

NYC's First Bank and Available Wetland Mitigation Credits: Saw Mill Creek Pilot Wetland Mitigation Bank



New York City Economic Development Corporation (NYCEDC)

Why us?

- NYCEDC is a quasi-governmental agency
- History:
 - 1966: New York City Public Development Corporation (PDC)
 - Sale and lease of City-owned property
 - Managed City's industrial parks and provided the City with urban planning services
 - 1979: Financial Services Corporation (FSC) Of New York City
 - Promote citywide business expansion by administering finance programs, such as direct loan programs
 - Assumed responsibility for the New York City Industrial Development Agency (NYCIDA), responsible was assisting industrial, commercial and not-for-profit firms in obtaining low-cost financing through the issuance of tax exempt bonds
 - 1991: New York City Economic Development Corporation (NYCEDC)
 - Formed by merging PDC and the FSC, and assumed the services previously undertaken by the merged corporations
 - Assumed economic development services previously performed by the City's Department of Ports and Trade

NYC'S CURRENT MITIGATION APPROACH

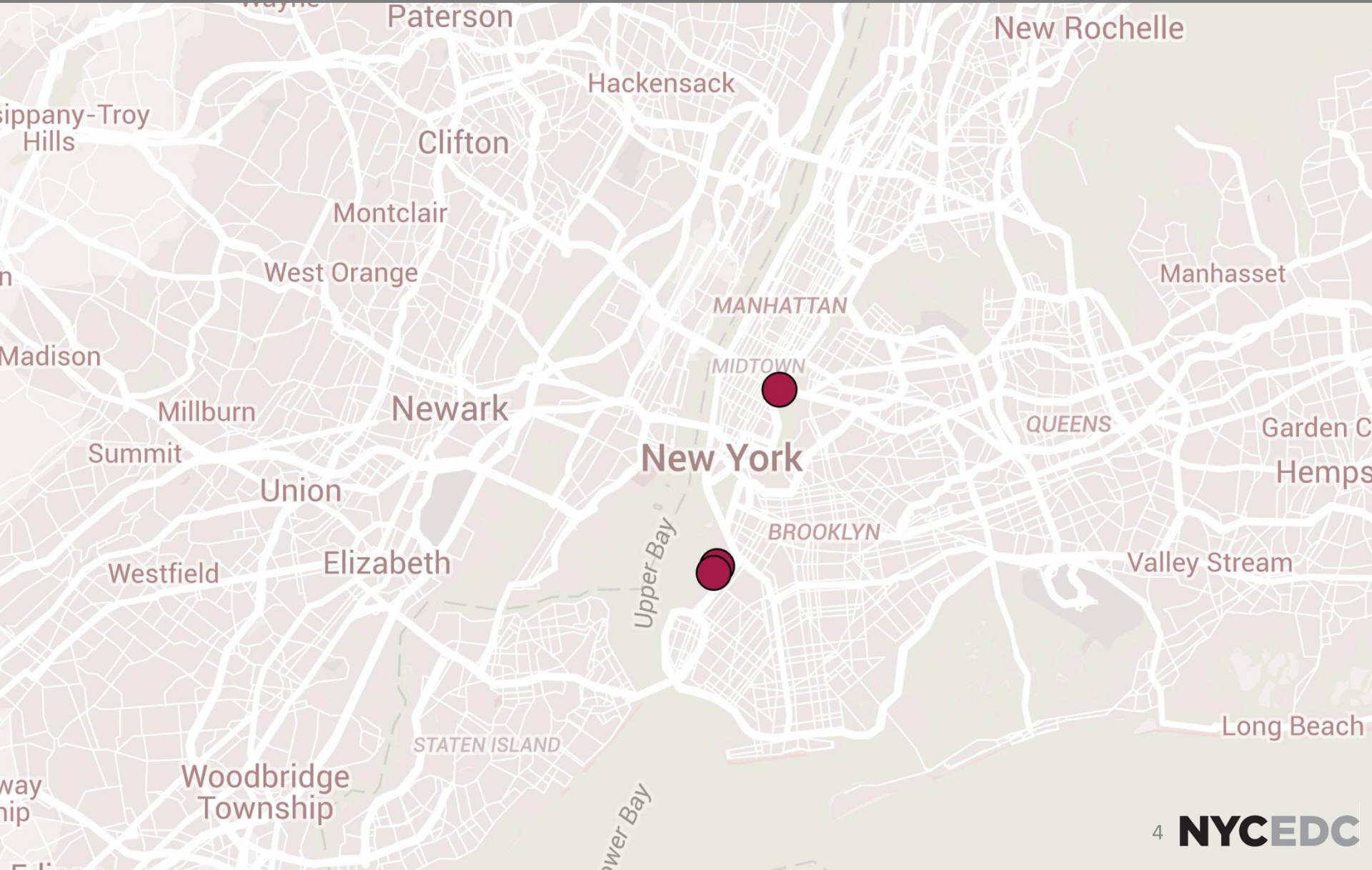
The Problem

NYC's compensatory mitigation regulatory process creates acute economic and ecological inefficiencies:

- DEC and USACE permit offsets can cost up to \$4 million per-acre of mitigation
- On-site mitigation can require sacrificing useful assets (existing piers, bulkheads, etc.)
- Offset ratios are unpredictable ranging from 1:1 to 1:3
- Identifying mitigation opportunities is increasingly difficult in NYC

NYC'S CURRENT MITIGATION APPROACH

Examples

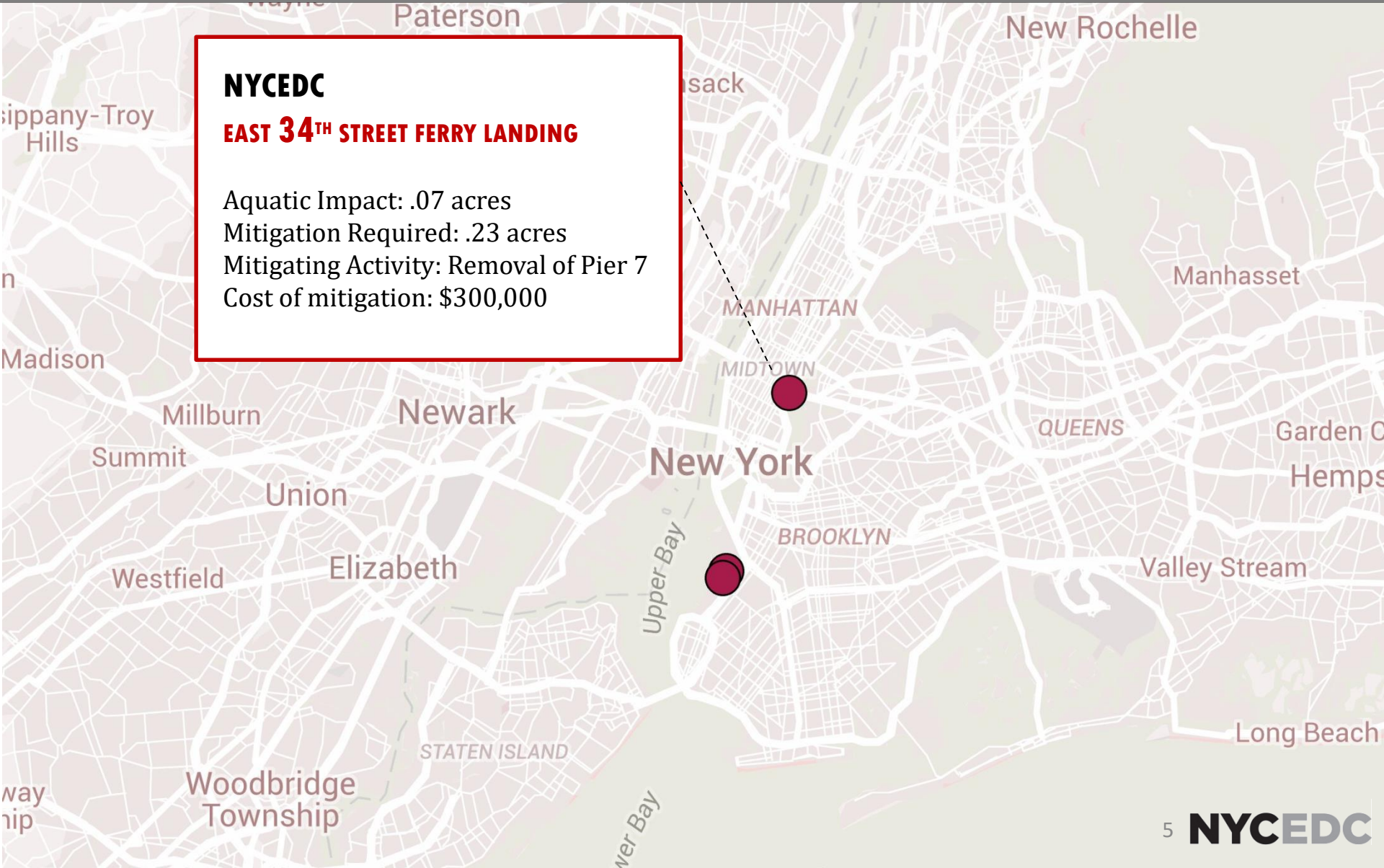


NYC'S CURRENT MITIGATION APPROACH

Examples

NYCEDC
EAST 34TH STREET FERRY LANDING

Aquatic Impact: .07 acres
Mitigation Required: .23 acres
Mitigating Activity: Removal of Pier 7
Cost of mitigation: \$300,000



NYC'S CURRENT MITIGATION APPROACH

Examples

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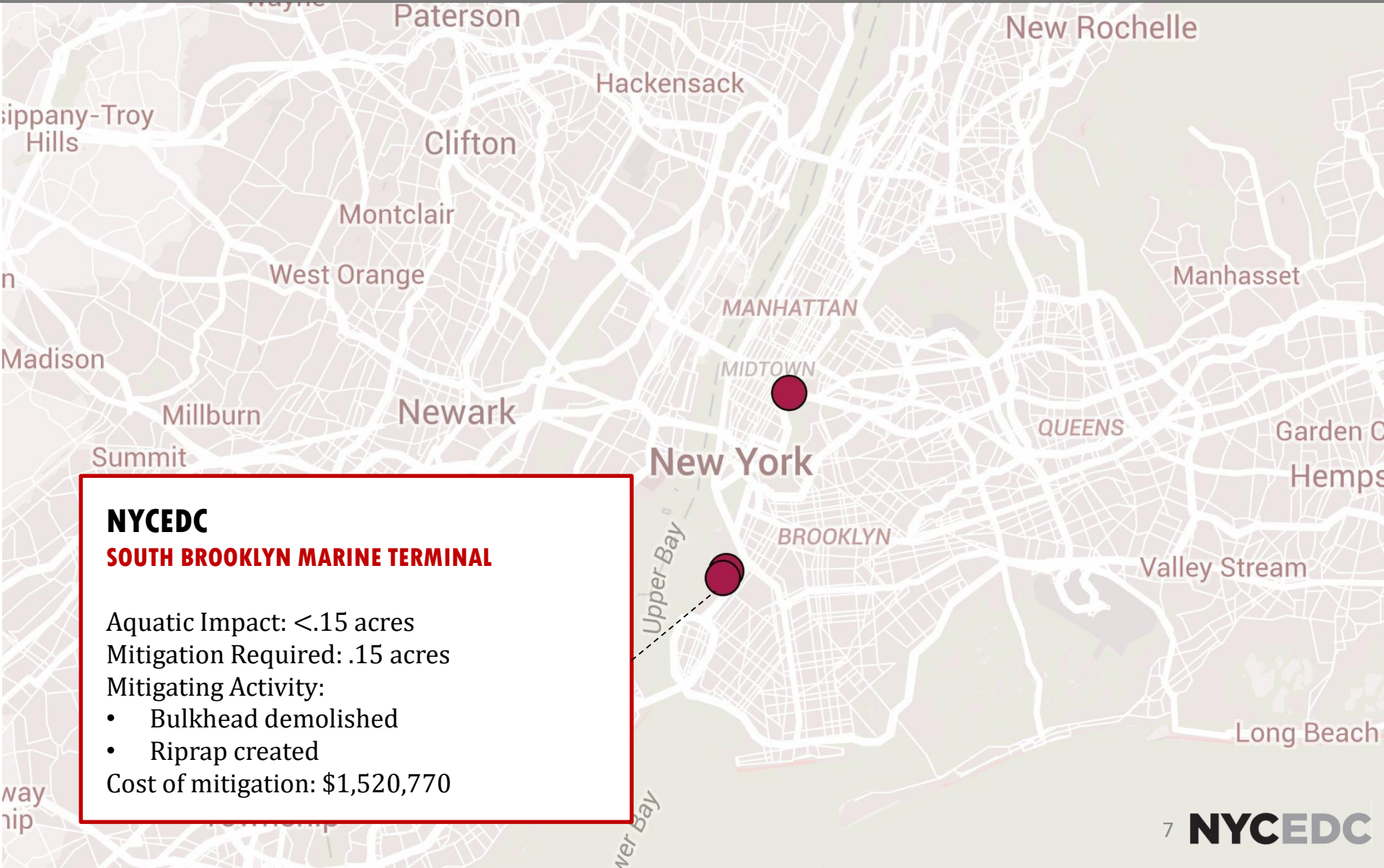
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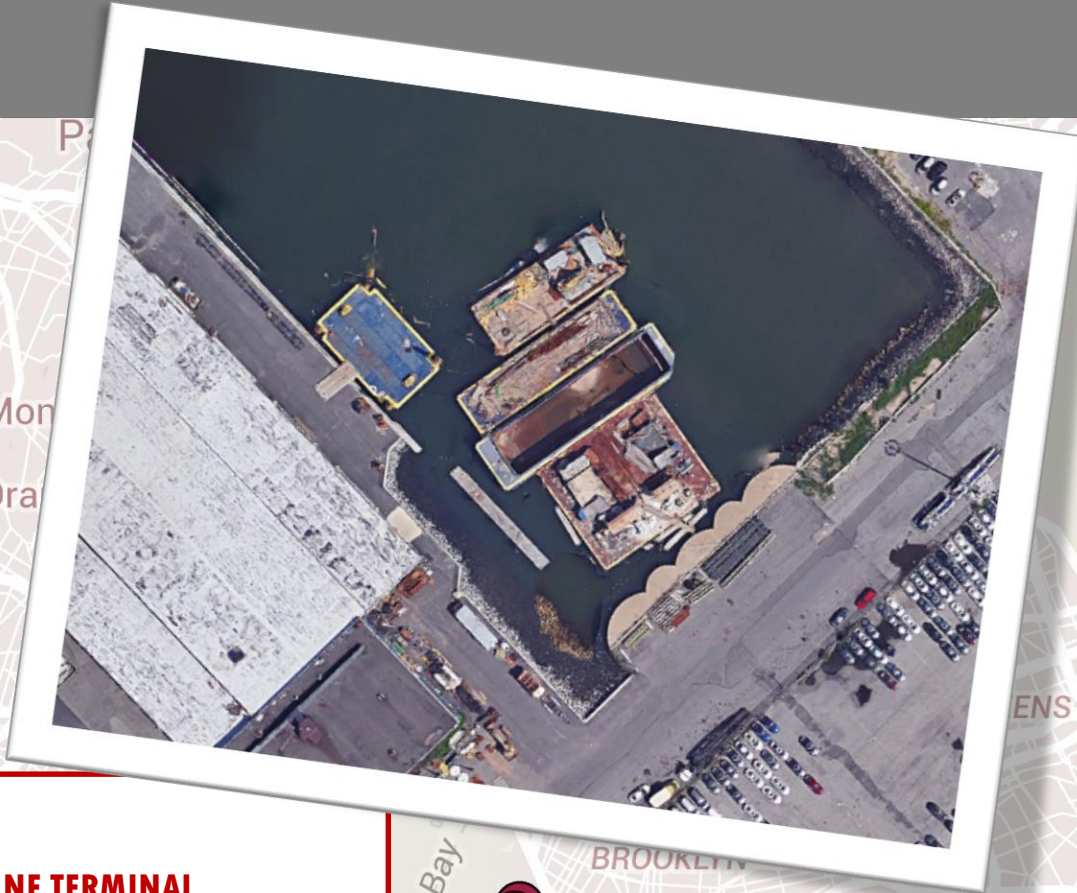


NYCEDC
SOUTH BROOKLYN MARINE TERMINAL

Aquatic Impact: <.15 acres
Mitigation Required: .15 acres
Mitigating Activity:
• Bulkhead demolished
• Riprap created
Cost of mitigation: \$1,520,770

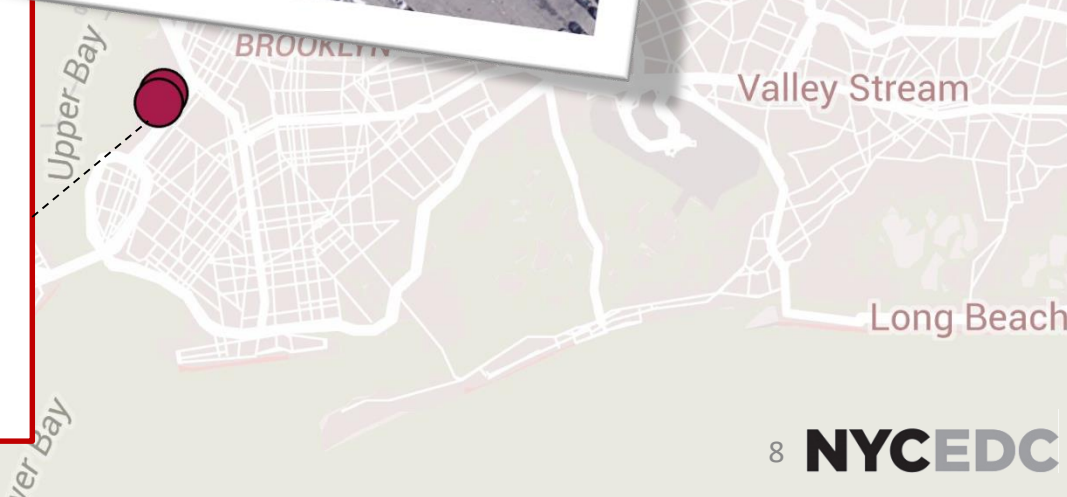
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“Economies of Scale” and “Ecologies of Scale”

- Federal rule on mitigation banking prefers mitigation banks over permittee-responsible mitigation
- Third-party restoration in advance generates “credits” which are acquired for project permits requiring offsets for impacts to tidal wetland
- Mitigation banks can be developed by public agencies, private sector, or through P3s
- Advantage of credits is they allow for faster and cheaper permitting
- Verifiable, market-based mechanism for wetland and coastal resource replacement

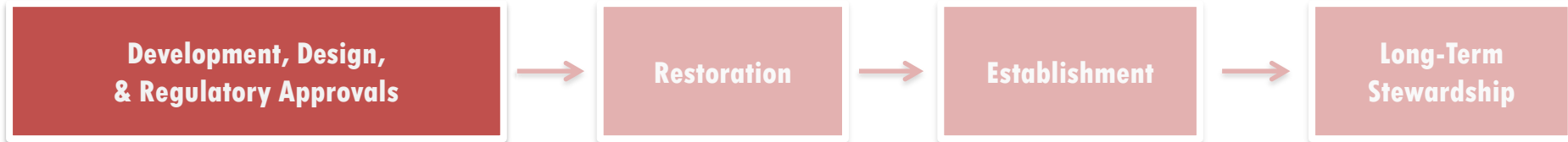
MITIGATION BANKING

Pilot Goals

1. Assess feasibility of mitigation banking in NYC; inform time, cost, and ecological impact of a pilot bank in the Nation's most urbanized counties
2. Inform normative baselines and provide technical standards for how banking compensatory mitigation in NYC can operate
3. Establish a mitigation credit market in NYC to compel private entrepreneurs to invest in restorations in the City

SAW MILL CREEK PILOT MITIGATION BANK

Process



1. Prospectus:

- Overview of Project and Service Area
- Public Comment

2. Mitigation Banking Instrument

- Restoration Plan
- Ecological Performance Measures
- Monitoring and Maintenance Protocols
- Long-term Stewardship Mechanism
- Credit System and Schedule for Release

3. Permits

- Environmental Review
- Public Comment



SAW MILL CREEK PILOT MITIGATION BANK

Project Permitting History

December 2012 - **RFP released** for design and permitting team in December 2012

March 2013 - After competitive procurement Louis Berger **starts work** on project with NYCEDC

May 2013 - **First meeting** of Interagency Review Team (IRT)

August 2013 - **Sediment sampling** occurs

November 2013 - **Draft-Prospectus** noticed

February 2014 - **Prospectus** finalized

June 2014 - **Supplementary sediment sampling** occurs

January 2015 - **Public notice** of NYS DEC and USACE **permits**

April 2015 - agencies noticed of **start of NEPA-Environmental Assessment** (EA)

July 2015 – **City Environmental Quality Review** - Negative Declaration issued

September 2015 – **NYS DEC issues permits**

December 2015 - **USACE signs MBI**

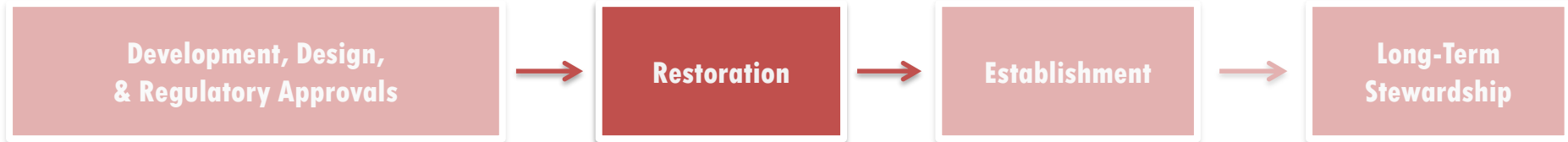
November 2016 - **IRT reconvenes** to discuss USACE permit

February 2017 - notice of **NEPA EA-Finding of No Significant Impact** (FONSI)

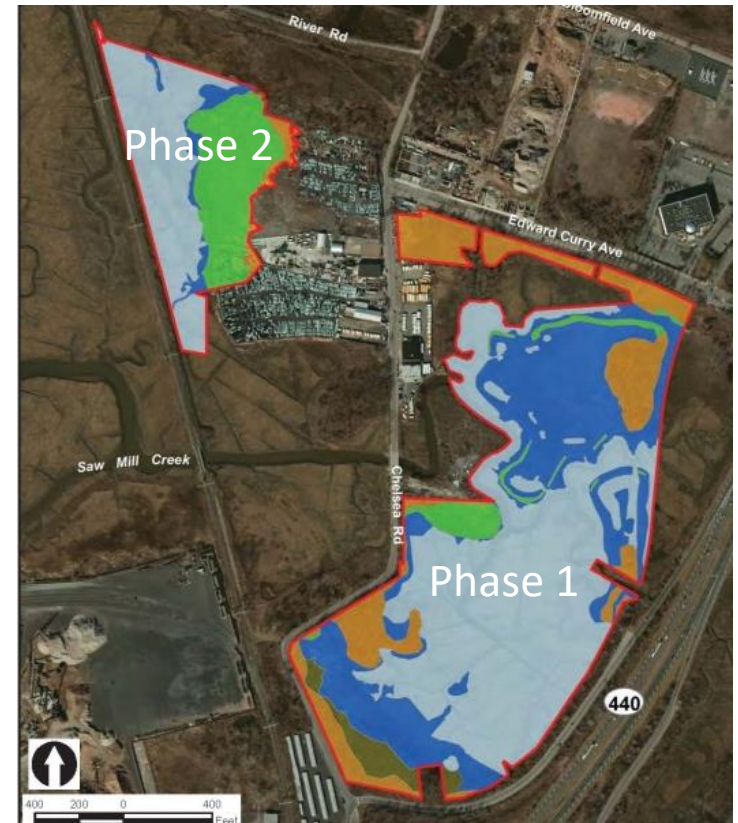
March 2017 – **USACE issues permit** with sampling permit conditions

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Process



- Phase 1: 53.94-acre site on west shore of Staten Island, part of 100+ acre marsh complex
- Phase 2: 14 acres
- City-owned under DPR jurisdiction
- Site historic tidal wetland and portions severely degraded
 - Historic fill, dumping, and debris
 - Mosquito ditching
 - Invasive species



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Phase 1: Capital Project Summary

Restore Wetland (Rehabilitation and Re-Establishment)

- Remove historic fill-material
- Re-plant native wetland flora

Enhance Tidal and Forest Habitat

- Remove invasive species, garbage, and debris

Creates Mitigation Credits

- 12.92 credit acres of impact
 - Project expands to phase II West Side with availability of future funds

Step 1

Establish Fauna Baseline Tissue Test

Step 2

Excavate 39,449 CY of Material

Step 3

Test for clean sediment at final grade

Step 4

Plant 26.06 acres of new vegetation

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Process

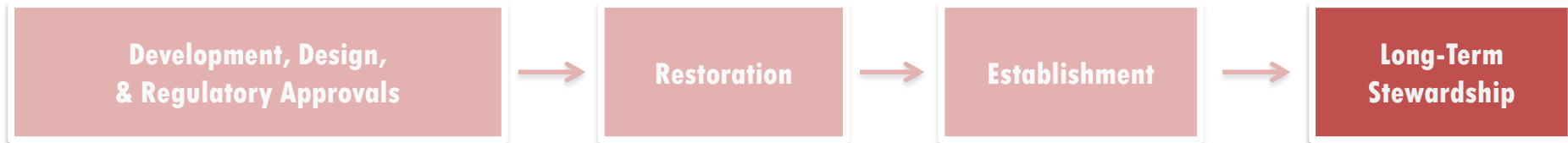


- Five year period in which Saw Mill Creek is continuously monitored to demonstrate that performance standards have been met
- Sediment and Biota Sampling
- After this five year period ends and all credits are sold bank closes



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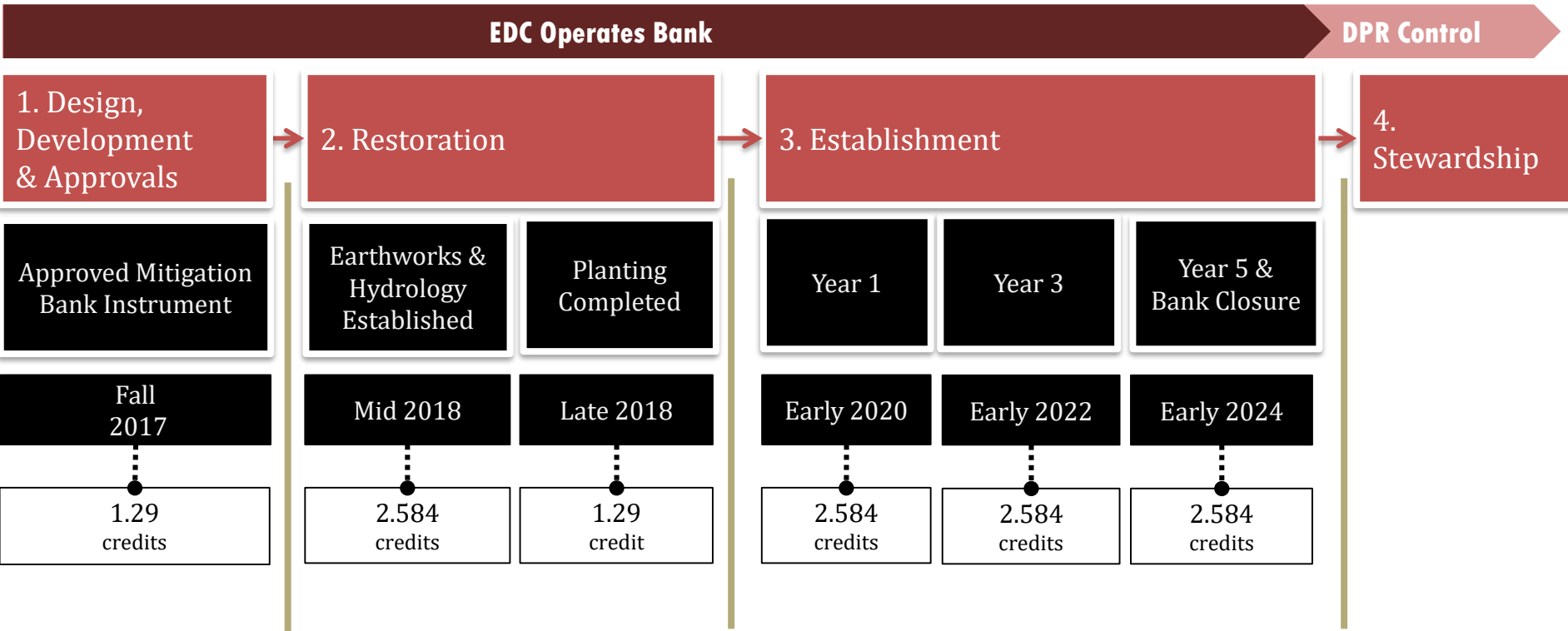
Process



- NYC Parks will be the long term steward of the site; maintaining site function and keeping invasive species at bay.
- The site will be periodically inspected to ensure that it continues to function, tracking the wildlife, vegetation, and stream flow.
- Agreement with Parks for long-term steward with initial capital is required

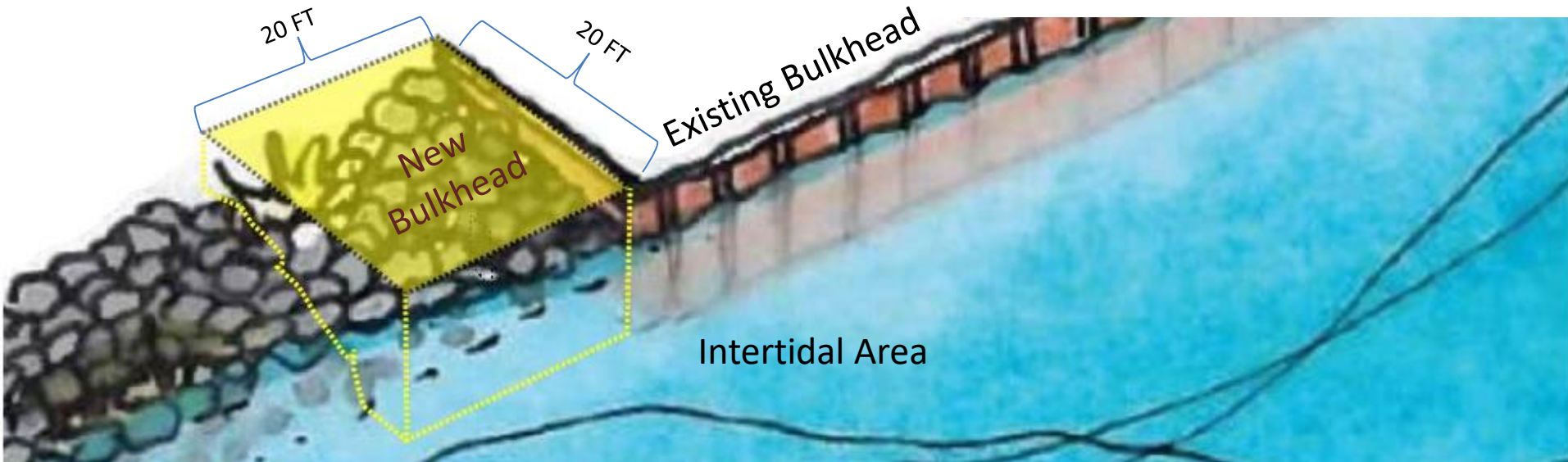
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Project Schedule



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What is a credit?



- 1 Credit equals 1 acre (43,560 SQFT) of impact
- Every in water construction project is different
- Mantra: Avoid, Minimize, Mitigate

Hypothetical Example:

- 20 FT of bulkhead extending 20 FT into water could be calculated as 400 SQ FT of impact
- $400 \text{ SQFT} / 43,560 \text{ SQFT} = .0092$ credits

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City Cost Savings

PROJECT REQUIRING MITIGATION	AGENCY	IMPACT (ACRES)	MITIGATION (ACRES)	MITIGATION ACTIVITY	COST OF MITIGATION ACTIVITY	COST OF EQUIVALENT MITIGATION CREDITS*
East 34th Street Ferry Landing	NYCEDC	0.07	0.23	Removal of Pier 7	\$300,000	\$105,000
South Brooklyn Marine Terminal	NYCEDC	0.15	0.15	Bulkhead demolished, rip-rap created	\$1,520,770	\$225,000
Calvert Vaux Phase I and Dreier Offerman Habitat Restoration Project	Parks	1.4	1.4	Soil remediation, wetland planting, permeable pavement	\$2,539,760	\$2,100,000
Southwest Brooklyn Converted MTS	DSNY	0.91	0.91	Sunset Cove wetland and habitat creation	\$910,000	\$1,365,000
North Shore Converted MTS	DSNY	3.85	3.85	Pugsley Creek marsh creation, Hamilton Ave MTS demolition, Bush Terminal Piers shallow water habitat and debris removal, Fresh Kills Barge removal	\$16,295,036	\$5,775,000
East 91st Street Converted MTS	DSNY	2.15	2.15	South Bronx MTS demolition, Bush Terminal Pier 4 demolition, Fresh Kills Mooring Rack Walkway removal, Sunset Cover restoration	\$4,753,773	\$3,225,000

*Assumes \$1.5M cost to create credit

SAW MILL CREEK BANK

Open For Business

- A **Request for Proposal (RFP)** is now available for interested parties to acquire Credits from the Saw Mill Creek Pilot Wetland Mitigation Bank.
 - Credits are eligible only for tidal wetland impacts
 - Credits are available for usage in NYC only
 - Any Credit fraction may be acquired
- Respondents should **confirm directly with federal and state regulators** that Credits and Credit quantities from the Saw Mill Creek Pilot Wetland Mitigation Bank address Respondents' specific project permit mitigation requirements.

RFP Submission Deadlines:

-November 28, 2018 4:00pm

- Approximately every three months there after thru 2020

The RFEI is available for download at

WWW.EDC.NYC/RFP

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