of No Significant Impact
HMGP	Hazard Mitigation Grant Program
NEPA	National Environmental Policy Act
NPDES	National Pollution Discharge Elimination System
NYCDEP	New York City Department of Environmental Protection
NYCHA	New York City Housing Authority
NYSDOS	New York State Department of State
NYSDEC	New York State Department of Environmental Conservation
PEA	Programmatic Environmental Assessment for Stream and Shoreline Stabilization in New York and New Jersey
SSEA	Site-Specific Environmental Assessment

TMDL	Total Maximum Daily Load
USACE	U.S. Army Corps of Engineers
U.S.C.	United States Code
WRP	Waterfront Revitalization Program

1.0 INTRODUCTION

Between January 20, 2020, and May 11, 2023, the emergency conditions in the State of New York, resulting from COVID-19 were considered sufficiently severe to warrant a major disaster declaration on March 20, 2020. The declaration authorized the U.S. Department of Homeland Security's (DHS) Federal Emergency Management Agency (FEMA) to aid the State of New York according to Federal Disaster Declaration DR-4480-NY. The New York City Department of Small Business Services (DSBS) applied for FEMA's Hazard Mitigation Grant Program (HMGP) funding through the New York State Division of Homeland Security and Emergency Services (DHSES). The HMGP is authorized under Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act. DHSES is the direct recipient of the grant, and DSBS is the Subrecipient.

DSBS proposes to construct new shoreline protection measures along five low-lying locations on the south shore of Coney Island Creek, totaling approximately 3,336 feet between West 23rd Street and West 8th Street. These protection measures include replacing existing bulkheads with a combination of cantilevered and/or anchored bulkheads and riprap revetments divided into 12 segments across the five sites.

1.1 Use of this Tiered Site-Specific Environmental Assessment

FEMA prepared this tiered Site-Specific Environmental Assessment (SSEA) in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended, and the Council on Environmental Quality regulations implementing NEPA (Title 40 Code of Federal Regulations [CFR] Sections 1500–1508).[1] In accordance with the above-referenced regulations, FEMA Directive 108-1, and FEMA Instruction 108-1-1, during decision-making, FEMA is required to evaluate and consider the environmental consequences of major federal actions it funds or undertakes.

In July 2020, FEMA prepared the *Programmatic Environmental Assessment for Stream and Shoreline Stabilization in New York and New Jersey* (PEA) (FEMA 2020) to facilitate and streamline compliance with NEPA for FEMA-funded streambank and shoreline stabilization

[1] FEMA is aware of the November 12, 2024, decision in Marin Audubon Society versus Federal Aviation Administration, No. 23-1067 (D.C. Cir. Nov. 12, 2024). To the extent that a court may conclude that the CEQ regulations implementing NEPA are not judicially enforceable or binding on this agency action, FEMA has nonetheless elected to follow those regulations at 40 CFR Parts 1500–1508, in addition to FEMA's procedures/regulations implementing NEPA at U.S. Department of Homeland Security Instruction 023-01-001 and FEMA Instruction 108 01 1, to meet the agency's obligations under NEPA, 42 United States Code (U.S.C.) Sections 4321 et seq.

projects in New York and New Jersey. While the Proposed Action is consistent with the scope of actions described in the PEA, project activities require a total of 8.73 acres of ground disturbance, which exceeds the 5.0-acre limit established in the PEA. Additionally, potential impacts may exceed those described in the PEA under Section 5.3 Water Quality and Water Resources, as current water quality conditions within Coney Island Creek are poor, and Section 5.10 Hazardous Materials, as the project area is in close proximity to a proposed Superfund site and active remediation and chemical storage sites facilities. Therefore, a tiered SSEA is required based on the exceedances in area and potential impacts of the proposed scope.

FEMA intends to use this tiered SSEA to (1) analyze potential environmental impacts of the Proposed Action and alternatives, including a No Action alternative, which may be beyond the scope covered in the PEA, and (2) determine whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI).

2.0 PURPOSE AND NEED

FEMA's HMGP provides financial assistance to state, local, tribal, and territorial governments so they can implement hazard mitigation measures that reduce the risk of loss of life and property from disasters. This grant funding is available after a presidentially declared disaster.

The purpose of the Proposed Action is to reduce risks associated with increasingly frequent tidal flooding and storm surge events on the south shore of Coney Island Creek. With an increase in both the frequency and intensity of storms, elevated levels of flooding are anticipated to worsen conditions in the project area compounded by its low-lying topography. Flooding leads to damaged roads and structures and limits the mobility of residents and businesses of the local area by impeding transportation and access to jobs, health care services, and schools. The project is needed to minimize future damage to roads, structures, businesses, and transportation infrastructure in the communities directly upland of Coney Island Creek. Additionally, flooding may cause hazardous materials from Coney Island Creek and nearby proposed Superfund sites to impact the roadways and structures, potentially causing harm to the public.

3.0 BACKGROUND

The project benefit area is on the southern shoreline of Coney Island Creek in Brooklyn, Kings County, New York, and encompasses the neighborhoods of Sea Gate, Coney Island, and portions of Brighton Beach (**Figure 3-1**). Due to historical changes in hydrology in combination with the low-lying topography, the neighborhoods adjacent to Coney Island Creek are susceptible to tidal flooding and storm surge. Coney Island Creek has seen significant damage from two large storms since 2010, which include Hurricane Irene in August 2011 and Hurricane Sandy in October 2012. These two events highlighted the area's vulnerability to severe weather events. An estimated 864

buildings are at risk of property structural damage because of increased water levels from intensifying storm surge. Vulnerable buildings include commercial, industrial, residential, and public housing structures. Current trends and projections indicate that the frequency of severe storm events and flooding will continue to increase.

The existing shoreline conditions include a mix of engineered and non-engineered structures. The engineered structures include bulkheads and revetments in the eastern section of the Creek while non-engineered structures include rock and construction debris piles and timber bulkheads between West 23rd Street and Kaiser Park. A waterfront inspection by DSBS noted several portions of the shoreline between West 22nd Street to Cropsey Avenue are in critical condition because of widespread rot and deterioration of existing debris, and timber bulkheads and are in need of repair and maintenance (Arcadis 2016).

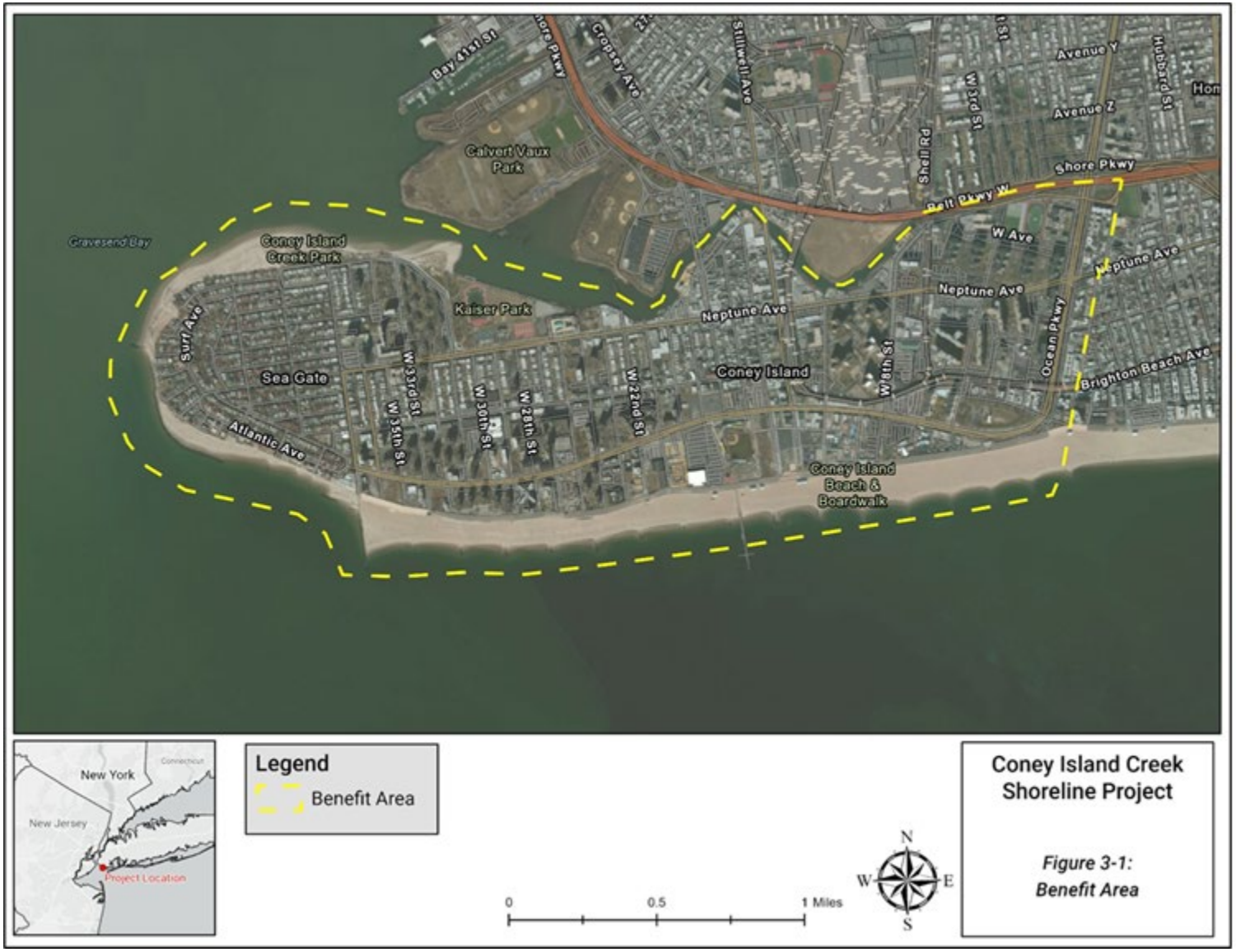

Figure 3-1 Benefit Area

4.0 ALTERNATIVES

This section discusses the No Action alternative, the Proposed Action, and alternatives that were considered but dismissed.

4.1 No Action Alternative

Under the No Action alternative, there would not be any construction, and flood mitigation work would remain deferred for an unknown period of time. To provide a consistent basis for comparison to the Proposed Action, it is assumed, for the purposes of this tiered SSEA, that bulkhead structures, revetements, and vulnerable buildings would remain in their current state and would continue to deteriorate. Storm surge and heavy rainfall events would continue to flood Coney Island Creek, maintaining the risk of damage to property and infrastructure. Flooding would continue to inundate streets, potentially necessitating road closures, which would affect emergency response times and close off evacuation routes. Water inundation would flood buildings and other structures, potentially damaging property and infrastructure. This alternative would not meet the overall purpose and need.

4.2 Proposed Action Alternative

Under the Proposed Action, DSBS would construct new shoreline protection measures at five sites along Coney Island Creek raising the existing grade one to two feet to an elevation of seven feet North American Vertical Datum of 1988 (**Figure 4-1**).

Shoreline protection measures would consist of replacing existing bulkheads with a combination of new steel cantilevered or anchored bulkheads and stone riprap revetments for approximately 3,336 feet. Bulkheads are a form of vertical wall that prevents the sliding of land and protection from wave action (U.S. Army Corps of Engineers [USACE] 1995). Revetments are a retaining wall with a sloping structure made that protects against erosion caused by wave action and storm surge. For the proposed project, the bulkheads would be composed of steel sheet piles and reinforced with a concrete cap. The concrete cap would cover the top of the bulkhead along its entire length, providing structural and aesthetic functionality, including protection of the bulkhead material, structural support to keep the bulkhead straight, and recreational uses. The proposed revetment for the project would consist of three layers: a geotextile fabric liner, bedding stone, and armor stone on the top.

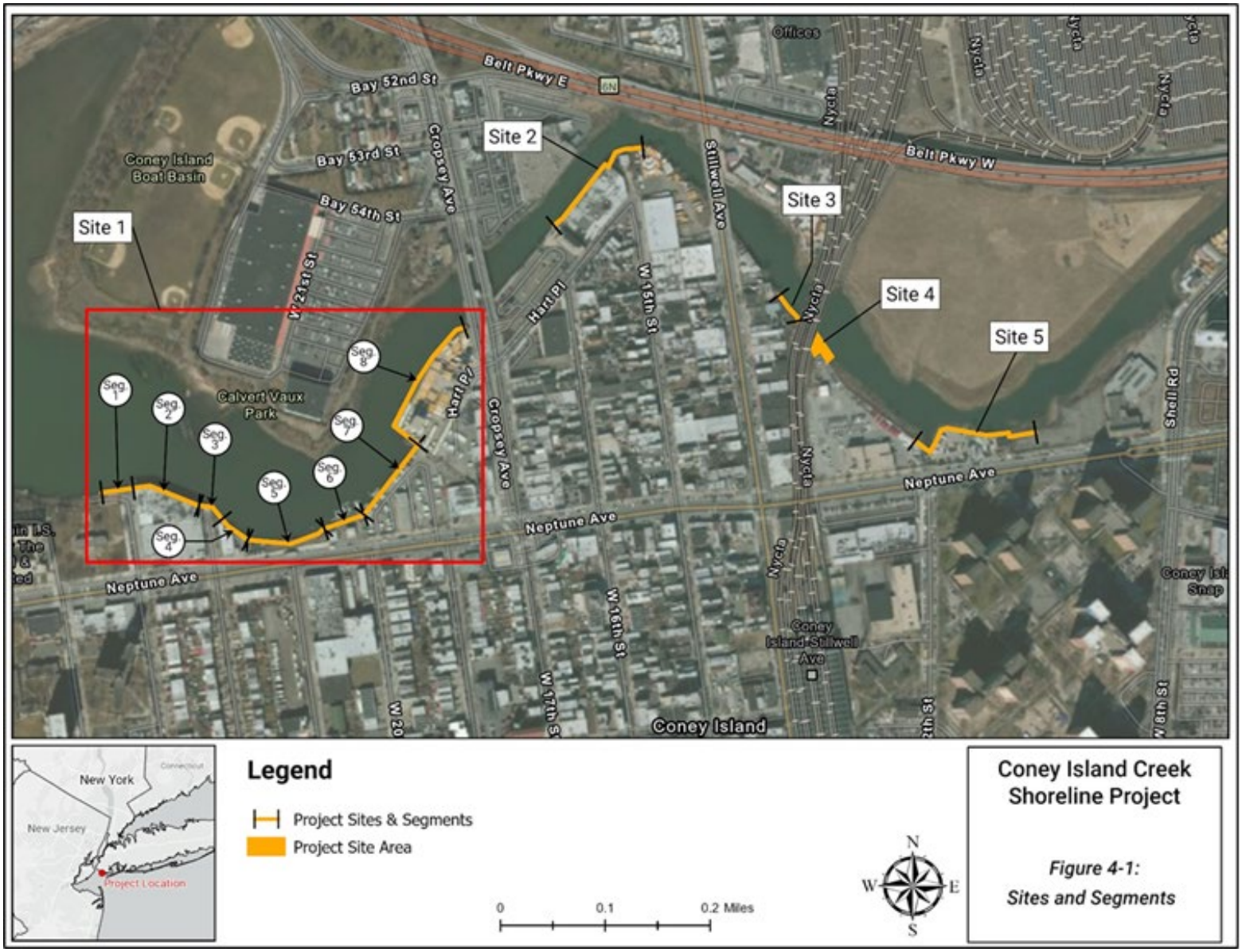

Figure 4-1 Project Sites and Segments

Site 1 would be between West 23rd Street and the Cropsey Avenue Bridge and would total 1,980 feet of shoreline improvements composed of eight segments labeled one through eight (**Figure 4-1**). At Segments 1, 2, 6, and 7, new cantilevered bulkheads would be installed outshore from existing bulkheads with no excavation required. At Segments 3, 4, and 8, existing bulkheads would be removed, and then new cantilevered bulkheads would be installed inshore from the existing bulkhead line. Excavation at these three sites would be required to remove the existing structure outshore of the proposed new structure. Segment 5 would consist of installing a new riprap revetment and steel sheet pile cutoff wall. Construction at all segments would involve in-water work. Excavation at Segments 3 through 5 and 8 would total approximately 3.26 acres.

Site 2 along the shore between Cropsey Avenue and Stillwell Avenue and would include 522 feet of new cantilevered bulkhead. Site 2 would be constructed in the water with no required excavation.

Site 3 is at the Metropolitan Transportation Authority Subway Bridge North and would total 140 feet of new cantilevered bulkhead constructed in the water with no required excavation.

Site 4 is at the Metropolitan Transportation Authority Subway Bridge South and would total 184 feet of new riprap revetment and an upland steel sheet pile cutoff wall. Construction of this segment would be conducted in the water and would require excavation totaling 0.38 acres.

Site 5 is at Neptune Avenue and would total 510 feet of new cantilevered bulkhead constructed in the water with no excavation required.

Within the proposed project, the relative position of each bulkhead segment (both cantilevered and anchored) would vary based on existing upland infrastructure, the height needed to provide the required amount of protection, and other existing conditions. Generally, the cantilevered bulkhead would be positioned along existing bulkhead lines; however, outshore installations would be offset approximately 18 inches from existing shoreline structures. At segments where the upland area is vacant, the bulkhead may be positioned inshore of the existing bulkhead. Any required excavation would be conducted with a tracked excavator and all bulkheads would be installed using a barge-mounted crane, and any existing shoreline structures offshore of the proposed bulkhead would be demolished to the existing mudline. Anchored bulkheads would only be used at segments where a cantilevered bulkhead design would not be feasible because of inadequate ground stability. Where anchored bulkheads are proposed next to existing buildings, additional coordination would be required to design around existing subsurface structural elements such as building foundations. At the revetment segments, a steel sheet pile cutoff wall with a concrete cap would be constructed inshore to minimize upland impacts during construction because of the proximity of upland infrastructure such as roadways, sidewalks, and parking areas. All steel sheet pile cutoff walls would be installed using a vibratory hammer.

The total length of the proposed work would be 3,336 feet, and the total ground disturbance for the whole project would be approximately 8.73 acres.

4.3 Alternatives Considered and Dismissed

Four alternatives to address long-term coastal flood mitigation were developed and considered, but they were dismissed.

4.3.1 Barrage

This alternative would close off the creek from Coney Island Creek Park at Seagate Avenue by constructing a marine floodwall (a barrage) across Gravesend Bay to Calvert Vaux Cove and fill in the Creek behind the structure with fill or wetlands. Since this alternative would be an in-water barrier, this alternative would provide substantial flood risk reduction with a passive flood protection system that would have minimal maintenance during non-storm conditions. However, closing off a portion of the Creek to tidal flushing could create a stagnant pool of stormwater and sewage from combined overflows that would have many environmental and ecological impacts. If tidal waters are impeded by the barrage, the area would no longer be a natural estuarine environment. Based on the potential adverse environmental impacts compared to other alternatives, this alternative was dismissed.

4.3.2 Tidal Barrier Alignments

Two tidal barrier alignments were considered: the Calvert Vaux Alignment and Six Diamonds Alignment. The Calvert Vaux Alignment is the longer of the two alternatives and would start at Coney Island Creek Park at Seagate Avenue and extend across Gravesend Bay to Calvert Vaux Cove. The Six Diamonds Alignment would be shorter and would start at West 23rd Street and cross the creek to the Six Diamonds baseball field. Both alternatives would have wide opening floodgates that would only be closed during storm events, and both would provide similar flood risk reduction. These tidal barrier alternatives would maintain tidal flows, circulation, and marine navigation within the creek. During non-storm conditions, the floodgates would remain open, allowing for water and boats to pass through. The Calvert Vaux Alignment would enclose the entire creek and would provide a greater area of flood protection for the benefit area. The Six Diamonds Alignment would also provide flood protection but would require additional measures to provide similar comprehensive flood protection for the benefit area. Although these alignments would provide flood protection, the intensive in-water footprint both during construction and permanently post-construction, along with the necessary removal of other upland habitats, such as tree removal, would result in potential adverse environmental impacts. These alternatives would also be considerably more expensive to construct, operate, and maintain. Therefore, these two tidal barrier alternatives were dismissed.

4.3.3 Shoreline Perimeter

The perimeter flood protection alternative comprises a series of flood control measures such as levees, floodwalls, and/or a combination of the two, placed adjacent to one other to create a continuous barrier on land along or near the shoreline of Coney Island Creek. This barrier would run along the entire perimeter of Coney Island Creek, from Coney Island Creek Park at Seagate Avenue inward towards the narrowest portion of the creek, between Six Diamonds Park and West 23rd Street, and wrap around the adjacent side along Six Diamonds baseball field and ending at Calvert Vaux Park. This alternative would likely not impact current hydrological conditions but would require private property acquisition and potential remediation of soils contaminated by prior shoreline uses. Additionally, this alternative would require on-land structural measures such as drainage features to ensure that any perimeter protection would not exacerbate flooding. Since there would be an extensive amount of private property work requiring cooperation of all property owners, this alternative was determined to not be logistically feasible.

4.3.4 Recontouring

This alternative would recontour (commonly called dredging and filling) the bottom of the entire creek from the widest portion at Seagate Avenue across Gravesend Bay to Calvert Vaux Park and inwards to its narrowest point between Six Diamonds Park and West 23rd Street to create wetlands. Creating wetlands by making more shallow side slopes along the creek channel and in-water planting may reduce wave energy because vegetation increases bottom friction and drag and lowers wave heights.

However, preliminary calculations showed the new wetlands would only attenuate wave energy by less than 10 percent because of limited space and the types of species that could be planted in the creek. Furthermore, converting the current open water conditions into wetlands may reduce the capacity of the creek to receive runoff across the tributary drainage area. Since there is a low reduction in flood risk and impacts on open water conditions, this alternative would not meet the purpose and need.

4.4 Summary of Alternatives

Of the six alternatives considered, four were dismissed as they did not meet the purpose and need of the project or were not feasible. Two alternatives were carried forward for detailed evaluation of the Coney Island Creek Shoreline Project.

1) No Action Alternative
2) Proposed Action

The following sections discuss the potential environmental impacts and proposed mitigation measures associated with the No Action alternative and Proposed Action.

5.0 AFFECTED ENVIRONMENT AND POTENTIAL IMPACTS

This section discusses the potential impacts of the No Action alternative and the Proposed Action on environmental resources. When possible, FEMA considers quantitative information to establish potential impacts, and the significance of the potential impacts are evaluated qualitatively based on the criteria listed in **Table 5-1**. Potential environmental impacts are also discussed in Section 5. Potential impacts identified throughout Section 5 are adverse unless noted otherwise.

Table 5-1 Impact Significance and Context Evaluation Criteria for Potential Impacts

Impact Scale	**Criteria**
No Impact	The resource area would not be affected and there would be no impact.
Negligible	Changes would either be non-detectable or, if detected, would have impacts that would be slight and local. Adverse impacts would be well below regulatory standards, as applicable.
Minor	Changes to the resource would be measurable, but the changes would be small and localized. Adverse impacts would be within or below regulatory standards, as applicable. Mitigation measures would reduce any potential adverse impacts.
Moderate	Changes to the resource would be measurable and have either localized or regional scale impacts. Adverse impacts would be within or below regulatory standards, but historical conditions would be altered on a short-term basis. Mitigation measures would be necessary, and the measures would reduce any potential adverse impacts.
Major	Changes to the resource would be readily measurable and would have substantial consequences on regional levels. Adverse impacts would exceed regulatory standards. Mitigation measures to offset the adverse impacts would be required to reduce impacts, though long-term changes to the resource would be expected.

Table 5-2 summarizes the resources that have been adequately described in the PEA, have minimal potential impacts, or that do not occur in the project area and thus would have no impacts under any of the alternatives. These resources are not analyzed in detail in this tiered SSEA.

Table 5-2 Resource Topics with No or Minimal Impacts

Topic	Reason
Geology, Soils, and Topography	None of the alternatives would impact bedrock deposits because of the depth of bedrock below the surface in the project area. None of the alternatives would affect topography. The project area is within a highly urbanized area where erosion and sediment controls are required for any construction, avoiding the potential for impacts on soils.
Farmland Protection Policy Act	Project alternatives would not affect prime or unique farmland. The project area is within the boundaries of New York City; thus, it is designated as incorporated urban area and would not be considered farmland under the Farmland Protection Policy Act.
Seismic Safety	According to the U.S. Geological Survey Earthquake Hazards Program, the project area is not in a seismically active area; therefore, none of the alternatives would affect seismic activity or be affected by seismic hazards.
Air Quality	In the EPA Greenbook, Kings County, New York, is currently shown as in nonattainment for 8-Hour Ozone. The No Action alternative would have no effect on air quality. The Proposed Action would not create a permanent source of ozone within the proposed area. All other potential air quality impacts are adequately covered in the PEA.
Floodplains	According to FEMA's National Flood Hazard Layer map, the project area is within Zone AE. Following FEMA's PEA parameters, a site-specific eight-step review process was conducted in compliance with EO 11988, and the Proposed Action was determined to be the most practicable alternative (Appendix A). Floodplain impacts for the No Action alternative are otherwise adequately described in the PEA. See Appendix A.
Wetlands	According to the National Wetlands Inventory, the project area is within an estuarine and marine deepwater wetland. Following FEMA's PEA parameters, a site-specific eight-step review process was conducted in compliance with EO 11990, and the Proposed Action was determined to be the most practicable alternative (Appendix A). Wetland impacts for the No Action alternative are otherwise adequately described in the PEA. See Appendix A.

Topic	**Reason**
Wild and Scenic Rivers Act	According to the National Wild and Scenic River System database, the closest wild and scenic river is the Musconetcong River, which is approximately 75 miles west of the proposed project area. Thus, the alternatives would have no effect on wild and scenic rivers.
Coastal Resources and Zones	The project is not within or near a Coastal Barrier Resource System unit or Otherwise Protected Area based on the U.S. Fish and Wildlife Coastal Barrier Resource System mapper. The project area is within the New York coastal zone per the New York Department of State Coastal Atlas. The Proposed Action requires consistency review with the New York City Waterfront Revitalization Program (WRP) and New York State Department of State (DOS) coastal policies. Potential impacts from all of the alternatives are adequately covered in the PEA.
Land Use and Planning Act	None of the alternatives would change existing or future land use in the area.
Endangered Species Act	Per U.S. Fish and Wildlife Service's Information for Planning and Consultation site, the following species are potentially present within the project area: • Northern long-eared bat (*Myotis septentrionalis*) – endangered • Tricolored bat (*Perimyotis subflavus*) – proposed endangered • Piping plover (*Charadrius melodus*) – threatened • Roseate tern (*Sterna dougallii dougallii*) – endangered • Rufa red knot (*Calidris canutus rufa*) – threatened • Monarch Butterfly (*Danaus Plexippus)* – proposed threatened The Proposed Action would not impact the habitat or individuals of any of the above species and FEMA made a No Effect determination. The No Action alternative would also have no effect on listed species.
Magnuson–Stevens Fishery Conservation and Management Act	The project area is within and adjacent to Essential Fish Habitat. However, due to the polluted composition of the creek, FEMA has made a No Effect determination on Essential Fish Habitat, as the alternatives would likely not cause a change in conditions in the creek.
Wildlife and Fish (Migratory Bird Treaty Act, Bald and Golden Eagle	The project area is highly developed and none of the alternatives would alter existing degraded habitats or disturb any wildlife species not otherwise adapted to an urban environment and levels

Topic	Reason
Protection Act, and Marine Mammal Protection Act)	of human activity typical of an urban area. Potential impacts on wildlife and fish, including migratory birds, are adequately covered under the PEA. Bald Eagles are not found in the project and benefit areas. Three species of seals (harbor seal [*Phoca vitulina*], gray seal [*Halichoerus grypus*], and harp seal [*Pagophilus groenlandicus*]) protected under the Marine Mammal Protection Act occur within New York Harbor. FEMA has made a No Effect determination on marine mammals, as it is unlikely the creek could support marine mammals in its current condition.
Noise	The Subrecipient must comply with all applicable noise ordinance standards, which may include limitations on construction timeframes for construction activities. Potential noise impacts for all alternatives are adequately covered under the PEA.
Transportation	Potential traffic and transportation infrastructure impacts for all alternatives are adequately covered under the PEA.
Public Services and Utilities	Potential impacts on public services and utilities for all alternatives are adequately covered under the PEA.
Public Health and Safety	Potential impacts on public health and safety for all alternatives are adequately covered under the PEA.
National Historic Preservation Act	FEMA has determined that the Proposed Action conforms to allowances outlined in the New York Statewide Programmatic Agreement (PA) and would not require consultation with the State Historic Preservation Office or Tribal Nations. Therefore, FEMA has completed its review process pursuant to Section 106 of the Nation Historic Preservation Act of 1966 (as outlined in Stipulations II.A.1 of the PA) and no further analysis is needed.

5.1 Water Quality

The Clean Water Act (CWA) of 1977, as amended, regulates discharge of pollutants into water with sections falling under the jurisdiction of USACE and EPA. Section 404 of the CWA establishes USACE's permit requirements for discharging dredged or fill materials into Waters of the United States. USACE regulation of activities within navigable waters is also authorized under the 1899 Rivers and Harbors Act. Under the National Pollution Discharge Elimination System (NPDES), EPA regulates both point and nonpoint pollutant sources, including stormwater and

stormwater runoff. Activities that disturb one acre of ground or more are required to apply for an NPDES permit, called a State Pollution Discharge Elimination System, issued through NYSDEC, as authorized by EPA.

CWA Section 303(d) requires states to identify waters that do not or are not expected to meet applicable water quality standards with current pollution control technologies alone. Under Section 303(d), states must develop total maximum daily loads (TMDLs) for impaired water bodies. A TMDL establishes the maximum amount of a pollutant or contaminant allowed in a water body and serves as a planning tool for restoring water quality. NYSDEC is responsible for enforcing compliance with Section 303(d) of the CWA.

Section 1424(e) of the Safe Drinking Water Act of 1974 (Public Law 93-523) authorizes EPA to designate an aquifer for special protection under the sole source aquifer program if the aquifer is the sole or principal drinking water resource for an area and if its contamination would create a significant hazard to public health. The sole or principal source is defined as supplying 50 percent or more of the drinking water for a particular area. Federal financial assistance may not be provided for any project that EPA determines may contaminate a sole source aquifer such that a significant hazard to public health is created.

NYSDEC's Protections of Waters Program establishes and enforces regulations that are compatible with the preservation, protection and enhancement of the present and potential values of the water resources, protect the public health and welfare; and are reasonably consistent with the state's social and economic development (NYSDEC 2024a). Under the NYS Tidal Wetlands Act a permit is required for almost any activity which will alter wetlands or the adjacent areas (6 NYCRR Part 661).

5.1.1 Existing Conditions

NYSDEC's Water Quality Standards and Classifications serve as the foundation for state-sponsored water protection initiatives. Standards establish the maximum permissible levels of chemical contaminants and serve as regulatory targets for permits, compliance, enforcement, and monitoring and assessing the quality of the state's waterways. All surface waters in New York State are assigned a letter classification that denotes their "best uses." For example, Letters SA, SB, SC, I, and SD are assigned to saline (marine) surface waters (NYSDEC 2024b). Using these categories, waters are classified for their best uses and standards are established to preserve those uses. The project site is directly next to Coney Island Creek, which is a saline water body near the southwestern shore of Brooklyn and is a tributary to the Lower New York Bay (EPA 2024c). Coney Island Creek is classified by NYSDEC as a Class I Saline surface water, which has secondary contact recreation, such as boating and fishing, as best uses and that is suitable for fish propagation and survival (NYSDEC 2023).

Sewage and stormwater from the areas surrounding the project site are collected in either combined sewer overflows (CSO) or the municipal separate storm sewer system. There are two CSO outfalls and eight separated stormwater outfalls that discharge into the creek. Coney Island Creek receives approximately 290 million gallons a year of combined stormwater and sewage through the permitted CSO outfall to the Creek. In addition, the Creek receives another 1,487 million gallons per year of urban stormwater. As a consequence of these discharges, nuisance conditions resulting from solids and floatables have impaired recreational uses. Additionally, depressed dissolved oxygen levels have impacted aquatic health and elevated bacteria concentrations, including coliform, are common (New York City Department of Environmental Protection [NYCDEP] 2016).

EPA completed a preliminary assessment in September 2020 of the Coney Island Creek site in response to a request from the community to assess the Creek. Based on the information gathered during the preliminary assessment, EPA collected 50 sediment and 8 surface water samples from Coney Island Creek in April 2021 as part of a site inspection. EPA found that volatile organic compounds, semi-volatile organic compounds including polycyclic aromatic hydrocarbons, pesticides, and metals were detected in the sediments in Coney Island Creek. In addition, EPA detected iron and cyanide in the surface water samples. EPA and NYSDEC are currently reviewing the data to determine if the Creek should be included on the Superfund National Priority List (EPA 2024a).

As of the 2022 New York State Section 303(d) list of impaired waters, Coney Island Creek is deferred from TMDLs pending the development, implementation, and evaluation of restoration measures covered by NYCDEC's (2016) Long Term Control Plan for Coney Island Creek. A TMDL may be deferred until the necessary construction and improvement projects are planned and completed, which would lead to the attainment of pertinent water quality standards within the Creek. The need for a TMDL would be reassessed after the completion of post-construction monitoring and a comprehensive analysis of the data generated by NYSDEC (NYSDEC 2024c).

Coney Island's drinking water is brought in via the Catskill aqueduct from the Catskill/Delaware systems west of the Hudson River. The project area is above the Brooklyn-Queens Sole Source Aquifer, which is no longer used as a drinking water source as of 2007 (NYCDEP 2024b, 2024c).

5.1.2 Potential Impacts

No Action Alternative

Under the No Action alternative, no construction activity related to shoreline protection measures would occur that could result in the discharge of pollutants, such as oil leaks, spills, or sediments from ground disturbance that would adversely impact water quality. No in-water work would occur that could disrupt sediment in the Creek. However, future flood events are expected to worsen with increased intensity and frequency of heavy precipitation as well as the frequency of intense storms.

The No Action alternative would not reduce the risk of flooding on Coney Island and recurrent flooding and stormwater runoff can transport sediments, contaminants from nearby industrial facilities, and hazardous materials (such as oil and grease) into waterways, thereby adversely affecting water quality. Therefore, the No Action alternative would have no short-term impacts but would have long-term **minor** adverse impacts from continued flood-related runoff.

Proposed Action Alternative

Under the Proposed Action, construction activities would include excavation, removal of vegetation through clearing and grubbing, in-water work from a barge, and pile driving with a vibratory hammer. Vegetation removal, excavation, and in-water work could result in sediments entering the waterway, potentially impacting water quality. Construction could result in accidental releases of hazardous waste from unknown underground sources or minor leaks from construction equipment (Section 5.4) that could potentially enter the creek or aquifer. However, due to the built-up nature of the project and benefit area, it is unlikely any hazardous waste from the project area would enter the Brooklyn-Queens Sole Source Aquifer. The anchors of the barge may disturb sediments, resulting in potential disturbance and resuspension of pollutants from the Creek bottom. The repeated setting and removal of barge anchors and tugboat propellers for moving the barge could also increase turbidity within the Creek. Bulkhead replacement and removal that occurs within water may also cause turbidity and sediment disturbance.

Before any construction begins, DSBS would be required to coordinate with USACE and NYSDEC to obtain any required permits. Adherence to USACE and NYSDEC permit conditions would minimize construction-related turbidity and sediment disturbance. Additional permits may be needed for stormwater management and the project would follow all construction BMPs associated with the potential permit(s) requirements. Therefore, with adherence to permit requirements and construction BMPs, construction-related activity would result in **negligible** short-term adverse impacts on water quality.

Replaced bulkheads and riprap would help reduce the impacts of storm surge and wave action, limiting damage to the shoreline. These structures would absorb wave energy while armor stone revetments placed out into the waterway work to dampen the wave energy. Furthermore, the increased elevation of the new protection measures would mitigate flood damage on adjacent properties and infrastructure by reducing the risk of water overtopping the shoreline protection measures. This would reduce the transport of debris, pollutants, and hazardous materials into the Creek waters from receding floodwaters and the contamination of roadways and structures from Coney Island Creek and the nearby proposed Superfund site. Therefore, there would be a **minor** beneficial long-term impact on water quality.

5.2 Hazardous Materials

Hazardous materials are those substances defined by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended by the Superfund Amendments and Reauthorization Act, and the Toxic Substances Control Act. Hazardous materials and wastes are regulated under a variety of federal and state laws, including 40 CFR Part 260, the Resource Conservation and Recovery Act of 1976 (42 United States Code [U.S.C.] 6901 et seq.); CERCLA of 1980 (42 U.S.C. 9601 et seq.); Solid Waste Act; Toxic Substances Control Act; and Clean Air Act of 1970 (42 U.S.C. 7401 et seq.). Evaluations of hazardous materials and wastes must consider whether any hazardous material would be generated by the proposed activity and/or already exists at or in the general vicinity of the site (40 CFR 312.10). If hazardous wastes are discovered, they must be handled by properly permitted entities. The New York Department of Labor permits entities for asbestos waste abatement, and NYSDEC issues permits for transportation and disposal of hazardous waste. In general, both hazardous materials and waste include substances that, because of their quantity, concentration, physical, chemical, or infectious characteristics, may present substantial danger to public health or to the environment when released or otherwise improperly managed.

Hazardous materials may be encountered during a project, or they may be generated by the project activities. To determine whether any hazardous materials or waste facilities exist near or upgradient of the proposed project area, or whether there is a known and documented environmental issue or concern that could affect the proposed project area, a search for Superfund sites, toxic release inventory sites, industrial water dischargers, hazardous facilities or sites, and multiactivity sites was conducted using the EPA NEPAssist tool and the DECinfo Locator.

5.2.1 Existing Conditions

According to the NEPAssist database, there are 276 hazardous material generators and waste sites within the benefit area. These sites range from commercial, industrial, and NYCHA properties with many being dry cleaners and Con Edison facilities (EPA 2024b). There are no known brownfields, toxic release, or Superfund sites in the area. Three sites, Coney Island Electroplating Works, Brooklyn Borough Gas Company, and the Creek itself have been assessed for inclusion on the Superfund National Priorities List. EPA has not issued a decision whether to include these sites on the National Priorities List.

In September 2022, EPA and NYSDEC conducted a joint preliminary assessment of sediments in the Creek. The assessment revealed the presence of volatile organic compounds; semi-volatile organic compounds including polycyclic aromatic hydrocarbons; pesticides; cyanide; and metals (EPA 2024a). An additional project area assessment via the DECinfo Locator confirmed that there are active remediation parcels and sites associated with the 2022 preliminary assessment. The NYSDEC database confirmed that there are two inactive solid waste landfills, one scrap metal

processor, one vehicle dismantling facility, and three chemical bulk storage facilities near the project area (NYSDEC 2024d).

The poor water quality of the Creek is largely attributed to factors such as low tidal flushing, which may lead to high background concentrations of pollutants, debris and refuse from dumping or direct drainage in the Creek, and illicit discharges, which include connections to sewer outfalls and pipes that convey discharges other than stormwater runoff that are not authorized (Arcadis 2016). Over time, the upper and lower sections of the Creek have become obstructed by discarded cars, boats, and various forms of urban waste (NYCDEP 2024a).

5.2.2 Potential Impacts

No Action Alternative

Under the No Action alternative, no construction activity would occur that could potentially disturb contaminated soil and there would be no in-water work that could change existing conditions of the creek. Thus, there would be no short-term impact. However, recurrent flooding would continue to occur that could damage facilities containing hazardous materials, releasing them into floodwaters. Flooding could also disrupt currently contaminated sediments within the creek, degrading water quality and exposing people and fish and wildlife to contaminated sediments. Thus, there would likely be a **minor** to **moderate** long-term adverse impact from the continued risk of flooding and damage that could lead to the dispersal of hazardous materials.

Proposed Action Alternative

The Proposed Action could pose a risk to the environment and health of on-site workers and nearby residents because hazardous materials could be encountered through direct contact or inhalation during ground-disturbing activities or released into the air and water and carried to adjacent areas. The excavation and installation of piles during in-water work could loosen soil and sediments and result in the mobilization of contaminated material in the area.

The use of mechanical equipment throughout the project area could also release fuels, oils, and lubricants through inadvertent leaks and spills. However, the Subrecipient would ensure that all equipment and project activities adhere to state and local regulations to reduce the risk of hazardous leaks and spills. Any spills during construction would be contained and cleaned. If hazardous materials are encountered in any part of the project area, the contractor would implement precautions and procedures to safely identify, manage, and dispose of hazardous materials in accordance with applicable local, state, and federal regulations. Contractors performing the work would be required to have the appropriate licenses or permits from local or state governments handling and transporting building and hazardous wastes (NYSDEC 2024e). If all regulations are followed, the Proposed Action would not increase the overall risk of exposure to hazardous materials known to already exist in the environment. As such, the Proposed Action

would have **negligible** short-term adverse impacts related to hazardous materials from vehicle and equipment use and **minor** long-term beneficial impacts because the shoreline protection measures would reduce the potential for flooding and flood damage to release hazardous materials known to occur in the project area.

5.3 Cumulative Effects

Cumulative effects represent the impact on the environment, which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or nonfederal) or person undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time. "Reasonably foreseeable" means sufficiently likely to occur such that a person of ordinary prudence would take it into account in reaching a decision (40 CFR 1508.1).

NEPA requires an assessment of (i) the reasonably foreseeable environmental effects of the proposed agency action; and (ii) any reasonably foreseeable adverse environmental effects which cannot be avoided should the Proposed Action be implemented. In addition, the CWA, the Clean Air Act, Section 106 of the National Historic Preservation Act, and Section 7 of the Endangered Species Act require an evaluation of effects as the alternatives apply to their respective resources.

FEMA broadly considers the potential for reasonably foreseeable effects based on the Proposed Action and experience with similar type projects. The Subrecipient is responsible for consulting with relevant federal, state, and local planning and regulatory agencies and determining other actions that are underway or proposed, at or near the project site that, in combination with the proposed project, could result in reasonably foreseeable effects.

Independent of the Proposed Action, one other project from the Brooklyn Greenway Initiative called Destination: Greenway is currently planned to upgrade a greenway next to Site 1 of the Proposed Action. This project would improve or add walking and biking infrastructure and provide transportation options that connect to other neighborhoods and public spaces safely (Brooklyn Greenway Initiative 2023; New York City Office of the Mayor 2023).

FEMA does not anticipate that this other project would result in overlapping construction schedules or impacts with the Proposed Action; however, the project is currently in preliminary development and could change once designs are developed. Any change to the approved scope of work will require re-evaluation by FEMA.

5.3.1 Conclusion

The project described above would result in negligible short-term impacts. Since construction activities would not overlap with the Proposed Action there would be no reasonably foreseeable effects on the human and natural environment. Implementation of BMPs and permit requirements are expected to limit potential construction-related cumulative impacts across both projects. The

Proposed Action would stabilize the shoreline of the Creek and make it safer for people to approach close to the edge. The Destination: Greenway project would complement the Proposed Action by adding more opportunities for walking and biking that may provide more recreational activities adjacent to Coney Island Creek. Therefore, there would be a long-term beneficial effect from the Destination: Greenway project and the Proposed Action.

6.0 PROJECT REQUIREMENTS

The Subrecipient is responsible for obtaining all applicable federal, state, and local permits and other authorizations for project implementation prior to construction and adherence to all permit conditions. Any change to the approved scope of work will require re-evaluation by FEMA for compliance with NEPA and other laws and EOs. The Subrecipient must adhere to the conditions as presented in Section 6.0 of the *Programmatic Environmental Assessment for Stream and Shoreline Stabilization in New York and New Jersey* during project implementation. Failure to comply with grant conditions may jeopardize federal funds.

7.0 AGENCY COORDINATION AND PUBLIC INVOLVEMENT

In accordance with FEMA's NEPA procedures, this tiered SSEA is available for agency and public review and comment for a period of 30 days. The PEA and tiered SSEA are available for download at FEMA's NEPA Repository (www.fema.gov/emergency-managers/practitioners/environmental-historic/nepa-repository) and the New York City Economic Development Corporation (NYCEDC) website (https://edc.nyc/project/coney-island-creek).

A hard copy of the PEA and tiered SSEA will be available for review at the following location:

Coney Island Library
1901 Mermaid Ave.
Brooklyn, NY 11224

This tiered SSEA reflects the evaluation and assessment of the federal government, the decision-maker for the federal action; however, FEMA will consider comments submitted during the 30-day public review period. The public is invited to submit written comments by emailing FEMAR2COMMENT@fema.dhs.gov or via mail to:

FEMA Region 2
26 Federal Plaza
New York, NY 10278
Attn: Coney Island Creek Shoreline Tiered-SSEA Comments

If FEMA receives no substantive comments from the public or agency reviewers, FEMA will adopt the tiered SSEA as final and will issue a FONSI. If FEMA receives substantive comments, it will evaluate and address comments as part of the FONSI documentation or in a final tiered SSEA.

8.0 LIST OF PREPARERS

The following is a list of preparers who contributed to the development of the tiered SSEA for FEMA. The following individuals had principal roles in the preparation of this document. Many other contributed, including senior managers, administrative support personnel, and technical staff, and their efforts in developing this tiered SSEA are appreciated.

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CDM Smith prepared this document under Contract No. 70FA6020D00000002, Task Order 70FA6022F00000060.

9.0 SUMMARY OF IMPACTS

Table 9-1 Summary of Impacts

Section	Area of Evaluation	No Action Alternative	Proposed Action: Short-Term / Temporary Impacts	Proposed Action: Long-Term / Permanent Impacts
5.1	Water Quality	Long-term minor adverse impact	Negligible adverse impact	Minor beneficial impact
5.2	Hazardous Materials	Minor to moderate intermittent adverse impact long-term	Negligible adverse impact	Minor beneficial impact

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Appendix A

8-Step Floodplain and Wetland Review

DR 4480 HMGP 2022 Coney Island Creek Shoreline Project
HMGP-4480-0052-NY (1)

Executive Order 11988 – FLOODPLAIN MANAGEMENT
Executive Order 11990 – WETLAND PROTECTION

8-STEP PROCESS SUMMARY

Date: 4/23/2025

Prepared By: Elaine Langer, Environmental Protection Specialist

Project: New York City Department of Small Business Services (NYCSBS) (subrecipient) has applied for financial assistance from the U.S. Department of Homeland Security (DHS) - Federal Emergency Management Agency (FEMA), for the construction of new bulkhead, removal of existing bulkhead, and the installation of new rip rap revetment at five sites along the southern shore of Coney Island Creek, Brooklyn, Kings County, New York through the Hazard Mitigation Grant Program (HMGP). The purpose of HMGP is to reduce the loss of life and property due to natural disasters.

The project is to be located at the following five sites: West 2nd St to Cropsey Ave Bridge, W 15th Street, Subway Bridge North, Subway Bridge South, and Neptune Ave, all along the southern shore of Coney Island Creek, Brooklyn, Kings County, NY. The proposed scope of work is to mitigate coastal flooding due to storm surge, tidal flooding, and the significant damages to infrastructure that occurred after Hurricanes Irene and Sandy. With an increase in both the frequency and intensity of storms, elevated levels of flooding are anticipated to worsen conditions in the project area compounded by its low-lying topography. To minimize future flood damage, the scope of work consists of installing new bulkheads, removing existing deteriorating bulkhead, and installing new rip rap revetment with an upland cutoff wall. All new bulkheads will be extended parallel along either the landward or leeward side of the existing bulkhead. Bulkheads will be replaced on the landward side with a new cantilever bulkhead with a concrete cap for approximately 2,302 feet and on the seaward side with an anchored bulkhead with a concrete cap for approximately 510 feet. The total linear length of all components of the proposed project is approximately 3,336 feet. Ground disturbance includes 8.73 acres. All construction will be conducted to NFIP standards in 44 CFR Part 60 and the American Society of Civil Engineers Flood Resistant Design & Construction standards (ASCE 24-14) or the latest edition.

This project must be conducted in accordance with conditions for federal actions in the floodplain as set forth in Presidential Executive Order (EO) 11988 (Floodplain Management), EO 11990 (Protection of Wetlands) and the implementing regulations found in 44 Code of Federal Regulations (CFR) Part 9, Floodplain Management and Protection of Wetlands. These regulations apply to all Agency actions which have the potential to affect floodplains or wetlands or their occupants, or which are subject to potential harm by location in floodplains or wetlands.

Projects conducted with HMGP funds must be carried out in accordance with the local floodplain management plan and ordinance and shall utilize the latest published Flood Insurance Rate Map (FIRM) Panels as “best available data,” as a minimum standard. Exceptions to this requirement shall be reported to FEMA Environmental and Historic Preservation and the local floodplain administrator before undertaking the action.

STEP 1 - Determine whether the proposed actions are located in a wetland and or the 100-year floodplain (500-year floodplain for critical action [44 CFR 9.4]) or whether they have the potential to affect or be affected by a floodplain or a wetland (44 CFR 9.7).

__X__ The project sites are located in relation to the floodplains as mapped by:

	Site	Start Point	End Point	FIRM Panel	Eff. Date	Zone
1	West 2nd St to Cropsey Ave Bridge	(40.579328, -73.991055)	(40.581089, -73.986041)	3604970353G	Preliminary 1/130/2015	VE / Area of Moderate Wave Action
2	W 15th Street Site	(40.581938, -73.984980)	(40.582938 -73.983441)	3604970353G	Preliminary 1/130/2015	VE / Area of Moderate Wave Action
3	Subway Bridge North	(40.581422, -73.981710)	(40.581115, -73.981430)	3604970353G	Preliminary 1/130/2015	VE
4	Subway Bridge South	(40.580967, -73.981197)	(40.580687, -73.980923)	3604970353G	Preliminary 1/130/2015	VE
5	Neptune	(40.57993, -73.979850)	40.579951-73.978366	3604970353G	Preliminary 1/130/2015	VE

Brief description of work: The project entails the installation 3,336 linear feet (8.73 acres) of non-continuous installation of new bulkhead, replacement of deteriorating bulkhead, and installation of rip rap revetment along portions of the southside of Coney Island Creek. The improvements are to reduce the risk of increased tidal and storm surge flooding that impacts roadways, businesses, and residences in the neighborhoods to the south of Coney Island Creek.

__X__ The Project is located in the wetland as identified by:

A review of the U.S. Fish and Wildlife National Wetland Inventory mapper on 4/23/2025 indicated that the proposed project location is in and/or adjacent to an Estuarine Subtidal habitat, classified as E1UBL.

STEP 2 - Notify the public at the earliest possible time of the intent to carry out an action in a floodplain or wetland and involve the affected and interested public in the decision-making process (see 44 CFR 9.8).

_____ Not applicable - Project is not located in a floodplain or wetland.
__X__ Applicable - Notice will be or has been provided by:

Public notice will be provided in the public comment period for the Tiered Site-Specific Environmental Assessment for this project.

STEP 3 - Identify and evaluate practicable alternatives to locating the proposed action in a floodplain or wetland (including alternative sites, actions, and the "No Action" option) [see 44 CFR 9.9]. If a practicable alternative exists outside of the floodplain or wetland, FEMA must locate the action at the alternative site.

_____ Not applicable – Project is not located in a floodplain or in a wetland.
__X__ Applicable – Alternative identified in the EA Document or as described below:

Alternative 1: No Action – The *No Action* alternative would leave the area susceptible to flooding during storm events and overtopping of the existing deteriorating bulkheads. Stormwater would continue to overflow into the community, as has been the case historically. Flood-related losses and flooding would continue to jeopardize life and safety.

Alternative 2: Proposed Action: Coney Island Shoreline Project – The proposed action consists of installing new bulkheads, removing existing deteriorating bulkheads, and installing new rip rap revetment with an upland cutoff wall. All new bulkheads will be extended parallel along either the landward or leeward side of the existing bulkhead. Bulkheads will be replaced on the landward side with a new cantilever bulkhead with a concrete cap for approximately 2,302 feet and on the seaward side with an anchored bulkhead with a concrete cap for approximately 510 feet. The total linear length of all components of the proposed project is approximately 3,336 feet. Ground disturbance includes 8.73 acres. The proposed project will follow applicable codes and standards and conditions to comply with requirements of EO 11988 and 11990 and the implementing regulations at 44 CFR Part 9. The EOs allow for locating these actions in the floodplain because the impacts of the action can be minimized, and the importance of the action to this community outweighs other EO requirements.

Alternative 3: Barrage – This alternative consists of closing off the creek from Coney Island Creek Park at Seagate Avenue by constructing a marine floodwall (a barrage) across Gravesend Bay to Calvert Vaux Cove and fill in the Creek behind the structure with fill or wetlands. Although this alternative would create a significant flood risk reduction, the ecological footprint would be significant and less preferrable.

Alternative 4: Tidal Barrier Alignments – This alternative consists of installing two tidal barrier alignments; the Calvert Vaux Alignment (the longer of the two) and Six Diamonds Alignment. Both alignments would have wide opening floodgates that would only be closed during storm events, and both would provide similar flood risk reduction. These tidal barrier alternatives would maintain tidal flows, circulation, and marine navigation within the creek. Both would provide significant protection from flood waters. However, this alternative would include in-water changes and upland changes by removing trees, altering the ecological footprint of the area, and is therefore less preferrable.

Alternative 5: Shoreline Perimeter – This alternative consists of extending the linear feet of the shoreline to the existing project. The project would be very expansive as it would include the entire shoreline perimeter and would need many private properties and parties to agree. Considering the size and scale of this alternative, it was deemed too costly and therefore less feasible and preferrable.

Alternative 6: Recontouring – This alternative proposes to dredge and fill (recontour) the bottom of the creek. Although this would reduce flooding, the ecological footprint of dredging, and the contaminated substrate, would make this alternative less feasible.

STEP 4 - Identify the full range or potential direct or indirect impacts associated with the occupancy or modification of floodplains and wetlands and the potential direct and indirect support of floodplain and wetland development that could result from the proposed action (see 44 CFR 9.10).

_____Not applicable – Project is not located in a floodplain or in a wetland.
__X__ Applicable – Alternative identified in the EA document or as described below:

Alternative 2: Proposed Action – The purpose of this project is to alleviate flooding from hurricanes and storm events to the residences, businesses, and roads by replacing existing bulkhead and adding new bulkheads and rip rap. The installation of new and replacement bulkheads and rip rap installation will minimize flooding to this community, reducing the financial stresses of repetitive flooding and the possibility of mold and interior air quality issues that would negatively impact the surrounding environment. This reduced impact will minimize the potential for debris and pollutants to enter the waterway from the area to be protected. Impacts to wetlands during construction would be temporary, and construction would need to be coordinated with appropriate regulatory agencies, including the U.S. Army Corps of Engineers (USACE) and the New York State Department of Environmental Conservation (NYSDEC). Required permits would include the implementation of best management practices to minimize impacts to water quality.

A review of the natural environment, social concerns, and the economic aspects of the proposed project indicates that supporting bulkhead installation and replacement as well as the riprap revetment at the desired location is the only practicable alternative and that no practicable alternative has been identified outside of the special flood hazard area and wetlands.

STEP 5 - Minimize the potential adverse impacts and support to or within floodplains and wetlands to be identified under Step # 4, restore and preserve the natural and beneficial values served by floodplains, and preserve and enhance the natural and beneficial values served by wetlands (see 44 CFR 9.11).

_____Not applicable – Project is not located in a floodplain or in a wetland.
__X__ Applicable – Mitigation measures identified in the EA document or as described below:

The purpose of this project is to mitigate the risk of flooding to the residences, businesses and roads that have experienced recurring flooding events in the past from both hurricanes and storm events. During periods of flooding, the replacement and new bulkheads will serve to minimize inaccessibility to roads for emergencies and the MTA. Reduced flood impacts will decrease the likelihood of debris and hazardous materials being released into Coney Island Creek once flooding recedes. Impacts to wetlands will be minimized by permit regulations as required by USACE and NYSDEC.

Alternative 2: Proposed Action – The project shall be in accordance with local, state, and federal floodplain and wetland ordinances with applicable codes and standards applied to mitigate and minimize adverse effects.

STEP 6 - Re-evaluate the proposed action to determine first, if it is still practicable in light of its exposure to flood hazards, the extent to which it will aggravate the hazards to others and its potential to disrupt floodplain and wetland values, and second, if alternatives preliminarily rejected at Step #3 are practicable in light of the information gained in Steps #4 and #5. FEMA shall not act in a floodplain or wetland unless it is the only practicable location.

_____Not applicable – Project is not located in a floodplain or in a wetland.
__X__ Applicable – Action proposed is located in the only practicable location as described below:

The proposed action is the chosen practicable alternative based upon a review of possible adverse effects on the floodplain/wetlands and community/socioeconomic expectations.

STEP 7 - Prepare and provide the public with a finding and public explanation of any final decision that the floodplain or wetland is the only practicable alternative (see 44 CFR 9.12).

_____Not applicable – Project is not located in a floodplain or in a wetland.
__X__ Applicable – Finding is or will be prepared as described below:

Step 7 requires that the FEMA provide the public with an explanation of any final decisions that the Proposed Action in a floodplain is the only practicable alternative, potential impacts of the Proposed Action on floodplains, and associated mitigation measures. In accordance with 44 CFR 9.12, FEMA will provide this with the notice of availability of the draft Tiered Site-Specific Environmental Assessment for public review and comment.

STEP 8 - Review the implementation and post-implementation phases of the proposed action to ensure the requirements of the Order are fully implemented. Oversight responsibility shall be integrated into the existing process.

_____Not applicable – Project is not located in a floodplain or in a wetland.
__X__ Applicable – Approval is conditioned on review of implementation and post- implementation phases to ensure compliance with the order(s).

Review the implementation and post-implementation phase of the proposed action to ensure that the requirement(s) stated in 44 CFR 9.11 are fully implemented.

__X__ Applicable – Oversight responsibility shall be integrated into existing processes and project completion in accordance with all applicable floodplain ordinances and codes and standards shall be verified at project completion.