

**FIDi FORGE**  
**EIS Scoping**  
**Additional Information Document**

New York City, New York County (Manhattan), New York

May 2026

Provided by:

U.S. Army Corps of Engineers

New York City Economic Development Corporation

## **EIS Scoping**

### **Additional Study Information Document**

#### **Section 203 Feasibility Study and Environmental Impact Statement**

This document provides additional detail about the information presented in the Public Notice to prepare a Section 203 study and environmental impact statement (EIS) for the Financial District and Seaport Fortifying Our Resilient Growth & Economy (FiDi FORGE) Coastal Storm Risk Management Section 203 Study for New York, New York. The Section 203 study and EIS will be prepared as an Integrated Interim Feasibility Study and Environmental Impact Statement (Integrated Interim Report).

The Public Notice can be accessed via the study website at the following link:

<https://fidiseaportclimate.nyc/environmental-review>.

The United States Army Corps of Engineers, New York District (District) is soliciting public participation and input on the scope of the study and EIS, including information provided in the Public Notice and this Additional Information Document. The public is invited to submit comments related to the scope and preparation of the Draft Integrated Interim Report during this scoping period **through July 14, 2026**.

**FOR FURTHER INFORMATION:** For more information about the study, the EIS, or about this scoping period, please visit the study website at the following link: <https://fidiseaportclimate.nyc/environmental-review>. Scoping comments and questions regarding the Draft Integrated Interim Report or the National Environmental Policy Act of 1969 (NEPA) process may be directed to the NEPA POC, Cheryl Alkemeyer, NEPA by email at: [CENAN-FiDiFORGE-203-Study@usace.army.mil](mailto:CENAN-FiDiFORGE-203-Study@usace.army.mil)

# Introduction and Background

## Study Description

The USACE and the New York City Economic Development Corporation (NYCEDC), acting as a non-federal interest on behalf of the City of New York, are partnering to investigate the feasibility of managing coastal storm risk in Lower Manhattan within the Financial District and South Street Seaport and surrounding areas. The study will evaluate coastal storm risk management measures for approximately 0.9 miles of the Lower Manhattan and East River waterfront from the Brooklyn Bridge to The Battery (Figure 1). Due to its low-lying topography and location along the East River, the area is at greater risk due to high tidal elevations and coastal flooding from the increasing severity in storm events.



Figure 1. FiDi FORGE Location

## Previous Planning Studies

FiDi FORGE was first considered within a larger planning effort collectively known as “The Big U,” which was led by NYCEDC and the Mayor’s Office of Climate and Environmental Justice (previously known as the Mayor’s Office of Recovery and Resiliency). Following the 2014 release of the “The Big U” proposal, the Mayor’s Office of Recovery and Resiliency and NYCEDC led the Lower Manhattan Climate Resiliency Study. With the release of the Lower Manhattan Climate Resiliency Study in 2019, the City of New York adopted a phased approach to implementing solutions in multiple geographic areas. As such, the planning effort was subsequently separated into four projects, and the Financial District and South Street Seaport area became the subject of its own study through the Financial District and Seaport Climate Resilience Plan. The master planning process for the Financial District and Seaport Climate Resilience Plan, which was completed in 2021, included robust public engagement; city, state, and federal agency coordination; technical analysis; recommendations for coastal storm risk management designs and alternatives; and an implementation plan.

As part of the master planning effort, the USACE chaired a committee of local, state, and federal agencies associated with regulatory review, coordination, and permitting roles for managing and regulating aquatic and coastal resources to collaborate throughout the planning effort. This collaborative working group, known as the Aquatic Resources Advisory Committee, began meeting in 2020 and continued throughout the course of the planning process.

USACE also coordinated with the City of New York on the New York and New Jersey Harbor and Tributaries Study and released a coastal storm risk management feasibility study, Draft Integrated Feasibility Report, and Tier 1 Environmental Impact Statement in 2022, followed by a draft report for early actionable elements of the study in 2025. The FiDi FORGE study area is included in the New York and New Jersey Harbor and Tributaries Study but was not identified as an early actionable element. In 2023, the City of New York and USACE engaged in a workshop exploring alternative delivery mechanisms to advance projects, including FiDi FORGE. Those discussions led to NYCEDC initiating the current FiDi FORGE Coastal Storm Risk Management Section 203 Study.

## Study Area and Limits of Disturbance/Sub Areas

The study area limits encompass approximately 0.9 miles of Lower Manhattan and East River waterfront from just south of the Brooklyn Bridge to The Battery. It includes portions of the East River from the Brooklyn Bridge to The Battery and, from north to south, Piers 17, 16, 15, and 11 (servicing the NYC Ferry); the Downtown Skyport at Pier 6; the Battery Maritime Building (servicing Governors Island Ferry); Whitehall Ferry Terminal (servicing Staten Island Ferry); the United States Coast Guard site; and portions of The Battery.

This area includes several neighborhoods with varying characteristics. Lower Manhattan is a place where people work and live, with 24-hour services and amenities; open spaces; and recreational uses for residents, students, and employees. It includes a residential community and is a business district and transportation hub. Based on the previous Financial District and Seaport Climate Resilience Master Plan developed for the study area, Lower Manhattan serves about 510,000 commuters, 290,000 workers, and

62,000 residents including students enrolled in 21 schools and education centers; Lower Manhattan is also a tourist destination, with about 17.7 million annual visitors.<sup>1</sup>

The study area, comprising the South Street Seaport and the eastern portion of the Financial District, had a residential population of approximately 11,000 according to 2024 American Community Survey 5-year estimates. During 2023, the U.S. Census Bureau's OnTheMap online mapping application recorded approximately 93,100 jobs within the study area and a commuter inflow of 93,000 workers. Of the area's residents, about 500 both live and work within the study area, while 8,000 commute elsewhere for employment.

The South Street Seaport District has low-lying buildings with historic resources and tourist amenities such as restaurants and shopping, entertainment venues, the South Street Seaport Museum, and other historic landmarks. The Financial District includes large and medium-sized buildings, access to the Downtown Skyport (located on Pier 6), the Wall Street and Pier 11 Ferry Terminal, the Battery Maritime Building, and the Franklin D. Roosevelt East River Drive (FDR Drive), elevations of which transition from at-grade to viaduct in this area. Along the East River waterfront is a continuous esplanade with a walkway and bikeway, passive recreational space, and views of the river and the Brooklyn skyline.



Figure 2. Study Area and Subarea Map

<sup>1</sup> Financial District and Seaport Climate Resilience Master Plan. December 2021.

The study area is divided into four subareas that will be evaluated based on their unique characteristics and assets (**Figure 2**). These subareas provide a neighborhood-scale approach to communicate risks, impacts, and alternatives. Subareas include the following:

**Subarea A:** Inclusive of The Battery and the southern tie-in to the adjacent Battery Park City flood protection projects. Encompasses Whitehall Ferry Terminal, providing Staten Island Ferry service, and the National Historic Landmark Battery Maritime Building, providing Governors Island Ferry service. It also includes a United States Coast Guard site and significant underground infrastructure: Battery Park vehicular underpass; 1, R/W, and 4/5 subway stations; 1 subway turnaround; and 4/5 and R subway tunnels.

**Subarea B:** Characterized by the FDR Drive transition from an at-grade boulevard to a viaduct. Includes the Pier 11 Wall Street slips, offering NYC Ferry service, the Downtown Skyport, and the 2/3 subway tunnels underground.

**Subarea C:** Characterized by the National Historic South Street Seaport District, including the Tin Building. Infrastructure includes the A/C subway tunnels underground; the continuation of the FDR Drive viaduct; and Piers 15, 16, and 17, which serve recreational, commercial, and boating uses.

**Subarea D:** Includes the section of waterfront around the National Historic Landmark Brooklyn Bridge, the continuation of the FDR Drive viaduct, and the northern tie-in to the adjacent Brooklyn Bridge-Montgomery Coastal Resilience project.

## Area of Investigation

The Integrated Interim Report will consider the areas in which a coastal storm risk management project may have direct or indirect effects during construction or after completion.

## Limits of Disturbance

**Figure 2** illustrates the limits of disturbance for in-water and above-ground elements that would occur for the range of alternatives considered in the Integrated Interim Report. Proposed elements considered in the alternatives include, but are not limited to, floodwalls, berms, bridge and tunnel crossings, and sea walls.

## Direct Study Area

The study area for this analysis is the geographic area where direct impacts from a proposed federal action will occur within the Limits of Disturbance (**Figure 2**). These are the immediate, primary effects of the proposed activities and typically include the physical, ecological, or social effects that may result directly from construction, operation, or implementation.

The Limits of Disturbance consider the range of alternatives proposed for coastal storm risk management. Upland and in-water activities are proposed within this area and are described by subarea. Direct impacts are anticipated to include physical disturbance that would occur within Limits of Disturbance, including the demolition and relocation of existing structures buildings, construction of piers, installation of coastal storm risk management measures, modifications to the shoreline, and development of shoreline amenities.

Because FiDi FORGE will be designed to reduce the coastal storm risk inland from the Limits of Disturbance, these areas will also be considered part of the direct study area (**Figure 2**). That additional area where coastal storm risk would be managed as a result of the proposed measures was determined using the 100-year floodplain with the New York City Panel on Climate Change's 90<sup>th</sup> percentile sea level change projection for 2100.<sup>2</sup>

The direct study area will also include the anticipated construction staging areas within the Limits of Disturbance, which will be located under portions of FDR Drive, on barges moored in the East River, and on any newly constructed fill as necessary.

## Indirect Study Area

For analysis purposes, indirect effects are those caused by the proposed activities and occur later in time or farther in distance but are still reasonably foreseeable. These are considered alongside direct effects. For FiDi FORGE, proposed activities are anticipated to change the way storm events and coastal flooding affect the direct study area and additional areas along the southern Manhattan coastline and the surrounding water bodies. For that reason, the indirect study area for aquatic resources includes portions of the lower East River, Upper New York Bay, and Lower Hudson River that will be evaluated through hydrodynamic and water quality modeling. Other resource categories may consider this indirect study area or create other resource-specific areas for evaluation, which would be disclosed in their respective resource analysis documentation.<sup>3</sup>

## Projects Included in All Alternatives

All alternatives to be evaluated in the Integrated Interim Report will assume construction of projects already implemented or approved within and adjacent to the study area. This includes The Battery Coastal Resilience Project, which will provide passive flood protection through the reconstruction and elevation of the wharf promenade in The Battery.

The alternatives evaluated may tie into adjacent coastal storm risk management projects, such as the Brooklyn Bridge-Montgomery Coastal Resilience Project to the north of Subarea D and the South Battery Park City Resiliency Project to the northwest of Subarea A.

Not included as a project in the Integrated Interim Report is the Seaport Coastal Resilience project, because it has not yet been approved.

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<sup>2</sup> Horton, R., C. Little, V. Gornitz, D. Bader, and M. Oppenheimer. 2015. New York City Panel on Climate Change 2015 Report Chapter 2: Sea Level Rise and Coastal Storms. *Ann. N.Y. Acad. Sci.*, 1336: 36-44. Available online at: <https://doi.org/10.1111/nyas.12593>

<sup>3</sup> For example, an Area of Potential Effects will be delineated as the area of study for the cultural resources evaluation, which may differ from the direct study area identified on Figure 2.

## Purpose and Need

FiDi FORGE is one of several efforts underway for Lower Manhattan to manage coastal storm risk while maintaining and improving waterfront access to the community. The study area is at risk of coastal flooding from water during coastal storms, extreme tides, and future sea level change. Coastal flooding along the waterfront could cause extensive damage to public infrastructure and private property, loss of life and deterioration of public health and safety, degradation of the natural environment, and adverse changes to the social and economic character of the waterfront community.<sup>4</sup>

Lower Manhattan is a low-lying area with many transportation and economic assets including ferries and associated terminals, residential and commercial buildings, subway stations and tunnels. The study area includes more than 200 buildings with more than an estimated 85,000 jobs, 6,200 residents, and more than \$115 million in daily economic output. These assets are relied upon not only by the neighborhoods in the study area, but also by the City of New York, region, and in some cases, the Nation.

Also at risk is Lower Manhattan's utilities, roadways, and subway infrastructure. Highways, roads, railroads, subway tunnels, as well as airports have flooded in New York City during storm events. The loss of transportation function can be system-wide and affects more than the area in which the event occurred, due to the abundant number of maritime, bus, and subways services running throughout the study area. These outages can leave transportation users stranded throughout the system.

While protecting these assets from current and future coastal flood risk, proposed activities need to provide coastal storm risk management while preserving and enhancing transportation operations to and from the study area and within the East River. This includes providing evacuation opportunities and emergency access for the safety of the area's residents and workers. When coastal flooding and extreme weather events are forecasted, evacuations are recommended to minimize the loss of life and injuries. Maritime transportation, particularly, in this area is critically important for supporting emergency services and evacuations, playing a crucial role in emergencies in New York such as the nor'easter storm of December 1992, the terrorist attacks of September 11, 2011, the crash of U.S. Airways Flight 1549 in the Hudson River in January 2009, and following Hurricane Sandy in 2012.

The area needs coastal storm risk management measures. The purpose of the proposed activities is to manage current and future coastal flood risk and sea level changes within the study area by creating a coastal storm risk management system integrated within the neighborhoods that preserves and enhances critical maritime, roadway, and public transit transportation services; residential and business assets; emergency access; and waterfront access for all users.

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<sup>4</sup> For comparison, Superstorm Sandy resulted in an estimated \$19 billion in damages and lost economic activity across the New York City in 2012.

## Goals and Objectives

The goal of the study is to manage tidal and coastal flood risk in the FiDi FORGE study area while providing local and regional transportation connectivity and public access to this historically significant waterfront. This goal informed the development of study objectives and evaluation of alternative plans.

The study objectives will be used to identify reasonable alternatives that could meet the purpose and need, as set forth above. These objectives were developed through frequent coordination with multiple stakeholders and the public during the previous master planning process. The objectives target the current characteristics that must be maintained or enhanced while constructing and operating coastal storm risk management systems in an urban environment, in limited space, that minimize disruption to transportation services and economic and residential centers of the study area. The objectives for FiDi FORGE are as follows:

1. Provide a coastal storm risk management system that minimizes coastal flood damage and economic disruption to the central business district, public infrastructure, important societal resources, and the environment during regular tidal cycles and peak coastal storm events under current and future conditions with relative sea level change inside of the study area over a 50-year period of analysis.
2. Maintain ongoing functionality and reliability of surface and subsurface transportation systems.
3. Implement a coastal storm risk management system that maintains waterborne transportation services along the East River.
4. Implement a coastal storm risk management system that maintains and increases vehicular and pedestrian access to and from waterfront destinations and historic/tourist amenities in Lower Manhattan through easy-to-access entrances and connections along the East River for public use when not needed as coastal storm risk management infrastructure.
5. Reduce risk in mobilization and preparation for coastal storm surge by prioritizing passive coastal storm risk management infrastructure over deployable flood barriers.
6. Implement a coastal storm risk management system that balances initial investment with providing comprehensive coastal flood risk management for a national center of economic activity.

# Plan Formulation Process

## Project Definition

USACE planning policy and the NEPA of 1969 require that a report be available for public review that describes the analysis, risks, assumptions, and decisions made during this project's planning process. Pursuant to this requirement, the Plan Formulation section of the Draft Integrated Interim Report will:

1. Summarize the problems, needs, and opportunities for coastal storm risk management in the FiDi FORGE study area.
2. Present and discuss the results of the plan formulation process.
3. Identify specific details of a Tentatively Selected Plan (Preferred Alternative), including inherent risks.
4. Assist in determining the extent of federal interest and local support for the plan.

The plan formulation process documents the purpose and need, objectives, constraints, problems, and opportunities, which in turn inform the development of a range of alternatives for further evaluation. In addition to the purpose and need and objectives outlined above, the following problems, opportunities, and constraints were identified for the study area.

### Problems

1. Flood risk from coastal storms and extreme high tides are impacting nationally important areas/facilities, critical infrastructure, economic activity, societal resources, communities, and the environment along the Financial District and South Street Seaport waterfront.
2. Without federal action and financial assistance, it is expected that future relative sea level change will increase the frequency, extent, and depth of tidal flooding along the shoreline, thereby increasing economic damages and coastal storm risk to Lower Manhattan's vibrant waterfront.
3. The waterfront is currently at risk of coastal overtopping and damages to property and critical infrastructure because of coastal storms, including the contribution of tidal and storm surge levels, waves, and wave runup.
4. Changing sea levels will impact the functioning of the combined sewer system and impede the ability of overland stormwater to drain to New York Harbor. These hazards will impact critical utility service and cause flooding for a broad segment of residents and businesses.
5. Changing sea levels and coastal storms will inundate maritime facilities and visitor-serving attractions including the Battery Maritime Building, South Street Seaport Historic District, and other sites with historical significance. Many are listed on the National Register of Historic Places and are more vulnerable to damage due to their age.
6. Access to critical infrastructure, emergency services, and evacuation routes is expected to be limited or cut off entirely during coastal floods, posing a severe risk to life safety.

### Opportunities

1. Complete a continuous line of protection for Lower Manhattan by tying into adjacent coastal flood risk management projects along the shoreline.
2. Develop innovative strategies for adapting vulnerable historic maritime resources to relative sea level change consistent with the Secretary of the Interior Standards for Treatment of Historic Properties.
3. Recognize the cultural experiences and traditions of diverse waterfront communities and incorporate them into the planning and design of alternatives.
4. Incorporate interior drainage for coastal storm risk management, such as water retention, storage, and green infrastructure, to address stormwater flood risk.
5. Manage coastal flood risks to transportation systems in the study area.
6. Promote and enhance public access to the Financial District and South Street Seaport waterfront through quality open space.
7. Minimize carbon emissions from major construction by exploring and using proven technology in materials and landscape design.
8. Educate the public and stakeholders about current and future flood risk and create incentives for residents and businesses in the future floodplain to take individual action to reduce flood risk exposure.

### Constraints

1. Minimize impacts to cultural, historic, and community resources that sustain national and regional continuity wherever possible.
2. Avoid impacting the ability of the inland drainage system to manage stormwater runoff and do not increase combined sewer overflows to New York Harbor.
3. Avoid impacting the operations and function of maritime and public transportation systems.
4. Avoid displacement of existing private development and housing.
5. Minimize aesthetic impacts to the study area and its resources including neighborhood character and viewsheds.
6. Ensure compatibility with existing and planned coastal flood risk management measures in adjacent study areas.
7. Avoid or minimize negative impacts on existing environmental resources or ecosystem services, particularly aquatic resources.

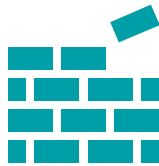
## Range of Alternatives

### Initial Approaches

To arrive at the final array of alternatives, NYCEDC formulated five initial thematic approaches that considered a range of strategies to address purpose and need, goals and objectives, problems and opportunities, and constraints. As approaches were developed, NYCEDC considered the waterfront features that are necessary for the continued operations of the urban waterfront within the FiDi FORGE study area, including those associated with critical maritime, roadway, and public transit transportation services; emergency access; and waterfront access for all users.

### Measures Considered in Initial Thematic Approaches:

Approaches were formulated with consideration of structural, non-structural, and engineering with nature features.



**Structural Measures** are physical modifications designed to reduce the frequency of damaging levels of flood inundation. Examples of structural measures included in the initial array of approaches include berms, pump stations, deployable closure gates, and floodwalls.



**Non-structural Measures** are permanent or contingent measures applied to a structure that prevent or resist damage from flooding. Physical non-structural measures include actions that require modifications to a property or structure such as structure elevation, basement removal, or acquisition. Non-physical non-structural measures do not modify individual structures but rather focus on behaviors and plans that reduce flood risk such as flood insurance, flood warning systems, and evacuation plans.



**Engineering with Nature Measures** refer to landscape features used to reduce flood risk while restoring natural processes and providing ecosystem benefits. These landscape features may be natural (produced purely by natural processes) or nature-based (produced by a combination of natural processes and human engineering) and include features such as green stormwater infrastructure, living seawalls, and subtidal habitat/aquatic vegetation improvements.

### Initial Thematic Approaches:

- **Approach 1 (No Action):** The No Action approach represents the baseline condition for the study area and assumes that no land-based or water-based coastal storm risk management improvements will be implemented.
- **Approach 2 (Non-Structural)** seeks to employ solely non-structural measures, which are permanent or contingent measures applied to a structure and/or its contents that prevent or

provide resistance to damage from flooding. A fully nonstructural approach was considered in accordance with USACE guidance in the form of a building-level strategy for the study area, including buyouts and deployable floodwall structures around buildings.

- **Approach 3 (Structural On Land)** aims to reduce in-water impacts in the East River by placing all coastal storm risk management infrastructure above or inboard of the existing bulkhead. This alternative would not construct a waterfront esplanade on the outboard, or “wet” side of the floodwall. In this alternative, ferry terminals and piers would be reconstructed to be resilient to future tidal flooding, and a pump station would be constructed to manage drainage associated with the coastal storm risk management infrastructure.
- **Approach 4 (Structural In Water)** proposes building a shoreline extension into the East River, with coastal storm risk management infrastructure integrated within the new shoreline. In comparison to Approach 3, this approach would also expand access to the waterfront by introducing a new waterfront esplanade built on the new shoreline extension, on the “wet” side of the floodwall. In this alternative, ferry terminals and piers would be reconstructed to be resilient to future tidal flooding, and a pump station would be constructed to manage drainage associated with the coastal storm risk management infrastructure.
- **Approach 5 (Engineering with Nature)** considers only Engineering with Nature solutions and proposes wrapping the study area with an ecotone levee. Engineering with Nature measures refer to the landscape features used to reduce flood risk while restoring natural processes and providing ecosystem benefits.

## Screening of Approaches to Reach the Final Array of Alternatives

To arrive at the final array of alternatives, these five thematic approaches were screened using USACE principles and guidelines (P&G) criteria (efficiency, effectiveness, completeness, acceptability) and the study objectives.

USACE P&G criteria were evaluated using the following ranking system:

- **Efficiency:** Efficiency is the extent to which an approach is the most cost-effective means of alleviating the specified problems and realizing the specified opportunities, consistent with protecting the Nation’s environment. Approaches that were ranked high are the most cost effective, while low-ranking approaches are more costly.
- **Effectiveness:** Effectiveness is the extent to which an approach alleviates the specified problems and achieves the specified opportunities. High-ranking approaches protect the study area from both tidal and coastal flooding, with capacity to address the most opportunities. Low-ranking approaches do not fully protect the study area from tidal and coastal flooding and provide little to no capacity to address opportunities.
- **Completeness:** Completeness is the extent to which a given approach provides and accounts for all necessary investments or other actions to ensure the realization of the planned effects. Approaches that rank high in completeness integrate with adjacent flood protection projects and existing infrastructure. Low-ranking approaches do not integrate with adjacent flood protection projects and/or existing infrastructure.
- **Acceptability:** Acceptability is the workability and viability of the approach with respect to acceptance by State and local entities and the public, and compatibility with existing laws,

regulations, and public policies. Approaches that score high in acceptability maintain existing infrastructure and waterfront access. Low-scoring approaches either remove waterfront access or do not minimize the shoreline extension.

### P&G Evaluation Table

Approach	Efficiency	Effectiveness	Completeness	Acceptability
1: No Action				
2: Non-Structural	Low	Low	Low	Low
3: Structural On Land	High	Medium	Medium	Medium
4: Structural In Water	Medium	High	High	Medium
5: Engineering with Nature	Low	Low	Medium	Low

Figure 3. Ranking of the Initial Thematic Approaches Compared to USACE Principles and Guidelines

**Figure 3** presents the study’s five initial thematic approaches compared to USACE P&G criteria (efficiency, effectiveness, completeness, acceptability). The results rank the approaches from lowest to highest as follows: Non-Structural approach scored the lowest, followed by Engineering with Nature; Structural On Land; scored second highest, and Structural In Water scored highest.

The five approaches were also evaluated based on metrics derived from the study’s objectives:

1. **Objective 1:** Provide a coastal storm risk management system that minimizes coastal flood damage and economic disruption to the central business district, public infrastructure, important societal resources, and the environment during regular tidal cycles and peak coastal storm events under current and future conditions with relative sea level change inside of the study area over a 50-year period of analysis.
  - a. **Objective 1 Metric (Property Protected):** Approaches that manage risk for properties in the study area for both coastal storm surge and tidal flooding were ranked high. Approaches that do not sufficiently manage risk for properties in the study area were ranked low.
2. **Objective 2:** Maintain ongoing functionality and reliability of surface and subsurface transportation systems.
  - a. **Objective 2 Metric (Transportation Protected):** Approaches that manage risk for transportation assets in the study area for both coastal storm surge and tidal flooding were ranked high. Approaches that do not sufficiently manage risk for transportation assets in the study area were ranked low.

3. **Objective 3:** Implement a coastal storm risk management system that maintains waterborne transportation services along the East River.
  - a. **Objective 3 Metric (Maritime Uses Preserved):** Approaches that manage risk for maritime assets and operations in the study area for both coastal storm surge and tidal flooding were ranked high. Approaches that do not sufficiently manage risk for maritime assets and operations in the study area were ranked low.
4. **Objective 4:** Implement a coastal storm risk management system that maintains and increases vehicular and pedestrian access to and from waterfront destinations and historic/tourist amenities in Lower Manhattan through easy-to-access entrances and connections along the East River for public use when not needed as coastal storm risk management infrastructure.
  - a. **Objective 4 Metric (Universal Accessibility):** High-ranking approaches preserve waterfront views and provide full access to the waterfront. Low-ranking approaches do not provide a fully accessible waterfront and rely on a high quantity of floodwalls that block waterfront views.
5. **Objective 5:** Reduce risk in mobilization and preparation for coastal storm surge by prioritizing passive coastal storm risk management infrastructure over deployable flood barriers.
  - a. **Objective 5 Metric (Passive Protection):** High-ranking alternatives employ few deployable flood barriers and integrate floodwalls into the landscape. Low-ranking alternatives rely on high numbers of deployable flood barriers and floodwalls in constrained space.
6. **Objective 6:** Implement a coastal storm risk management system that balances initial investment with providing comprehensive coastal flood risk management for a national center of economic activity.
  - a. **Objective 6 Metric (Initial Investment):** Approaches were evaluated based on a rough order of magnitude cost estimate, with the least cost-intensive approaches ranking high and the most cost-intensive approaches ranking low.

## Evaluation of alternatives against project objective metrics

Approach	Property Protected	Transportation Protected	Maritime Uses Preserved	Universal Accessibility	Passive Protection	Initial Investment
1: No Action						
2: Non-Structural	Low	Low	Low	Low	Low	Low
3: Structural On Land	High	High	High	Low	Medium	High
4: Structural In Water	High	High	High	High	Medium	Medium
5: Engineering with Nature	High	High	Low	High	High	Low

Figure 4. Ranking of the Initial Thematic Approaches Compared to USACE Principles and Guidelines

**Figure 4** presents the five initial thematic approaches compared to the study’s objectives. The results rank the approaches from lowest to highest as follows: non-structural approach scored the lowest, followed by Engineering with Nature; Structural On Land scored second highest, and Structural In Water scored highest.

## Final Array of Alternatives to be Considered Further and Evaluated in the EIS

Based on the screening of the thematic approaches using the USACE P&G criteria and an average of the evaluation of study objectives, NYCEDC proposes that Approaches 3 and 4 be selected for further evaluation and refined into a final array of alternatives, in addition to the No Action Approach.

### Evaluation Summary Table

Approach	Objectives (Avg.)	P&G Evaluation			Acceptability	Determination
		Efficiency	Effectiveness	Completeness		
1: No Action						Advance as no action alternative
2: Non-Structural	Low	Low	Low	Low	Low	Screen out due to evaluation performance
3: Structural On Land	Medium	High	Medium	Medium	Medium	Advance as on-land alternative due to evaluation performance
4: Structural In Water	High	Medium	High	High	Medium	Advance as in-water alternative due to evaluation performance
5: Engineering with Nature	Medium	Low	Low	Low	Low	Screen out due to evaluation performance

Figure 5. Evaluation of Results from Comparison of Initial Thematic Approaches to USACE Principles and Guidelines and Study Objectives

Figure 5 presents the five approaches compared to USACE P&G criteria and the evaluation average of the study objectives. Overall, the results rank the approaches from lowest to highest as follows: the non-structural approach scored the lowest, followed by Engineering with Nature; Structural On Land scored second highest, and Structural In Water scored highest.

### Approaches to Advance to Final Array of Alternatives:

The following approaches will be advanced to the final array as alternatives. The alternatives will be evaluated in the EIS and will advance in the feasibility study for further refinement and evaluation.

**Approach 1 (No Action)** represents the baseline conditions for the study area and will advance in the plan formulation process as a standard of comparison. Approach 1 will advance as the **No Action Alternative**.

**Approach 3 (On Land)** ranked high in both efficiency, as the shore-based measures avoid the high cost of shoreline extension. That said, it scored medium in completeness, effectiveness, and acceptability, as the constrained footprint along the bulkhead has limited capacity to address opportunities, and the shore-based floodwalls would cut off waterfront access. In addition, Approach 3 scored high in study objective goals 1, 2, 3, and 6; medium on study objective 5; and low on study objective 4. As such, Approach 3 will advance as **Alternative 3 (Bulkhead)**, proposing an exposed floodwall (15-18 feet tall) be constructed along the existing bulkhead. Ferry terminals and piers would be reconstructed to manage risks to future tidal flooding, and a pump station would be constructed to manage drainage associated with the coastal

storm risk management infrastructure. Ring walls and flood gates would be installed around the base of each pier to enable pedestrian, vehicle, and emergency access during non-coastal flood conditions.

**Approach 4 (In Water)** ranked the highest on average of all evaluated approaches, scoring high in effectiveness and completeness and medium in efficiency and acceptability. In addition, Approach 4 scored high in study objectives 1, 2, 3, and 4, and medium in study objectives 5 and 6. This is due to this approach's high capability to address opportunities, increase waterfront access, and integrate with adjacent coastal flood risk management projects. However, the high costs and permitting challenges of shoreline extensions have been flagged for further study.

After conducting a technical screening of multiple structural alignments and assessing their feasibility, two distinct alternatives were identified within Approach 4 to be further advanced and refined in the plan formulation process. **Alternative 4 (Medium Extension)** involves a medium-scale extension of the shoreline into the East River in a portion of the study area, elevating the waterfront by approximately 15-18 feet. This alternative buries the proposed floodwall under publicly accessible green open space.

**Alternative 4A (Narrow Extension)** proposes a narrow shoreline extension into the East River, designed to elevate the shoreline to a passive level of protection for future tidal flooding. The extension would incorporate a partially buried floodwall with inaccessible green space on the wet and dry sides of the floodwall. In both Alternatives 4 (Medium Extension) and 4A (Narrow Extension), ferry terminals and piers would be reconstructed to manage risks due to future tidal flooding, and a pump station would be constructed to manage drainage associated with the coastal storm risk management infrastructure.

### **Approaches Screened Out:**

**Approach 2 (Non-Structural)** will not be advanced, as it was found to be infeasible due to the magnitude of required buyouts, high market values, disruption to landmarks and the Seaport Historic district, and loss of critical maritime infrastructure along the waterfront. Non-structural measures may be included as appropriate with the structural alternatives.

**Approach 5 (Engineering with Nature)** will not be advanced, because an ecotone levee was found to be infeasible. Due to the extensive footprint required, an ecotone levee would result in the loss of critical waterfront functions, including the removal of ferry terminals and all maritime operations, directly conflicting with study objectives to preserve existing transportation infrastructure, public access, and maritime operations. The ecotone levee construction would also involve placing large volumes of fill over or adjacent to subsurface transit infrastructure, risking disruption to subway tunnels and posing considerable technical challenges. Engineering with Nature measures may be included as appropriate with the structural alternatives.

### **Comprehensive Benefits Approach**

The final array will be further evaluated using a comprehensive benefits approach, evaluating the alternatives across four categories: National Economic Development, Regional Economic Development, Environmental Quality, and Other Social Effects. This approach originates in USACE policy guidance to ensure a plan formulation process has carefully evaluated, calculated, and documented the totality of a proposed project's benefits and impacts to support USACE recommendations for potential future investments in water resources projects.

The **National Economic Development** account represents the increase in the net value of the national output of goods and services attributable to the project. The **Regional Economic Development** account provides a comprehensive understanding of how regional economic activity is distributed and influenced by alternatives through indicators such as income, employment, output, and population. The **Environmental Quality** account captures the non-monetary effects on ecological, cultural, and aesthetic resources, integrating environmental consideration into the decision-making process. Further study will examine the beneficial and adverse environmental quality effects of the final array of alternatives across the study area. Finally, the **Other Social Effects** account is essential to realize non-monetary effects of the project on the social fabric of the FiDi and Seaport community.

## Anticipated Potential Environmental Effects

Anticipated effects are expected to include those associated with aquatic habitats, water quality, visual quality, infrastructure, transportation corridors, recreation features, and historic resources. Effects anticipated to require compensatory mitigation include terrestrial and aquatic habitats and water resources.

Effects on other resources are anticipated as benefits to recreational and transportation access. Other long-term benefits are anticipated related to socioeconomic resources (such as life safety, critical infrastructure, utilities, recreation, and the local economy) through the management of coastal flooding and sea level change.

## Methodologies

Potential effects of proposed activities will be considered in accordance with Part 2.3 of the *Department of Defense National Environmental Policy Act Implementing Procedures*, June 30, 2025, which includes guidance as to the appropriate scope of analysis for an EIS. The guidance does not provide quantitative thresholds of significance for potentially affected resources, but states that the NEPA analyses should focus on whether the environmental effects of the proposed activities are significant, and effects should be discussed in proportion to their significance. “With respect to issues that are not of a substantive nature and do not meaningfully inform the consideration of environmental effects and the resulting decision on how to proceed, the EIS will include the briefest possible discussion to explain why those issues are not substantive and therefore not subject to any further analysis.”<sup>5</sup>

The resource analyses and evaluations conducted for the Integrated Report/EIS will identify the potential for reasonably foreseeable effects; whether the anticipated effects would be adverse or beneficial; and avoidance, minimization, and/or mitigation measures for any identified adverse effects. **Table 1** shows the methodologies to be followed for the resource analyses. If necessary, NYCEDC, in collaboration with relevant resource agencies, will refine project-specific methodology for topics where variation from established procedures is appropriate. Each technical analysis will evaluate the construction-related effects, if applicable. Project construction would occur over multiple years. The analysis will assess existing and future conditions with and without the proposed activities under a range of alternatives for

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<sup>5</sup> Department of Defense. Department of Defense Implementation of the National Environmental Policy Act [Notice]. Federal Register, 90 (123), 27857. (FR Doc. 2025-12094). June 30, 2025.

a 50-year period of analysis following construction. Although project structures will often function for longer than 50 years, forecasting economic and physical conditions and impacts beyond 50 years becomes uncertain, since conditions may change considerably over that length of time. For the purposes of analysis, and depending on the alternative, project implementation is expected with construction from 2030 through 2041. Project performance is quantified by estimating future damages through 2092, for a period of analysis of 50 years. Affected Environment and Environmental Consequences will be discussed by subarea for each alternative in addition to the consideration of a No Action Alternative.

Table 1. Potential Environmental Issues and Methodology for Evaluation

Resource Category	Methodology
<p>Water Resources including Wetlands, Floodplains, Surface Waters</p>	<p>Evaluate the proposed activities' potential to affect surface waters and wetlands in the study area in accordance with federal and state regulations. Conduct background research, field investigation to verify regulatory boundaries for surface water and wetlands identified through desktop evaluation; prepare wetland and surface water maps and report(s); and assess potential effects including impact type and approximate quantity on regulated surface waters and wetlands. Identify avoidance, minimization, and evaluate suitable mitigation measures (as needed) to satisfy regulatory requirements (as needed). Coordinate findings with the New York State Department of Environmental Conservation (NYSDEC) and USACE.</p> <p>Appropriate function and optimum condition of surface water bodies in New York City are set by NYSDEC and appear as water quality standards; groundwater quality standards are set by NYSDEC. Evaluation will assess the potential to affect water quality standards for surface waters within the study area. Coordinate with Water Quality and Stormwater Management analysis.</p> <p>For floodplains, perform a screening for floodplains by reviewing Federal Emergency Management Agency (FEMA) National Flood Hazard mapping and document the existing conditions and mapping for the study area. Determine whether Executive Order 11988 Floodplain Management applies to the proposed activities within the study area. Evaluate potential effects on flood control programs and floodplains. In accordance with applicable regulations, identify floodplain boundaries, assess the risks and effects on floodplain values, identify mitigation measures for adverse effects (as needed) to satisfy regulatory requirements (as needed).</p>

<b>Resource Category</b>	<b>Methodology</b>
Hydrology and Hydraulics	Evaluate the potential effects to hydrology conditions (e.g., changes in inflow, changes in water surface profiles, flow distribution, assessment of local and system-wide resultant impacts, and upstream and downstream impacts) based on hydrodynamic modeling and other modeling conducted to evaluate the potential effects of proposed activities. Determine whether proposed alternatives are feasible or safe under varying conditions (e.g., high-flow events, storm surges) and evaluate suitable mitigation measures (as needed). Effects could be related to coastal hydrology, currents, circulation, tides, tidal exchange, and waves. Consider direct (e.g., inundation) and indirect (e.g., sediment transport or water quality) impacts. Identify avoidance, minimization, and mitigation measures (as needed).
Water Quality and Stormwater Management and Infrastructure	Evaluate the proposed activities' potential to affect water quality and stormwater management in accordance with applicable regulations. Conduct data collection regarding surface water bodies in the study area (coordinate with Water Resource analysis); assess the potential for soil erosion and sedimentation, and sediment disturbance resulting in increases in suspended sediment; assess temporary and permanent measures that could be used to avoid or minimize and control soil erosion, sedimentation, sediment resuspension, and surface water quality effects during and after construction; and identify permitting requirements. Water quality to be assessed related to maintaining or violating any water quality standards for the designated Use Classification for surface waters within the study area; additional sources of polluted runoff; and/or construction of new stormwater drainage facilities and how that would affect other resources. The effect on existing sewer and other infrastructure will be assessed with regard to these resources.

Resource Category	Methodology
Aquatic Biota	<p>Evaluate the proposed activities' potential to affect aquatic biota in accordance with applicable federal and state regulations. Conduct the Year 3 biological and habitat sampling (full year) to provide additional baseline information on fish, benthic invertebrates, plankton, and aquatic habitats within the aquatic study area in the lower East River. Results of this third year of biological and habitat sampling will be analyzed with the results from the first two years of sampling to provide the baseline biological and habitat information to characterize the existing aquatic resource conditions and evaluate potential impacts of the proposed activities. Sampling includes seasonal surveys to characterize benthic macroinvertebrates and substrate, the fish community using seine nets, bottom and mid-water trawls, baited fish traps, imaging sonar environmental DNA, and acoustic telemetry to monitor for the presence and distribution of acoustic-tagged Atlantic and shortnose sturgeon. Characterization of aquatic resources within other portions of the aquatic study area will be based on existing information combined with the results of the aquatic sampling program within the East River portion of the study area.</p> <p>After survey and field reconnaissance, assess potential effects to these resources, including impact type and approximate quantity; identify avoidance, minimization, and mitigation measures and/or permitting requirements (as needed). Coordinate findings with NYSDEC, USACE, National Oceanic and Atmospheric Administration (NOAA) Fisheries, and New York State Department of State.</p>
Terrestrial Natural Resources	<p>Evaluate the proposed activities' potential to affect terrestrial resources including flora and fauna, in accordance with applicable federal and state regulations. Identify the ecological communities and habitats within the study area, including gardens, landscaped areas, small parks (as habitat -parklands, open space, and recreation areas will be evaluated separately), topsides of piers and waterfront structures (structures species adapt to in built environment), and significant sensitive, or designated resources in New York City, as applicable, within the study area. Conduct field reconnaissance at appropriate seasonal times for potential species including two different season surveys as relevant (one preliminary habitat characterization in late fall 2025 and one observational survey in late spring/early summer 2026). Evaluate the nature and extent of potential effects of the proposed activities on ecological communities and habitats including general determinations of the amount and type of vegetation to be disturbed, special habitats that could be damaged, and possible interruption of wildlife movements. Identify mitigation measures in consultation with the appropriate agencies (as needed).</p>

<b>Resource Category</b>	<b>Methodology</b>
Endangered and Threatened Species	Evaluate the proposed activities' potential to affect endangered, threatened, candidate, or special status aquatic and terrestrial species in accordance with applicable federal and state regulations. If species are identified, subsequent tasks will include documenting the habitat types in the vicinity and determining whether suitable habitat for the identified species is present within the study area. Assess effects on the species (as applicable) and identify avoidance, minimization, and mitigation measures as needed for adverse effects in consultation with appropriate agencies (as needed). The analysis will document all coordination with the United States Fish and Wildlife Service and NOAA Fisheries pursuant to Section 7 of the Endangered Species Act.
Air Quality	Evaluate the proposed activities' potential to affect air quality in accordance with applicable federal and state regulations to satisfy NEPA requirements. Determine the appropriate study area and whether the indirect study area is sufficient for air quality analysis purposes. Confirm study area's compliance and attainment with National Ambient Air Quality Standards. Analysis will characterize the current designation for criteria air pollutants within the study area, evaluate the proposed activities' total direct or indirect impacts due to construction and post-construction operations, and assess conformance with the State Implementation Plan and the potential to result in new violation of the applicable National Ambient Air Quality Standards. Impacts that would be quantified would be prepared using two models approved by USEPA, including "MOVES" and "AERMOD". Identify avoidance, minimization, and mitigation measures (as needed).
Geology, Topography, Soils, and Groundwater	Identify geological resources, topography and groundwater (with reference to Water Resources section), within the study area. Resources characterized would include those on land and under surface water resources. Identify direct and indirect effects on geologic resources related to alterations of existing drainage patterns of the area and potential to result in substantial erosion or siltation on or off site; effects on channel or bank erosion/sediment loss; effects on bottom sediment within surface waters; and effects on underlying geology. Consider whether the proposed activities would result in decreasing groundwater supplies or interfere with recharge or potential to impede sustainable management of groundwater. Also consider whether activities would adversely alter the rate or direction of groundwater flow. Identify avoidance, minimization, and mitigation measures (as needed).

<b>Resource Category</b>	<b>Methodology</b>
Noise and Vibration	<p>Assess operational and construction effects of the proposed activities for noise and vibration. Proposed activities would introduce pump stations, which would be considered a newly introduced permanent noise source. However, equipment associated with the pump stations would be expected to operate inside enclosed structures and would be designed to meet all applicable noise regulations and requirements (i.e., Subchapter 5, §24-227 of the New York City Noise Control Code and the New York City Department of Buildings Code). Consequently, noise generated from the pump stations would be assessed qualitatively. While the proposed actions are not anticipated to result in any other newly introduced noise sources, ferry and helicopter operations may be relocated closer to receptors. Given the nature of these sources, changes in operational noise will be evaluated according to guidance in the Transit Noise and Vibration Impact Assessment Manual (2018) published by the Federal Transit Administration (FTA). Due to the scope and duration of construction activity, including both stationary and mobile sources (i.e., equipment on site and worker auto and construction truck vehicular trips), construction noise will be addressed quantitatively. Conduct construction noise analysis according to guidance from Federal Transit Administration Transit Noise and Vibration Impact Assessment Manual (2018)<sup>3</sup> as well as from the Federal Highway Administration Roadway Construction Noise Model user guide. Although the construction noise analysis methods in the manual are not standardized criteria, they are often applied as guidelines for noise limits at sensitive land uses and used to describe noise levels that could result in a negative community response. As part of this quantitative noise construction analysis, determine the appropriate study area and suitable receptor locations, an existing conditions noise measurement program with locations throughout the study area will be conducted, potential sources of noise and vibration during construction of the proposed activities will be identified and predicted noise level increments will be assessed using appropriate Federal Transit Administration impact assessment methodology. If impacts are identified, noise and vibration abatement measures will be identified and evaluated for feasibility and reasonableness.</p>

<b>Resource Category</b>	<b>Methodology</b>
Cultural Resources (Archaeology and Architecture)	In accordance with Section 106 of the National Historic Preservation Act, tasks will include identifying historic properties (National Historic Landmarks, listed on or eligible for the National Register, locally designated by the New York City Landmarks Preservation Commission as landmarks or historic districts, and properties as yet not identified that may meet National Register eligibility criteria) within an appropriate Area of Potential Effects; assessing effects on identified historic properties; and resolving adverse effects (if any). Consult with the State Historic Preservation Officer, Advisory Council on Historic Preservation, and Section 106 Consulting Parties. The EIS will also assess the potential archaeological sensitivity of the portion of the Area of Potential Effects that consists of the Limits of Disturbance, where ground disturbance and construction may occur as a result of the project alternatives, and assess effects on any potential archaeological resources identified. Identify avoidance, minimization, and mitigation measures (as needed).
Hazardous, Toxic, and Radioactive Waste	Evaluate the proposed activities' potential to affect hazardous, toxic, and radioactive materials and waste in accordance with applicable federal and state regulations. Conduct a contaminated materials and hazardous substances assessment with reconnaissance as necessary to identify the potential of encountering hazardous and non-hazardous contaminated materials during the planned construction work. Identify measures that would be implemented during construction for the proper handling, transport, and disposal of any excess material to protect public health, worker safety, and the environment, and assess whether any post-construction controls may be warranted.
Recreation, Parklands/ Open Space	Evaluate the potential effects of the proposed activities on parkland within an appropriate study area, including an indirect study area. Information gathered should be for publicly and privately owned recreational, open space, and public use areas. The size, location, and types of uses should be documented. Potential effects to these resources could include the disruption or physical impact of a recognized recreational facility or activity or reducing access to or indirect effects (such as noise, air quality, and visual impacts) that could affect the experience of park users.

<b>Resource Category</b>	<b>Methodology</b>
Transportation	<p>Evaluate the proposed activities' potential effects on transportation resources in accordance with applicable federal and state regulations. Address transportation effects in the study area including temporary (construction) and permanent effects on movement of vehicles (major arterials, highway access), buses, access to subways and ferries, parking, and pedestrian and bicycle use and access. Major impacts would include permanent changes such as relocating or removing transportation elements and/or modifying the circulation pattern of a roadway that are not temporary construction effects. For construction, describe how maintenance and protection of traffic plans would follow applicable local regulations such as New York State Department of Transportation Highway Work Permits and New York City Department of Transportation Office of Construction Mitigation and Coordination Permits to reduce or eliminate temporary effects on transportation systems. Data from available sources from agencies such as New York State Department of Transportation and New York City Department of Transportation will be obtained at selected locations related to vehicular traffic, bicyclists, and pedestrians supplemented field observations as necessary. Conduct additional data collection as determined by gaps in what is publicly available. Identify mitigation measures in consultation with the appropriate agencies (as needed).</p>
Navigation	<p>Characterize navigation resources within the study area including navigation channels with depth and width, navigation routes, existing shipping ports, ferry routes, dinner cruises and sightseeing tours, and shipping ports. Develop and summarize a base case for the existing marine traffic in the study area and the associated high-level destination information. Evaluate the proposed activities' potential effects on navigation and/or maritime activities in accordance with applicable regulations during construction and post-construction due to operation of proposed maritime elements. The New York State Navigation Law governs the rights of navigation on waterways in New York State including those in New York City. Review navigation and waterways plans associated with New York City. For the preferred alignment, if adverse effects are determined, further analysis would be required to detail potential avoidance, minimization, and mitigation measures.</p>
Coastal Resources / Coastal Zone Management	<p>Evaluate the proposed activities' potential to affect coastal resources and coastal zone management in accordance with applicable federal, state, and local regulations. Evaluate whether the proposed activities would be consistent with New York State coastal policies and the New York City Waterfront Revitalization Program (WRP). Initial steps should include the preparation of a New York City WRP Consistency Assessment form and preparation of a detailed assessment if required. Identify mitigation measures in consultation with the appropriate agencies (as needed).</p>

<b>Resource Category</b>	<b>Methodology</b>
Land Use, Zoning, and Public Policy	Evaluate the proposed activities' potential to affect land use, zoning and public policy in accordance with applicable federal, state, and local regulations. Use readily available information, including the New York City Department of City Planning's primary land use tax lot output (PLUTO) database and New York City's Zoning Resolution to identify current land use and applicable zoning districts within the study area. Review relevant public policies such as the New York City Comprehensive Waterfront Plan. Characterize the land use changes associated with proposed activities to a level of detail sufficient to support other technical areas and discuss the proposed activities' consistency with zoning (if applicable) and relevant public policies.
Socioeconomic Conditions (including Neighborhood Character)	Characterize existing socioeconomic conditions through quantitative analysis of population, housing, employment, and economic activity within census tracts that fall largely within the study area. Compile data from: U.S. Census Bureau's Decennial Census and American Community Survey, New York State Department of Labor's Quarterly Census of Employment and Wages, New York City Department of City Planning's Population FactFinder and PLUTO datasets, additional proprietary sources, site reconnaissance, land use plans, and renderings for visual impact evaluation. Conduct fieldwork/site visit to confirm conditions. Visual documentation will be supported through site photography mapping. Analyze displacement of existing residents or businesses and reconfiguration for waterfront commercial uses; economic activity (estimating changes in business accessibility, customer base, or operations related to project implementation); resident characteristics including persons with disabilities, elderly populations (i.e., those over 65 years of age), and transit-dependent populations, and neighborhood character (effects on built form, land use continuity, and community cohesion, and viewshed, scale, and spatial experience). Metrics will include changes in employment and land use mix, displacements, and qualitative descriptions of community character and visual quality. Identify avoidance, minimization, and mitigation measures in consultation with the appropriate agencies (as needed).

<b>Resource Category</b>	<b>Methodology</b>
Visual Resources	<p>In support of demonstrating consistency with the New York City WRP and New York State Coastal Management Program, characterize existing visual access to the waterfront and assess the potential for the proposed activities to reduce existing visual access caused by the scale, design and location of the proposed activities in areas such as streets, parks, bridges and highways.</p> <p>Document existing conditions through site visits, during which photographs of corridors or mapped streets that terminate at the shoreline or within the waterfront block, will be taken to capture baseline views and visual characteristics. Use photographs to identify and annotate key features such as iconic views, visual corridors, and character-defining elements of the landscape. The selected views will form the basis for developing scenarios for each location representing the alternatives. Each scenario will be assessed to determine the level of potential visual impact (low, moderate, or high). The resulting viewsheds will provide a clear understanding of how each proposed alternative could alter aesthetics, sight lines, and public views to the waterfront and surrounding visual resources. Avoidance, minimization, and mitigation measures will be developed (as needed).</p>

# Identification of Cooperating and Participating Agencies

The USACE, as the lead federal agency, and NYCEDC (**Table 2a**) has invited federal, state, and other appropriate parties to participate in the environmental review process by service as Cooperating or Participating Agencies (**Table 2b**). Necessary agency approvals or actions will be confirmed or modified during the preparation of the Draft Integrated Interim Report.

*Table 2a. Lead Agency and Non-Federal Sponsor*

Agency	Study Involvement
USACE	Lead Agency, Potential project funding
NYCEDC	Non-Federal Sponsor

*Table 2b. Potential Cooperating and Participating Agencies*

Potential Cooperating Agencies	Study Involvement
United States Environmental Protection Agency (USEPA) <sup>[a]</sup>	Coordination related to NEPA and Section 309, Clean Air Act
United States Department of the Interior, Fish and Wildlife Service	Section 7 Consultation pursuant to the Endangered Species Act (16 United States Code [U.S.C.] §§ 1531-1544; and 50 Code of Federal Regulations [CFR] Part 402)
United States Coast Guard	Property Acquisition, Potential consistency with Regulated Bridge - Section 9 of the Rivers and Harbors Act of 1899 (33 U.S.C. § 401)
NOAA Fisheries, Habitat and Ecosystem Services Division	Essential Fish Habitat Consultation - Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. § 1801)
NOAA Fisheries, Protected Resources Division	Section 7 Consultation pursuant to the Endangered Species Act (16 U.S.C. §§ 1531-1544; 50 CFR Part 402)
New York State Department of State	Coastal Zone Consistency concurrence - 16 U.S.C. § 1456(c)
Federal Emergency Management Agency (FEMA)	Coordination related to resilience and floodplain issues
Federal Aviation Administration	Approvals due to modifications to East 34th Street Heliport
National Park Service	Presence of National Historic Landmarks in study area

Potential Cooperating Agencies	Study Involvement
New York State Department of Environmental Conservation (NYSDEC)	Section 401 Water Quality Certification pursuant to the Clean Water Act - Environmental Conservation Law Article 15, 6 New York Codes, Rules and Regulations (NYCRR) Parts 700-704, State Pollutant Discharge Elimination System Permits, Protection of Waters, Tidal Wetlands, New York Endangered Species Act, 014 Community Risk and Resiliency Act

Note:

<sup>[a]</sup> Section 309 of the Clean Air Act authorizes the USEPA to review proposed actions of other federal agencies in accordance with NEPA and to make those reviews public.

## Applicable Laws, Policies, Regulations

As stated in the Public Notice, compliance with federal laws and regulations will be demonstrated throughout the planning and environmental review process. The anticipated relevant laws, policies, and regulations associated with the federal review process are included in **Table 3**.

Table 3. Anticipated Applicable Laws, Policies, Regulations

Law, Policies, Regulations	Agencies Involved
Clean Air Act (42 U.S.C. §7401), General Conformity	USEPA
Executive Order 11988 of 1977; United States Department of Transportation Order 5650-2, "Floodplain Management and Protection," April 23, 1979	USACE in coordination with FEMA
Executive Order 11990 of 1977; United States Department of Transportation Order 5660.1A, "Preservation of the Nation's Wetlands," August 24, 1978	USACE
National Historic Preservation Act, Section 106 - 54 U.S.C. 300101 et seq.; 36 CFR Part 800 Abandoned Shipwreck Act of 1987 (43 U.S.C. 2101), if applicable	USACE in consultation with the Advisory Council on Historic Preservation and the New York State Historic Preservation Office
Clean Water Act (33 U.S.C. §§ 1251 et seq. [1972])	USACE USEPA
Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. § 403), Navigation	USACE
Section 14 of the Rivers and Harbors Act of 1899 (33 U.S.C. § 408), Alteration of a federal project (navigation channel)	USACE

Law, Policies, Regulations	Agencies Involved
Section 9 of the Rivers and Harbors Act of 1899 (33 U.S.C. § 401), United States Coast Guard Regulated Bridge	United States Coast Guard
Fish and Wildlife Coordination Act 1934 (16 U.S.C. 661-667e)	United States Fish and Wildlife Service
Marine Mammal Protection Act of 1972 (16 U.S.C. 1361 et seq.)	NOAA Fisheries Office of Protected Services
Endangered Species Act, Section 7 - 16 U.S.C. §§ 1531-1544; 50 CFR Part 402	United States Fish and Wildlife Service, and NOAA Fisheries Office of Protected Services
Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. § 1801), Essential Fish Habitat	NOAA Fisheries Office of Habitat Conservation
Clean Water Act, Section 401 Water Quality Certification - Environmental Conservation Law Article 15, 6 NYCRR Parts 700-704	NYSDEC
Water Pollution Control Environmental Conservation Law Article 17, 6 NYCRR Part 750), State Pollutant Discharge Elimination System Permits	NYSDEC
Water Resources (Environmental Conservation Law Articles 15, 24, 6 NYCRR Part 608)	NYSDEC
Tidal Wetlands Permit - Environmental Conservation Law Article 25	NYSDEC
New York State Endangered Species Act - Environmental Conservation Law Article 1, Title 5 § 11-0535; 6 NYCRR Part 182	NYSDEC
2014 Community Risk and Resiliency Act, as amended by the 2019 Climate Leadership and Community Protection Act, requires that applicants for permits issued for major projects in all regulatory programs covered by the Uniform Procedures Act (6 NYCRR Part 621)	NYSDEC
Coastal Zone Management Act - 16 U.S.C. § 1456(c)	New York State Department of State
Staging Approval (under FDR Drive)	New York State
New York State Public Lands Law Chapter 46, Article 6, § 75, Lands Underwater Permit or Easement	New York State Office of General Services

Law, Policies, Regulations	Agencies Involved
Federal Aviation Act of 1958, as amended; primarily codified in U.S.C. Title 49, and implemented through 14 CFR Part 157, Federal Aviation Administration airspace review and approval (Forms 7460 [obstruction to airspace] / 7480 [landing area proposal])	New York State Department of Transportation in coordination with the Federal Aviation Administration
Local Law 197-a / Local Waterfront Revitalization Program (Local Plan in accordance with Section 197-a of the City Charter), Local Waterfront Revitalization Program Consistency (required as part of New York State Department of State consistency determination)	New York City Department of City Planning

Notes:

1. Local permits and approvals may be required for proposed activities, and those will be addressed in a subsequent environmental analysis that would satisfy New York City Environmental Quality Review requirements.
2. NYCEDC and the United States Coast Guard will determine the appropriate mechanism and associated processes/approvals for incorporating the United States Coast Guard site into the coastal storm risk management infrastructure, as needed, while maintaining current United States Coast Guard operations.

## Agency Coordination and Public Engagement

As part of the NYCEDC’s preparation for the Draft Integrated Interim Report, NYCEDC also prepared a plan for public involvement and agency coordination for the duration of the study’s preparation. The plan identifies several opportunities for agency and public engagement including during the EIS scoping period and after the Draft Integrated Interim Report is prepared and released for review. These periods of review are accompanied by in-person and virtual meetings to provide multiple opportunities for all interested parties to share feedback on the material being presented at the time as well as the proposed activities and Section 203 and NEPA process in general.

NYCEDC developed a study-specific website, which will include updates on the study’s progress as well as the information presented in these public forums. There is also a FiDi FORGE mailing list that anyone can join to receive emailed notifications of website updates and scheduled meetings.

To ensure that a full range of issues is addressed in the Draft Integrated Interim Report and potential issues are identified, comments and suggestions are invited from all interested parties. The purpose of this request is to bring relevant comments, information, and analyses to NYCEDC and USACE’s attention as early in the process as possible. This will enable NYCEDC and USACE to make maximum use of this information in decision-making. Interested agencies and members of the public are invited to provide comments on FiDi FORGE including the information in this document.

Scoping comments and questions regarding the Draft Integrated Interim Report or the National Environmental Policy Act of 1969 (NEPA) process may be directed to the NEPA POC, Cheryl Alkemeyer, NEPA by email at: CENAN-FiDiFORGE-203-Study@usace.army.mil

## Schedule for the Decision-Making Process

The anticipated schedule is outlined in **Table 4**.

*Table 4. Anticipated Project Schedule*

Milestones	Anticipated Dates
Public Notice	May 27, 2026
Public Scoping Comment Period	May 28, 2026 through July 14, 2026
Public Scoping Meetings (one in-person, and one virtual)	Week of June 22, 2026
Publish Draft EIS; Public Review Period	May 2027 through July 2027
Public Hearings (one in-person, and one virtual)	July 2027
USACE Publishes Notice of Availability of Combined Final Integrated Report/NEPA Record of Decision	March 2028