



**US Army Corps  
of Engineers®**  
New York District

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# **NEW YORK AND NEW JERSEY HARBOR AND TRIBUTARTIES COASTAL STORM RISK MANAGEMENT STUDY**

## **INTEGRATED FEASIBILITY REPORT & Tier 1 ENVIRONMENTAL IMPACT STATEMENT**

### **APPENDIX E: Map Series**

#### **Sub-Appendix A: Alternative 2 Map Series**

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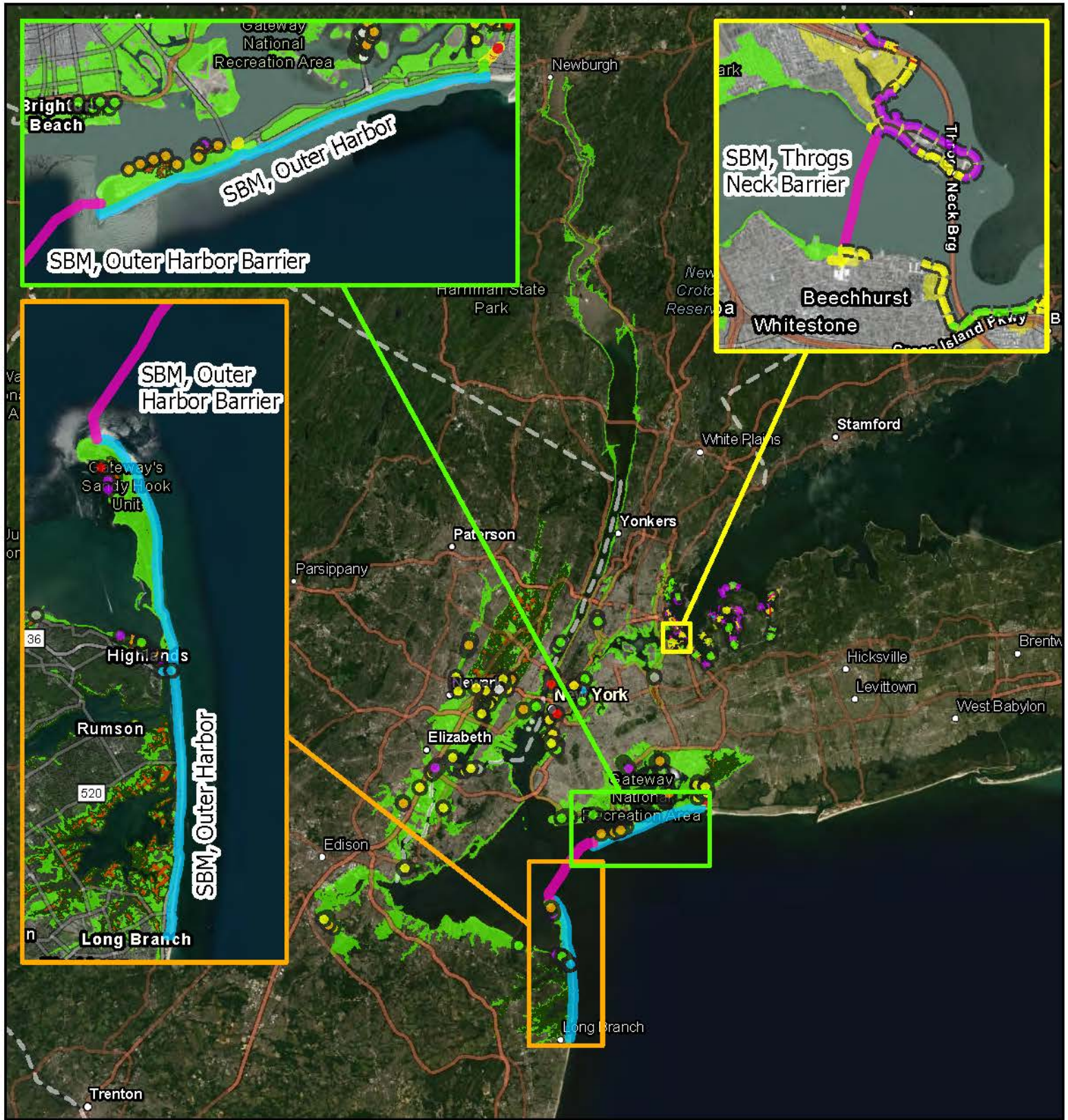
# Introduction

























There are five sets of map series graphics contained within this appendix. Each map series displays the various features associated with that specific alternative, the location of those features, and the specific measures that are a part of those features. The risk reduction areas associated with those features are also displayed.

The maps are organized by alternative and then broken down by the type of feature. Storm Surge Barriers (SSBs) and Shoreline Based Measures (SBMs) are grouped together in a set of maps, followed by a set of maps for Induced Flood-Mitigation Features (IFFs), and finally the Risk Reduction Features (RRFs) map sets. Each alternative includes these three types of features except for Alternative 5 which only includes SBMs.

Each feature and the area of reduced risk associated with it has its own map; however, it should be noted that the following specific maps represent more than one feature because they provide risk reduction to a shared area and/or are dependent on one another hydraulically:

- Alternative 2 – SSB/SBM Map Series  
Outer Harbor Barrier and associated Shoreline Based Measure  
Throgs Neck Barrier and associated Shoreline Based Measure
- Alternative 3A – SSB/SBM Map Series  
Arthur Kill Barrier and associated Shoreline Based Measure  
Verranzano Narrows Barrier and associated Shoreline Based Measure  
Throgs Neck Barrier and associated Shoreline Based Measures
- Alternative 3B – SSB/SBM Map Series  
Arthur Kill Barrier and associated Shoreline Based Measure  
Kill Van Kull Barrier and associated Shoreline Based Measure
- Alternative 2 and Alternative 3A – IFF Map Series  
Eastchester Bay IFF  
Throgs Neck IFF
- Alternative 2, Alternative 3A, and Alternative 3B – RRF Map Series  
Kearny Point RRF  
S. Kearny Point RRF



Legend		
Alt2 Features/Measures		
	SBM, Deployable Flood Barrier	 RRF, Floodwall
	SBM, Floodwall	 RRF, Navigable Gate
	SBM, Levee	 RRF, Revetment
	SBM, Reinforced Dune	 RRF, Road Raising
	SBM, Storm Surge Barrier	 RRF, Tide Gate
	RRF, Berm	 IFF, Deployable Flood Barrier
	RRF, Bulkhead	 IFF, Elevated Promenade
	RRF, Deployable Flood Barrier	 IFF, Floodwall
		 IFF, Levee
		 IFF, Reinforced Dune
		 IFF, Seawall
		 IFF, Storm Surge Barrier
		 IFF, Tide Gate
		Alt2 Reduced Risk Areas
		 SSB/SBM Reduced Risk Areas
		 RRF Reduced Risk Areas
		 IFF Reduced Risk Areas

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**Alternative 2 - SSB/SBMs**  
Feature Name: Outer Harbor & Throgs Neck  
Page 1 of 1

0 50000 Feet

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Legend	
Alt2 Features/Measures	
	SBM, Floodwall
	SBM, Storm Surge Barrier
	IFF, Deployable Flood Barrier
	IFF, Elevated Promenade
	IFF, Floodwall
	IFF, Seawall
	IFF, Storm Surge Barrier
Alt2 Reduced Risk Areas	
	SSB/SBM Reduced Risk Areas
	IFF Reduced Risk Areas

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**Alternative 2 - IFFs**

Feature Name: Eastchester Bay & Throgs Neck  
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0 1000 Feet

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### Legend

Alt2 Features/Measures

■ IFF, Floodwall

■ IFF, Levee

■ IFF, Reinforced Dune

■ IFF, Seawall

■ IFF, Tide Gate

■ IFF Reduced Risk Areas

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### Alternative 2 - IFFs

Feature Name: Great Neck

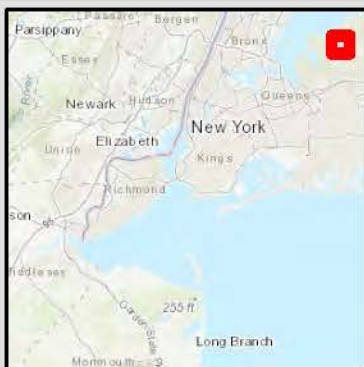
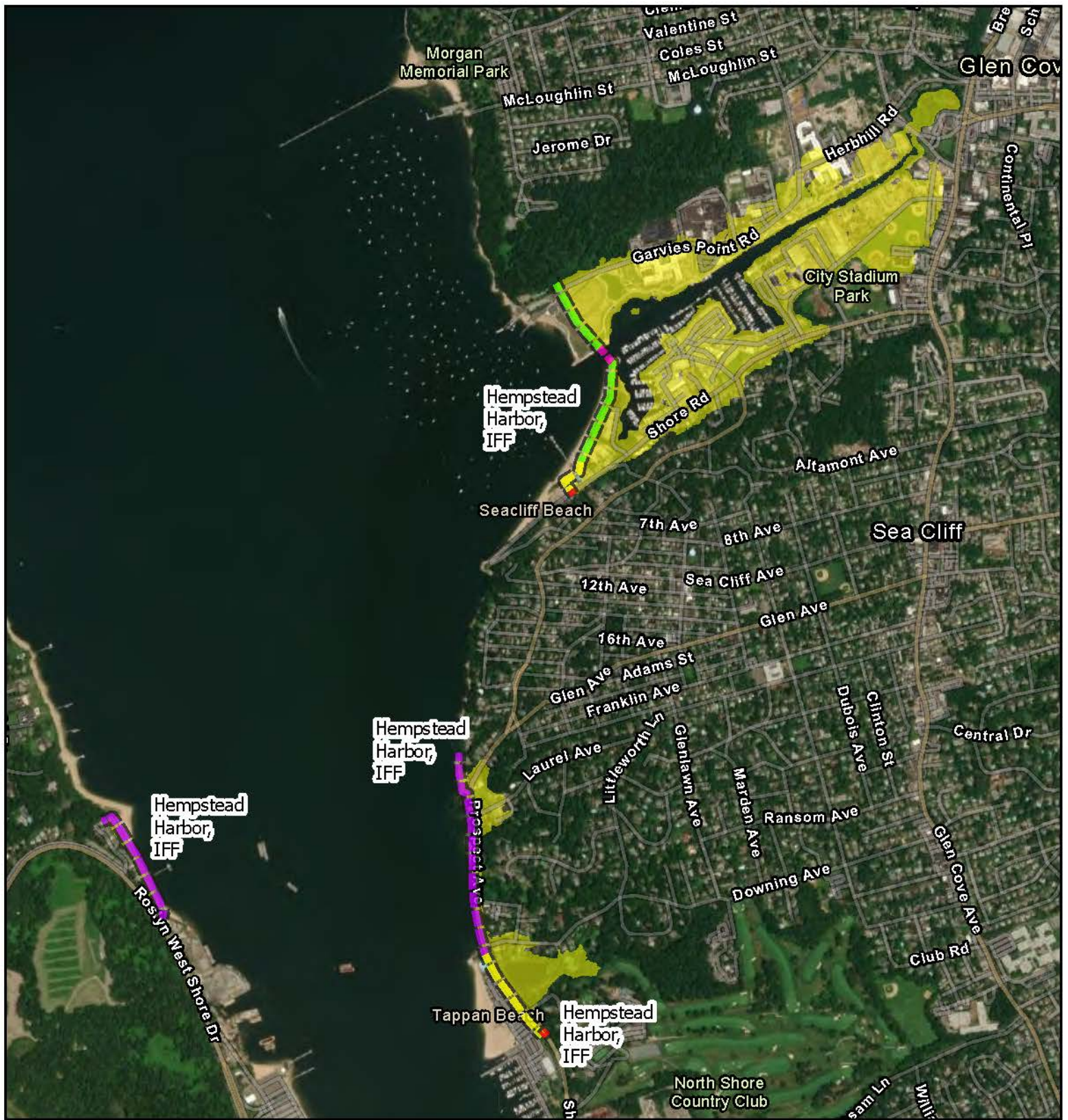
Page 2 of 11

0 2000 Feet



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### Legend

#### Alt2 Features/Measures

- IFF, Deployable Flood Barrier
- IFF, Floodwall
- IFF, Levee
- IFF, Seawall
- IFF, Storm Surge Barrier
- IFF Reduced Risk Areas

### NEW YORK - NEW JERSEY HARBOR & TRIBUTARIES STUDY

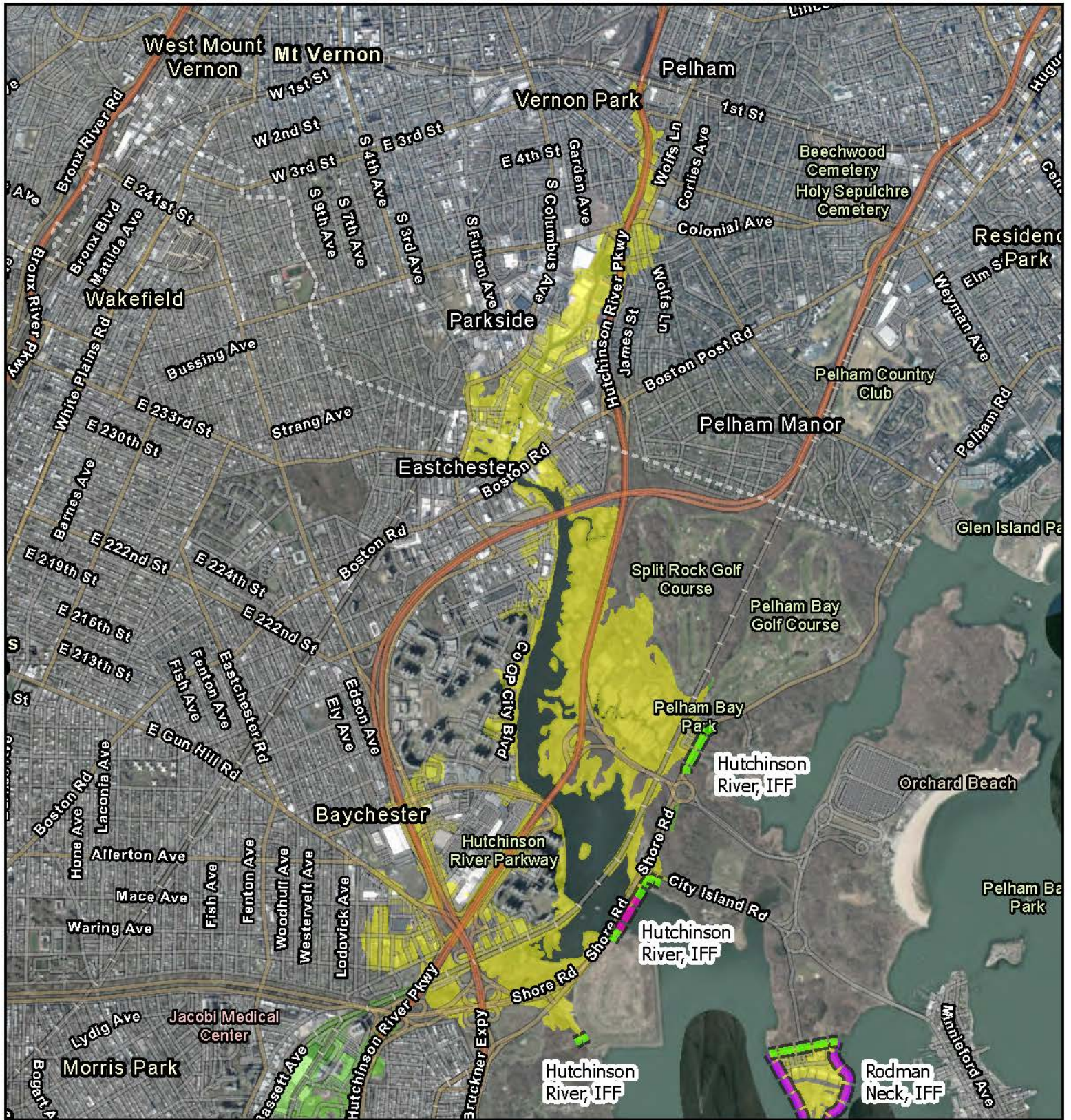
#### Alternative 2 - IFFs

Feature Name: Hempstead Harbor  
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### Legend

#### Alt2 Features/Measures

- IFF, Levee
- IFF, Seawall
- IFF, Storm Surge Barrier
- IFF Reduced Risk Areas
- SSB/SBM\_RiskReducedAreas

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#### Alternative 2 - IFFs

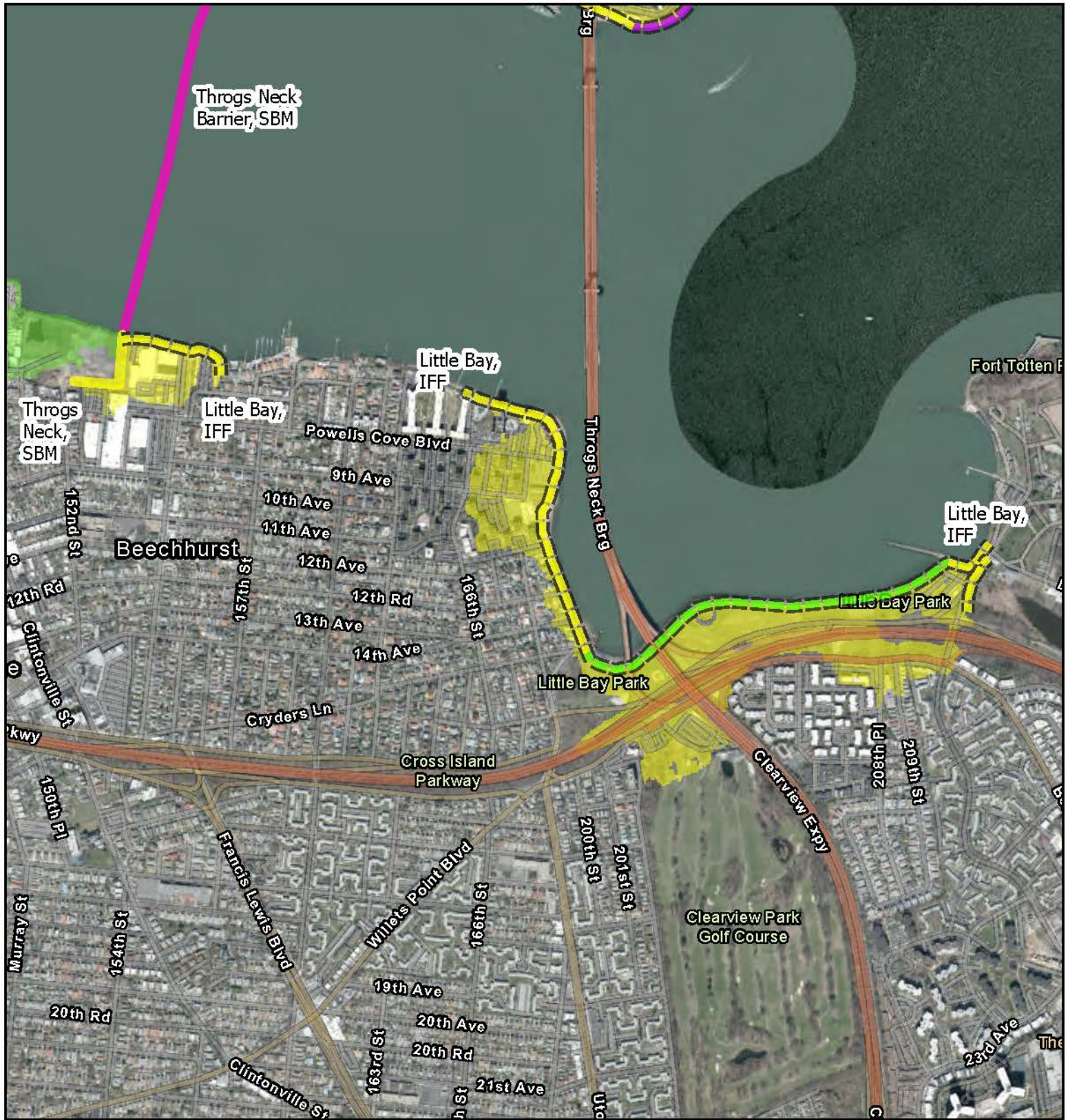
Feature Name: Hutchinson River  
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0 3000 Feet



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#### Legend

Alt2 Features/Measures

SBM, Floodwall

SBM, Storm Surge Barrier

IFF, Floodwall

IFF, Levee

IFF, Seawall

Alt2 Reduced Risk Areas

SSB/SBM Reduced Risk Areas

IFF Reduced Risk Areas

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#### Alternative 2 - IFFs

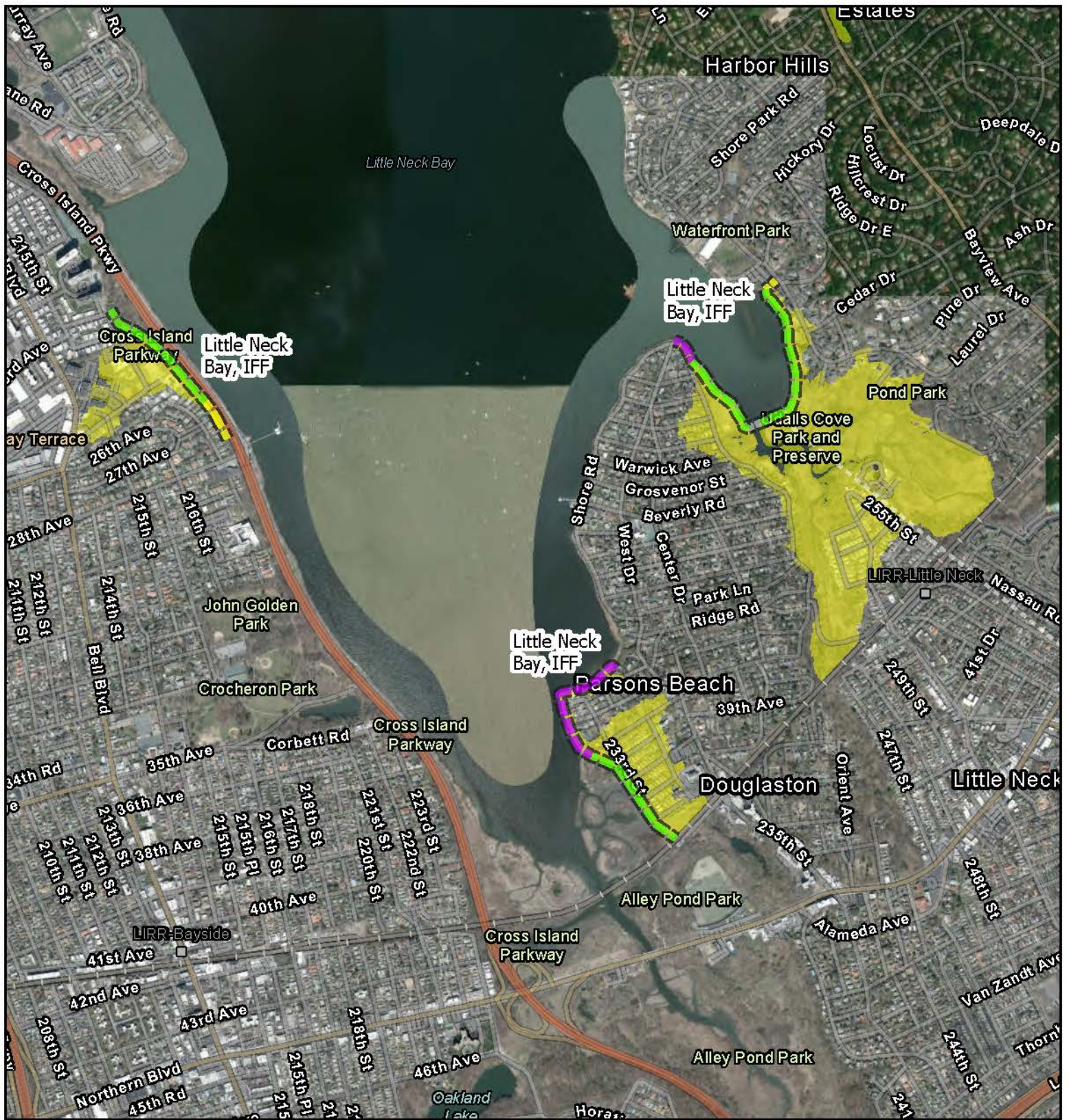
Feature Name: Little Bay

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### Legend

#### Alt2 Features/Measures

- IFF, Floodwall
- IFF, Levee
- IFF, Seawall
- IFF, Tide Gate
- IFF Reduced Risk Areas

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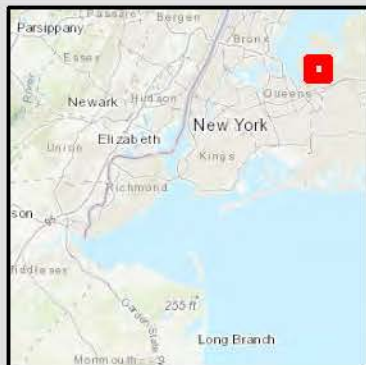
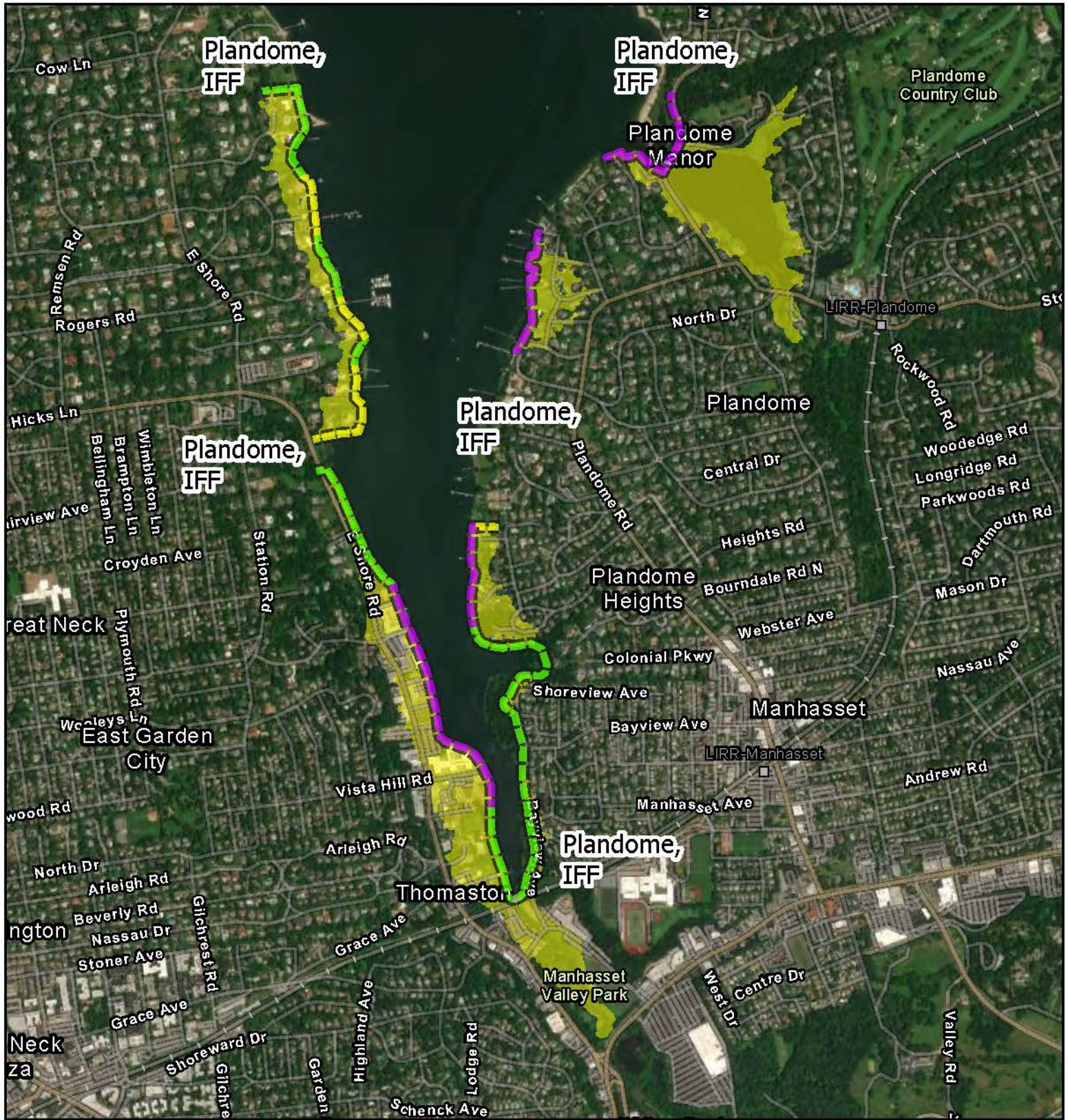
#### Alternative 2 - IFFs

Feature Name: Little Neck Bay  
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### Legend

#### Alt2 Features/Measures

- IFF, Floodwall
- IFF, Levee
- IFF, Seawall
- IFF, Tide Gate
- IFF Reduced Risk Areas

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#### Alternative 2 - IFFs

Feature Name: Plandome  
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0 1000 Feet



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### Legend

- |                        |                            |
|------------------------|----------------------------|
| Alt2 Features/Measures | ■ IFF, Storm Surge Barrier |
| ■ IFF, Floodwall       | ■ IFF, Tide Gate           |
| ■ IFF, Levee           | ■ IFF Reduced Risk Areas   |
| ■ IFF, Seawall         |                            |

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### Alternative 2 - IFFs

Feature Name: Port Washington  
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## Legend

### Alt2 Features/Measures

■ IFF, Levee

■ IFF, Seawall

■ IFF Reduced Risk Areas

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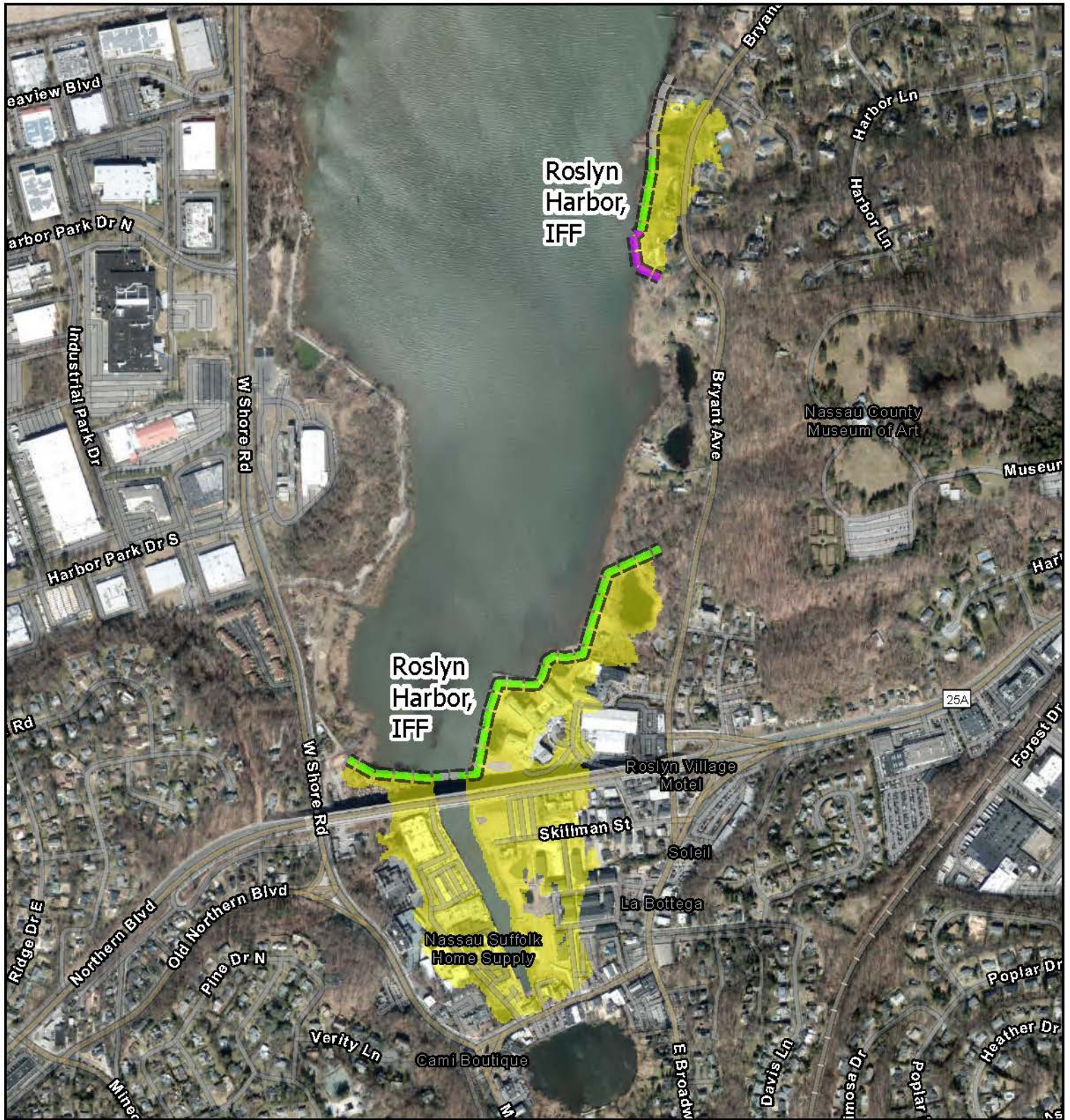
### Alternative 2 - IFFs

Feature Name: Rodman Neck  
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### Legend

#### Alt2 Features/Measures

- IFF, Levee
- IFF, Seawall
- IFF, Tide Gate
- IFF Reduced Risk Areas

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#### Alternative 2 - IFFs

Feature Name: Roslyn Harbor  
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### Legend

#### Alt2 Features/Measures

- IFF, Levee
- IFF, Seawall
- IFF, Tide Gate
- IFF Reduced Risk Areas

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#### Alternative 2 - IFFs

Feature Name: Sands Point  
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### Legend

#### Alt2 Features/Measures

● RRF, Floodwall

#### Alt2 Reduced Risk Areas

■ SSB/SBM Reduced Risk Areas

■ RRF Reduced Risk Areas

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#### Alternative 2 - RRFs

Feature Name: Arthur Kill  
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### Legend

#### Alt2 Features/Measures

●● RRF, Floodwall

#### Alt2 Reduced Risk Areas

■ SSB/SBM Reduced Risk Areas

▨ RRF Reduced Risk Areas

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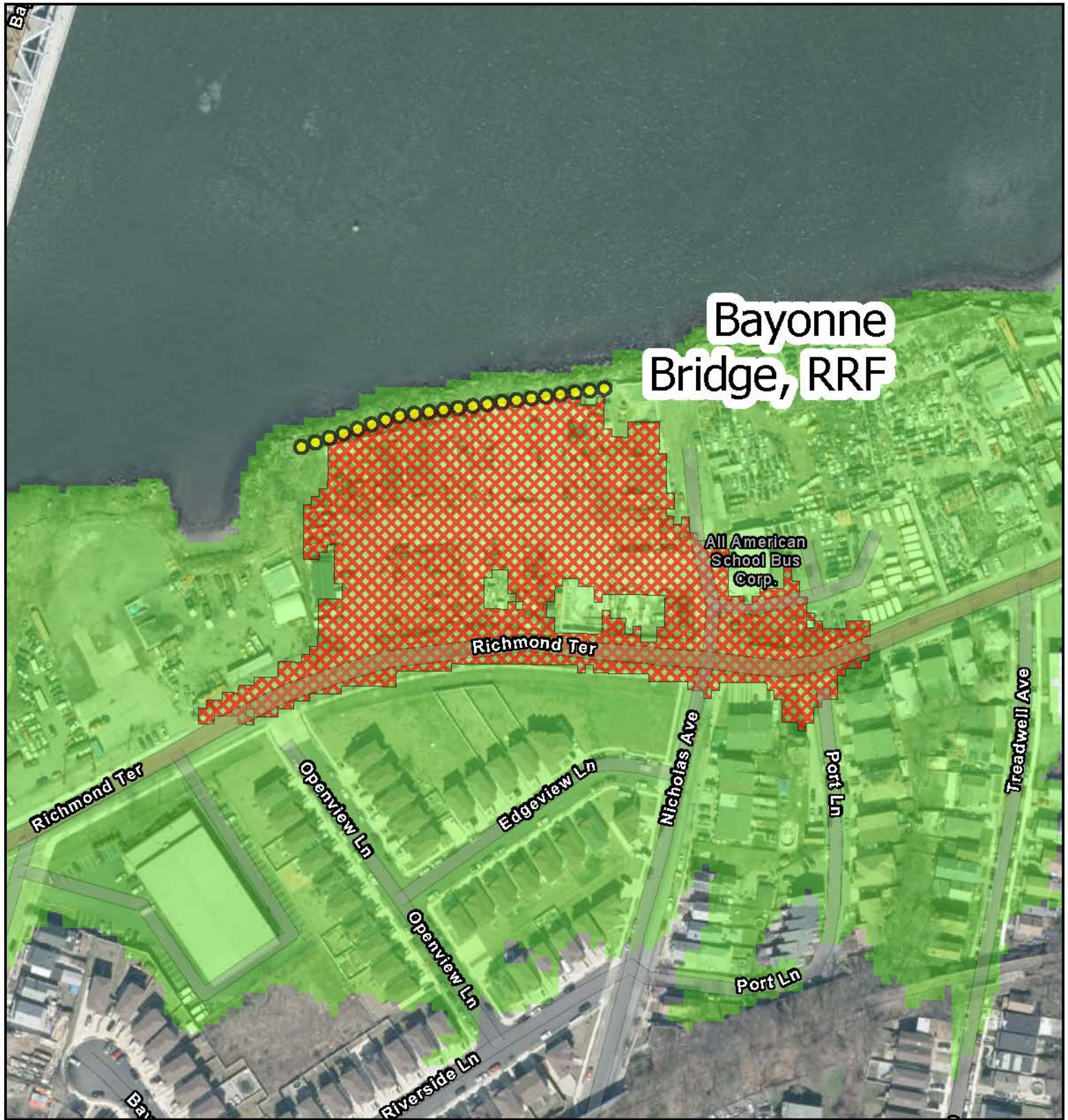
#### Alternative 2 - RRFs

Feature Name: Atlantic Basin  
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### Legend

#### Alt2 Features/Measures

●● RRF, Floodwall

#### Alt2 Reduced Risk Areas

■ SSB/SBM Reduced Risk Areas

■ RRF Reduced Risk Areas

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#### Alternative 2 - RRFs

Feature Name: Bayonne Bridge  
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#### Legend

##### Alt2 Features/Measures

●● RRF, Berm

●● RRF, Bulkhead

●● RRF, Floodwall

##### Alt2 Reduced Risk Areas

SSB/SBM Reduced Risk Areas

RRF Reduced Risk Areas

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#### Alternative 2 - RRFs

Feature Name: Bayswater Park

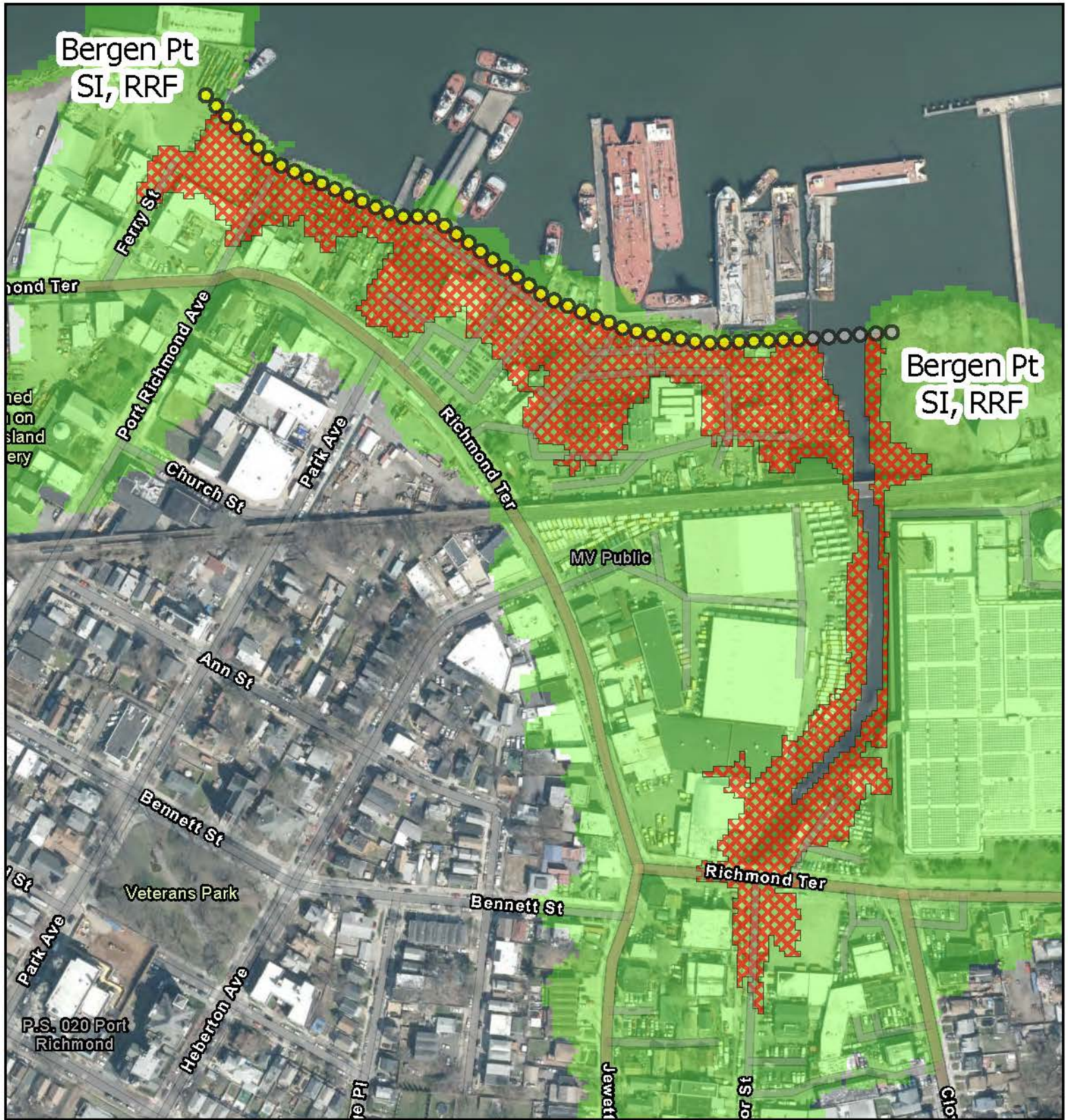
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0 200 Feet



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### Legend

#### Alt2 Features/Measures

●● RRF, Floodwall

●● RRF, Tide Gate

#### Alt2 Reduced Risk Areas

■ SSB/SBM Reduced Risk Areas

■ RRF Reduced Risk Areas

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#### Alternative 2 - RRFs

Feature Name: Bergen Pt SI

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0 200 Feet



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### Legend

#### Alt2 Features/Measures

— SBM, Reinforced Dune

● RRF, Berm

#### Alt2 Reduced Risk Areas

■ SSB/SBM Reduced Risk Areas

▨ RRF Reduced Risk Areas

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#### Alternative 2 - RRFs

Feature Name: Breezy Point

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### Legend

#### Alt2 Features/Measures

●● RRF, Revetment

#### Alt2 Reduced Risk Areas

■ SSB/SBM Reduced Risk Areas

▨ RRF Reduced Risk Areas

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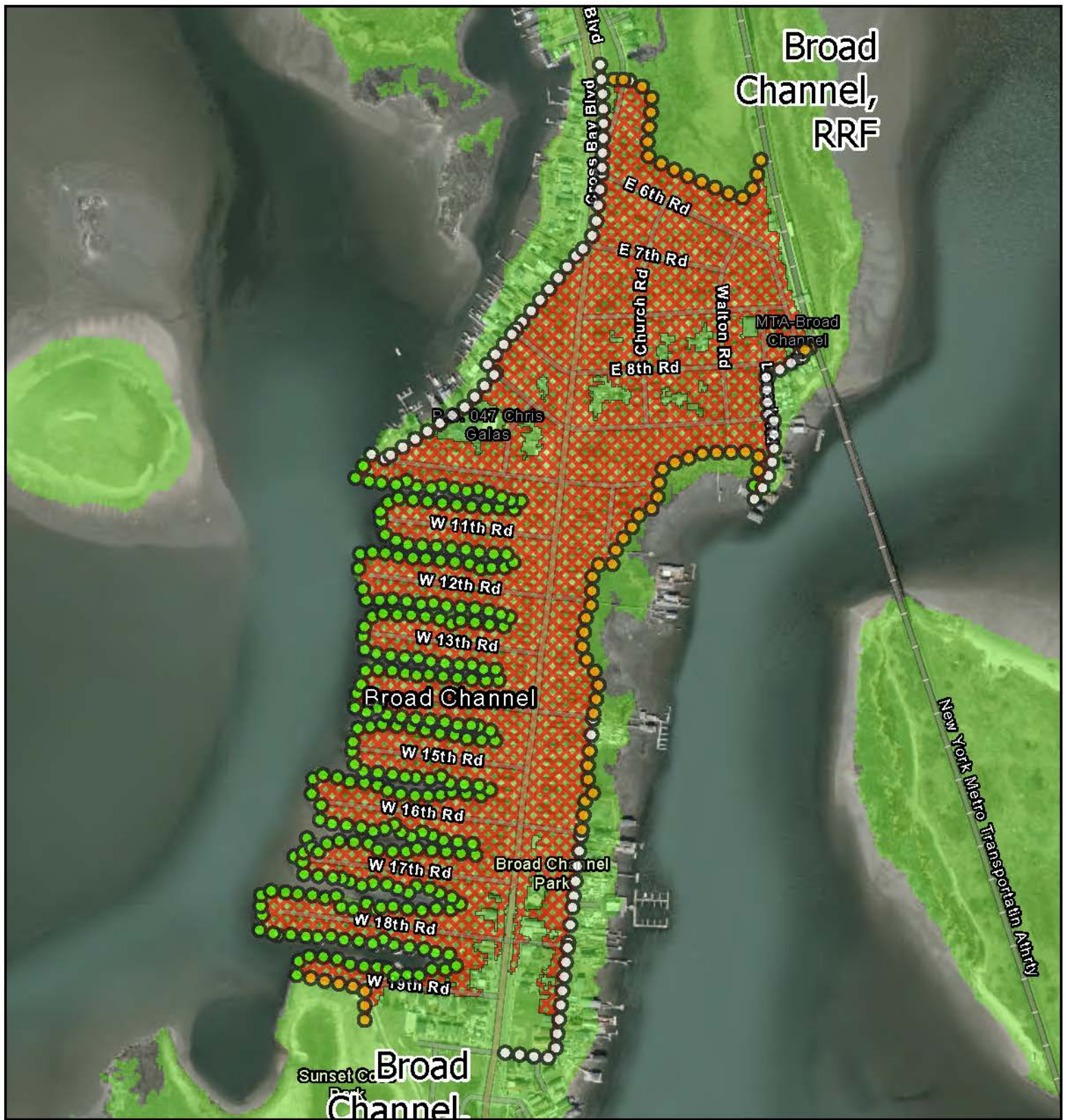
#### Alternative 2 - RRFs

Feature Name: Bridge Street Bridge  
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### Legend

#### Alt2 Features/Measures

RRF, Berm

RRF, Bulkhead

RRF, Road Raising

#### Alt2 Reduced Risk Areas

SSB/SBM Reduced Risk Areas

RRF Reduced Risk Areas

### NEW YORK - NEW JERSEY HARBOR & TRIBUTARIES STUDY

#### Alternative 2 - RRFs

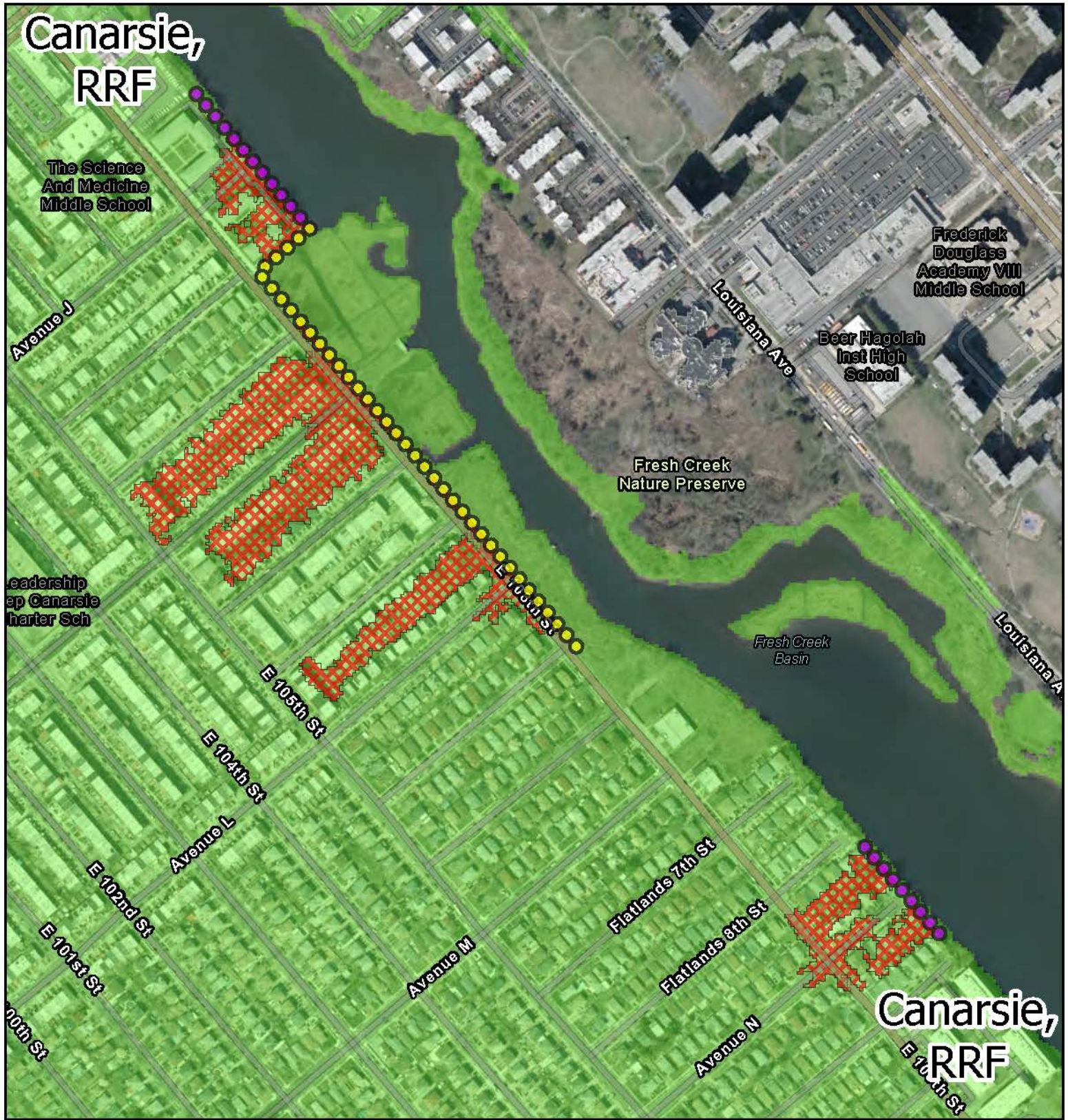
Feature Name: Broad Channel

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### Legend

#### Alt2 Features/Measures

● RRF, Floodwall

● RRF, Revetment

#### Alt2 Reduced Risk Areas

■ SSB/SBM Reduced Risk Areas

▤ RRF Reduced Risk Areas

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HARBOR & TRIBUTARIES STUDY

#### Alternative 2 - RRFs

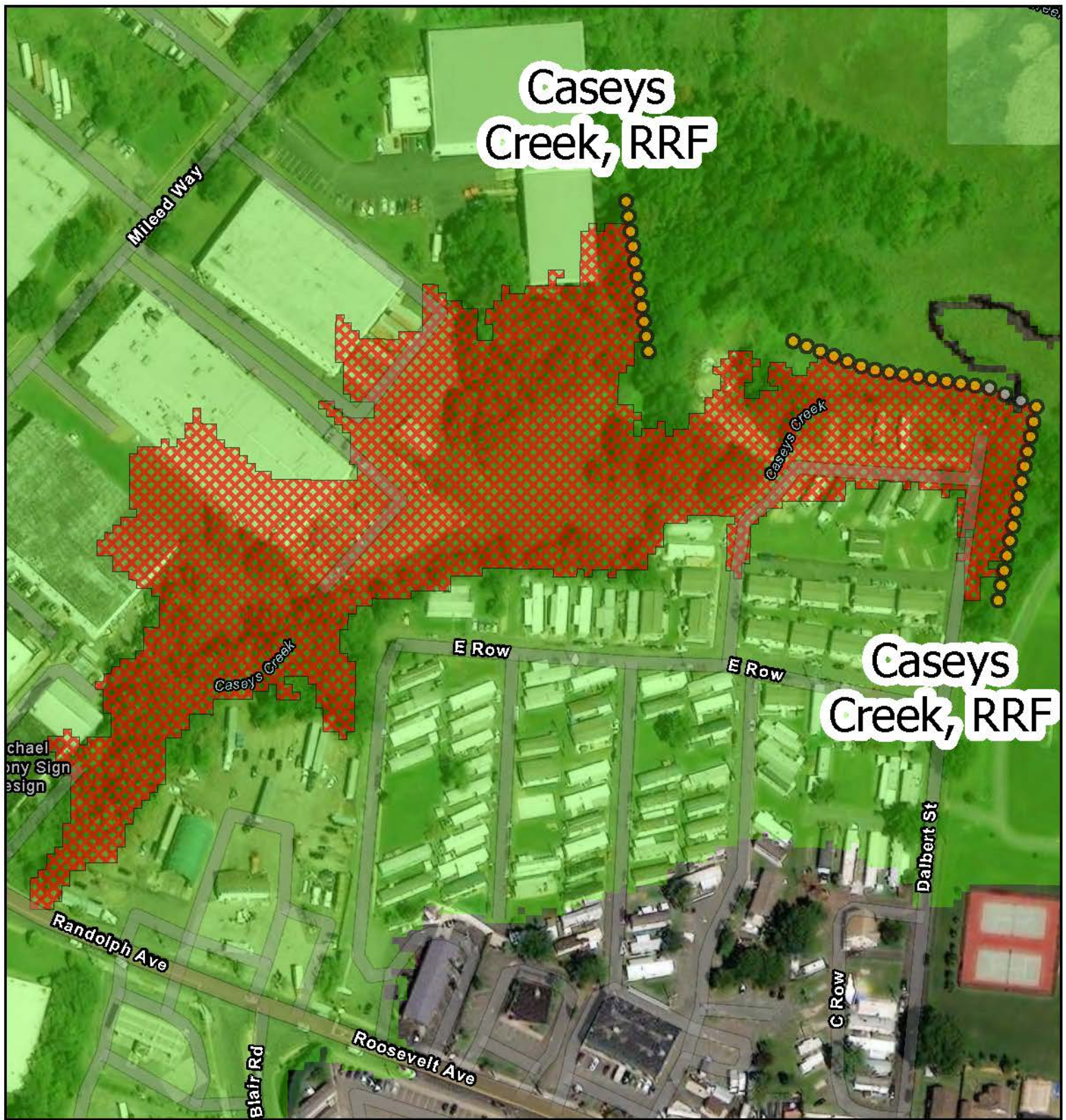
Feature Name: Canarsie

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### Legend

#### Alt2 Features/Measures

● RRF, Berm

● RRF, Tide Gate

#### Alt2 Reduced Risk Areas

■ SSB/SBM Reduced Risk Areas

■ RRF Reduced Risk Areas

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#### Alternative 2 - RRFs

Feature Name: Casey's Creek

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#### Legend

##### Alt2 Features/Measures

- RRF,Bulkhead
- RRF,Deployable Flood Barrier
- RRF,Floodwall

##### Alt2 Reduced Risk Areas

- SSB/SBM Reduced Risk Areas
- RRF Reduced Risk Areas

#### NEW YORK - NEW JERSEY HARBOR & TRIBUTARIES STUDY

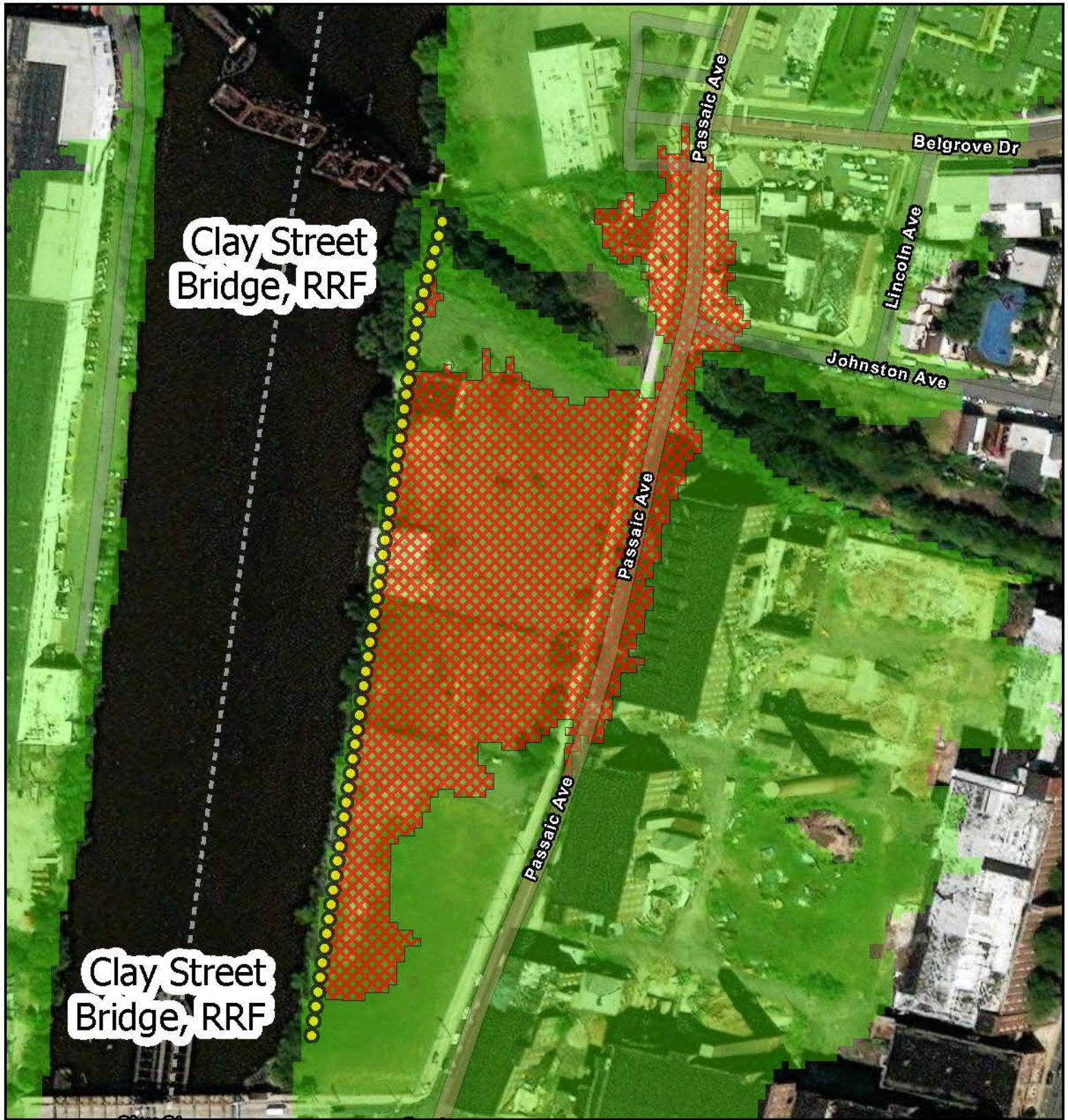
##### Alternative 2 - RRFs

Feature Name: Chelsea  
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### Legend

#### Alt2 Features/Measures

●● RRF, Floodwall

#### Alt2 Reduced Risk Areas

■ SSB/SBM Reduced Risk Areas

■ RRF Reduced Risk Areas

NEW YORK - NEW JERSEY  
HARBOR & TRIBUTARIES STUDY

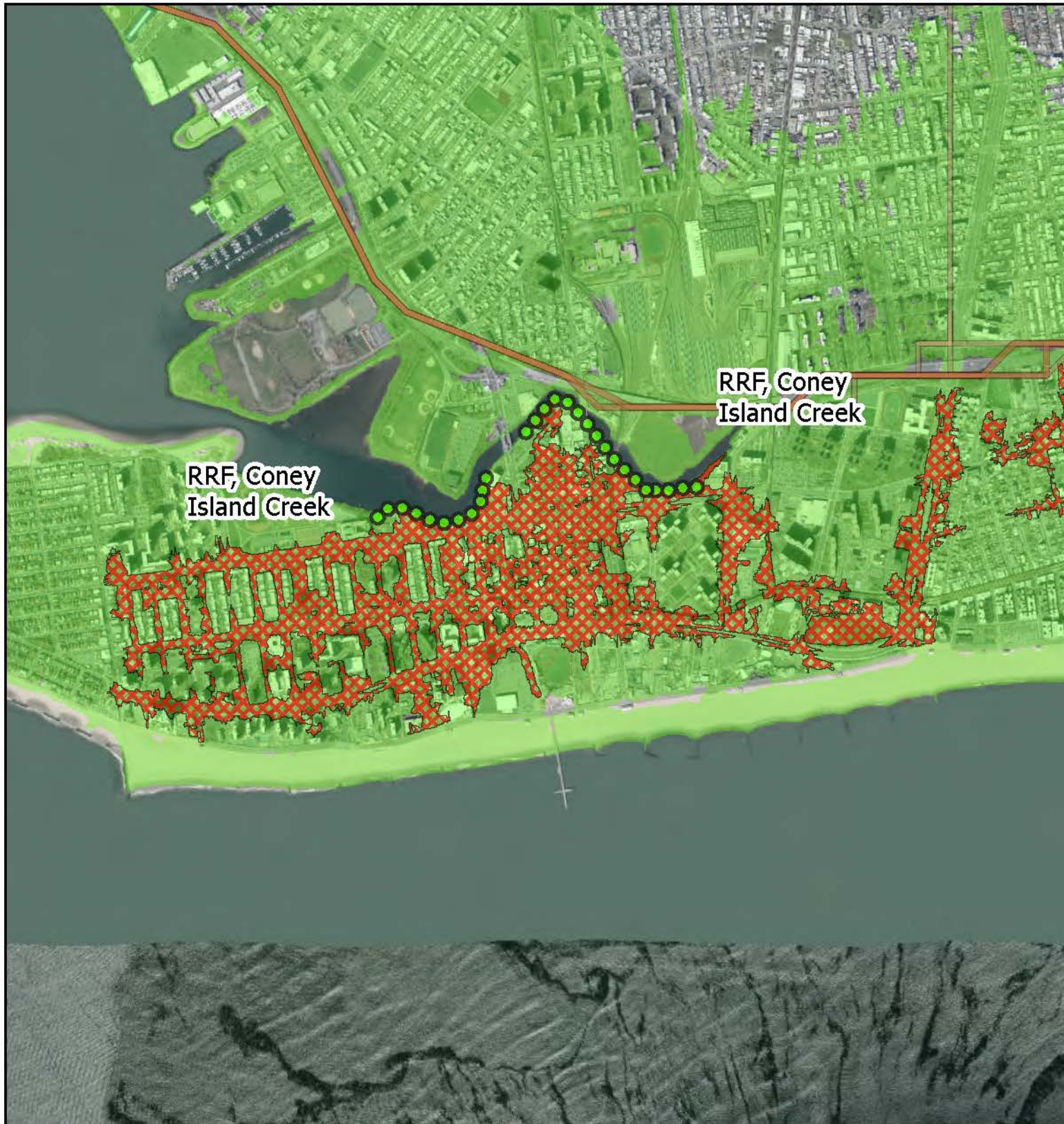
#### Alternative 2 - RRFs

Feature Name: Clay Street Bridge  
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### Legend

#### Alt2 Features/Measures

● RRF, Bulkhead

#### Alt2 Reduced Risk Areas

SSB/SBM Reduced Risk Areas

RRF Reduced Risk Areas

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#### Alternative 2 - RRFs

Feature Name: Coney Is Creek

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0 1000 Feet



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### Legend

#### Alt2 Features/Measures

● RRF, Floodwall

● RRF, Revetment

#### Alt2 Reduced Risk Areas

SSB/SBM Reduced Risk Areas

RRF Reduced Risk Areas

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#### Alternative 2 - RRFs

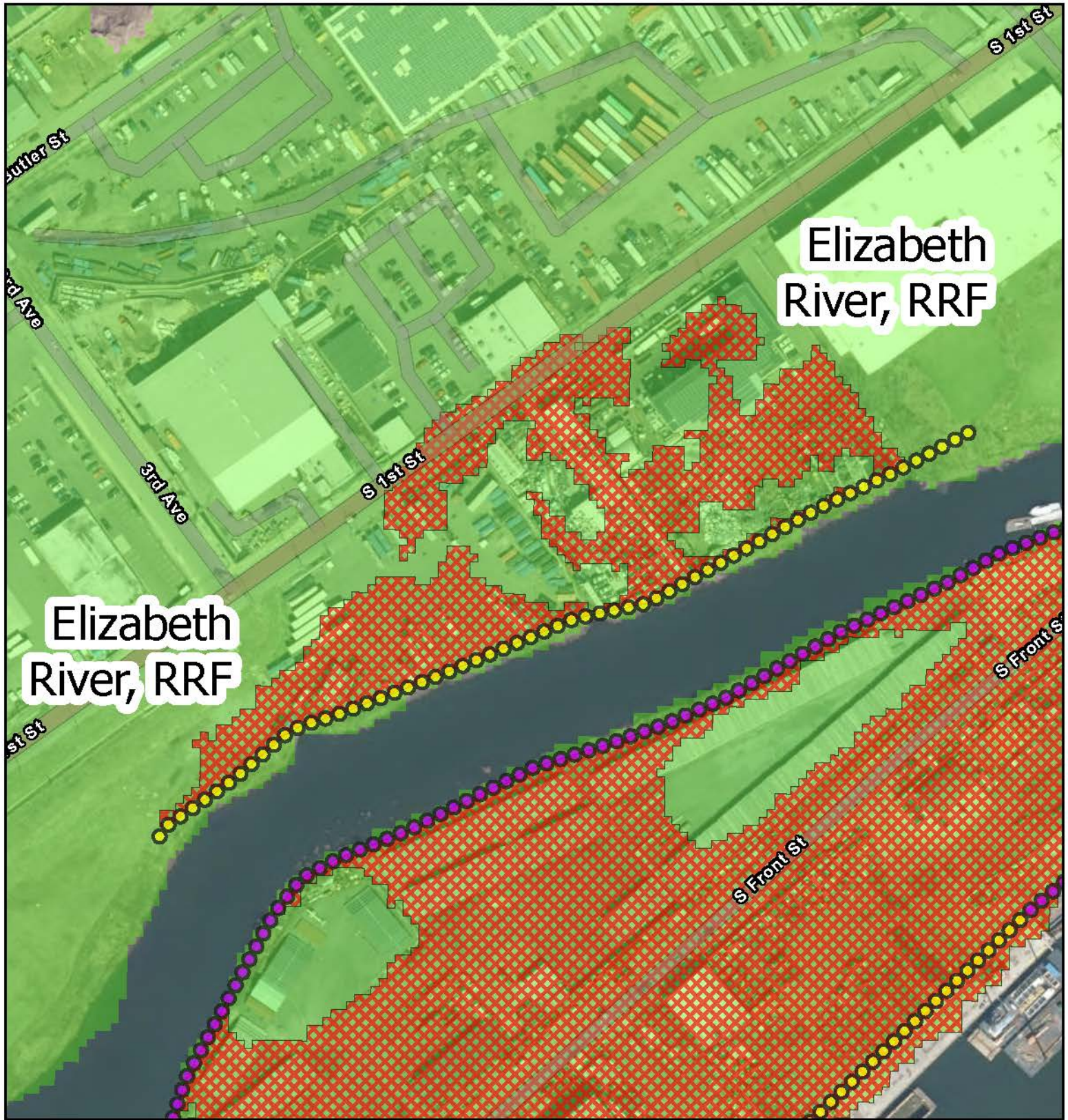
Feature Name: Dock Bridge

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### Legend

#### Alt2 Features/Measures

●● RRF, Floodwall

●● RRF, Revetment

#### Alt2 Reduced Risk Areas

■ SSB/SBM Reduced Risk Areas

■ RRF Reduced Risk Areas

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#### Alternative 2 - RRFs

Feature Name: Elizabeth River

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0 200 Feet



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### Legend

#### Alt2 Features/Measures

● RRF, Floodwall

● RRF, Revetment

#### Alt2 Reduced Risk Areas

SSB/SBM Reduced Risk Areas

RRF Reduced Risk Areas

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#### Alternative 2 - RRFs

Feature Name: Elizabethport

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0 400 Feet



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### Legend

#### Alt2 Features/Measures

●● RRF, Floodwall

#### Alt2 Reduced Risk Areas

■ SSB/SBM Reduced Risk Areas

■ RRF Reduced Risk Areas

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#### Alternative 2 - RRFs

Feature Name: EssexCntyCorrFac  
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0 1000 Feet



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### Legend

#### Alt2 Features/Measures

● RRF, Berm

○ RRF, Tide Gate

#### Alt2 Reduced Risk Areas

■ SSB/SBM Reduced Risk Areas

▨ RRF Reduced Risk Areas

NEW YORK - NEW JERSEY  
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#### Alternative 2 - RRFs

Feature Name: Flushing Creek

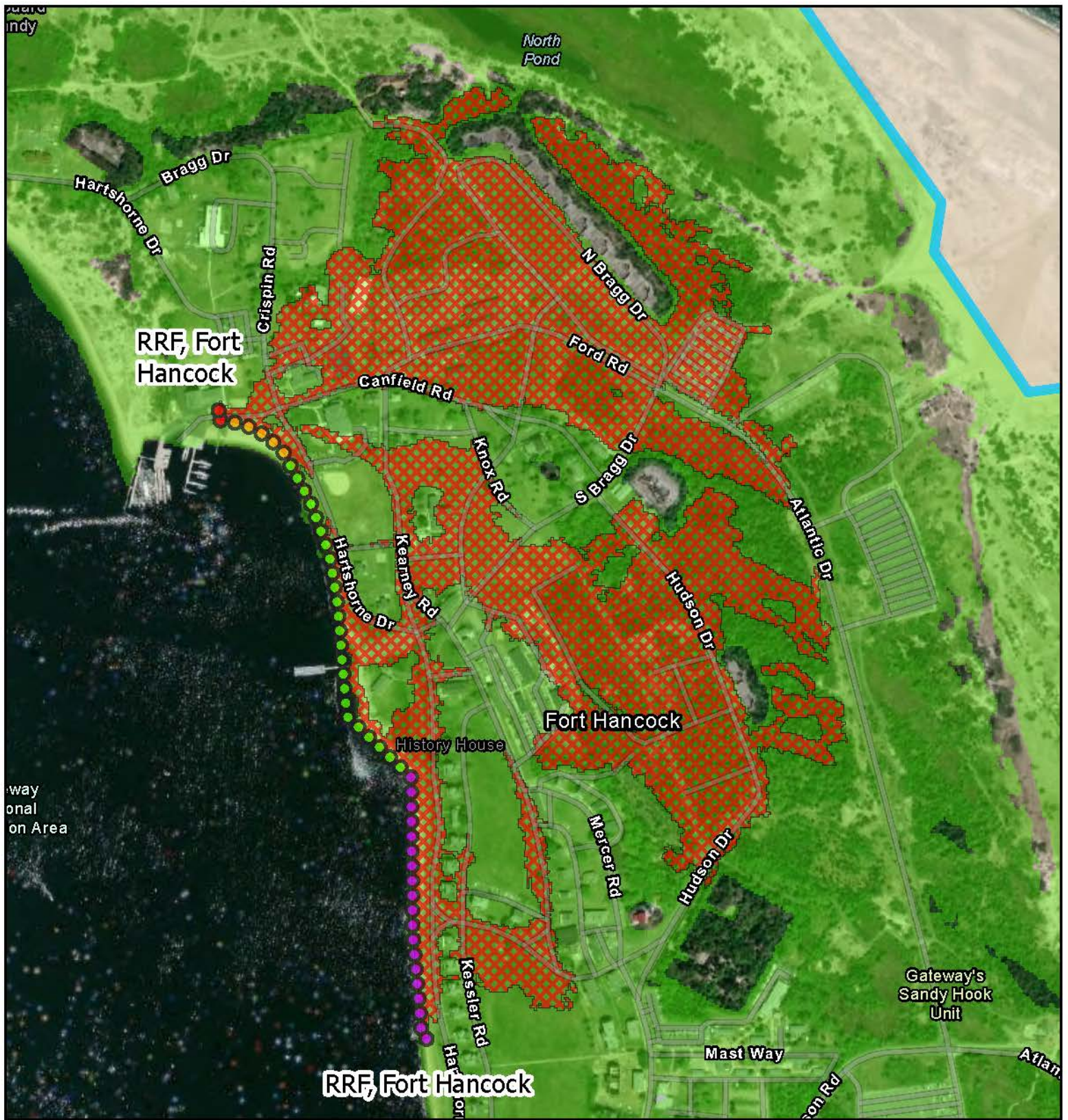
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0 2000 Feet



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#### Legend

Alt2 Features/Measures

SBM, Reinforced Dune

RRF, Berm

RRF, Bulkhead

RRF, Deployable Flood Barrier

RRF, Revetment

Alt2 Reduced Risk Areas

SSB/SBM Reduced Risk Areas

RRF Reduced Risk Areas

NEW YORK - NEW JERSEY  
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#### Alternative 2 - RRFs

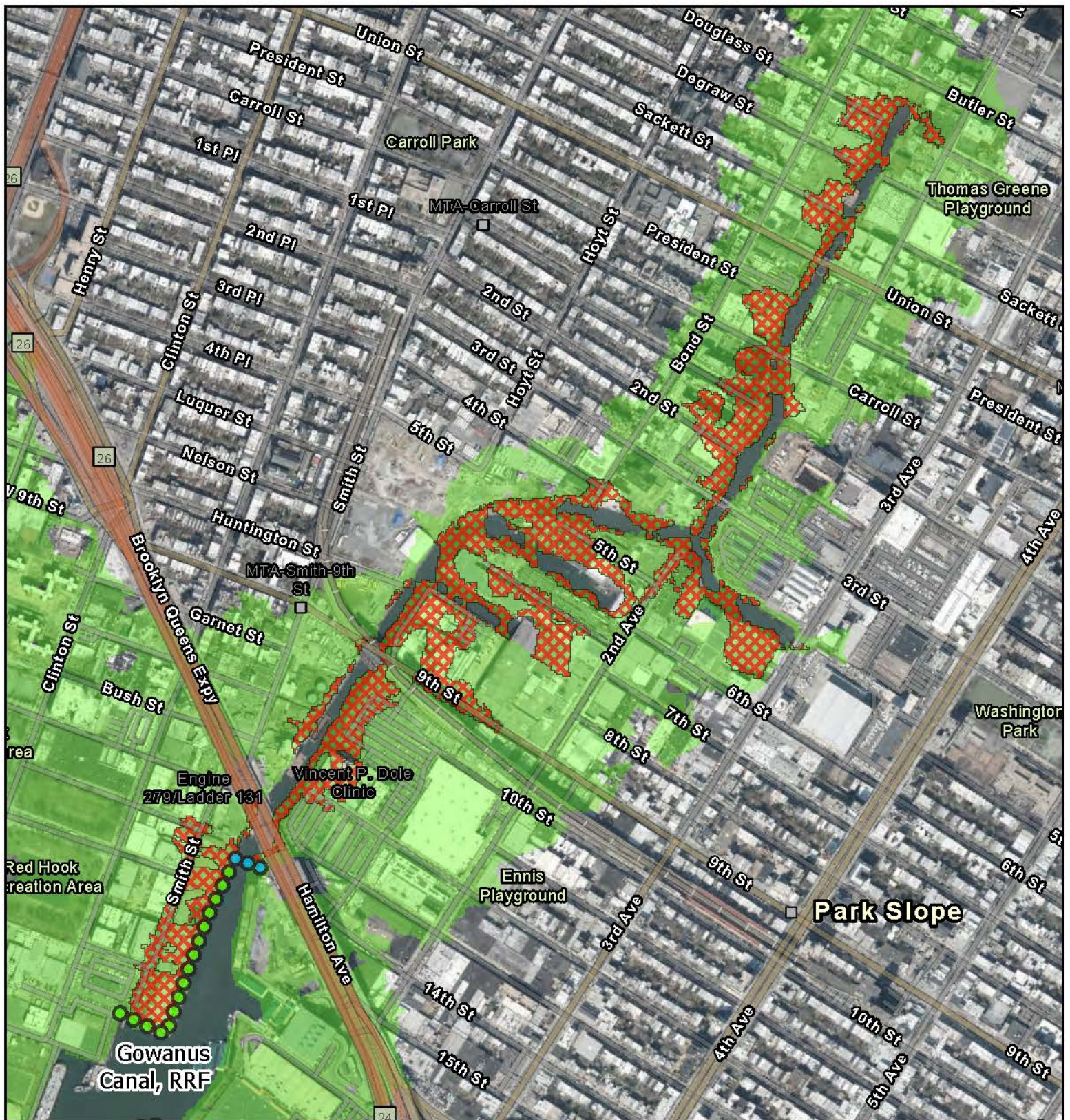
Feature Name: Fort Hancock

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### Legend

#### Alt2 Features/Measures

● RRF, Bulkhead

● RRF, Navigable Gate

#### Alt2 Reduced Risk Areas

■ SSB/SBM Reduced Risk Areas

■ RRF Reduced Risk Areas

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#### Alternative 2 - RRFs

Feature Name: Gowanus Canal

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0 600 Feet



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### Legend

#### Alt2 Features/Measures

● RRF, Bulkhead

#### Alt2 Reduced Risk Areas

■ SSB/SBM Reduced Risk Areas

■ RRF Reduced Risk Areas

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#### Alternative 2 - RRFs

Feature Name: Green Pt LI

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0 200 Feet



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### Legend

#### Alt2 Features/Measures

●● RRF, Floodwall

#### Alt2 Reduced Risk Areas

■ SSB/SBM Reduced Risk Areas

▨ RRF Reduced Risk Areas

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#### Alternative 2 - RRFs

Feature Name: Harrison Reach

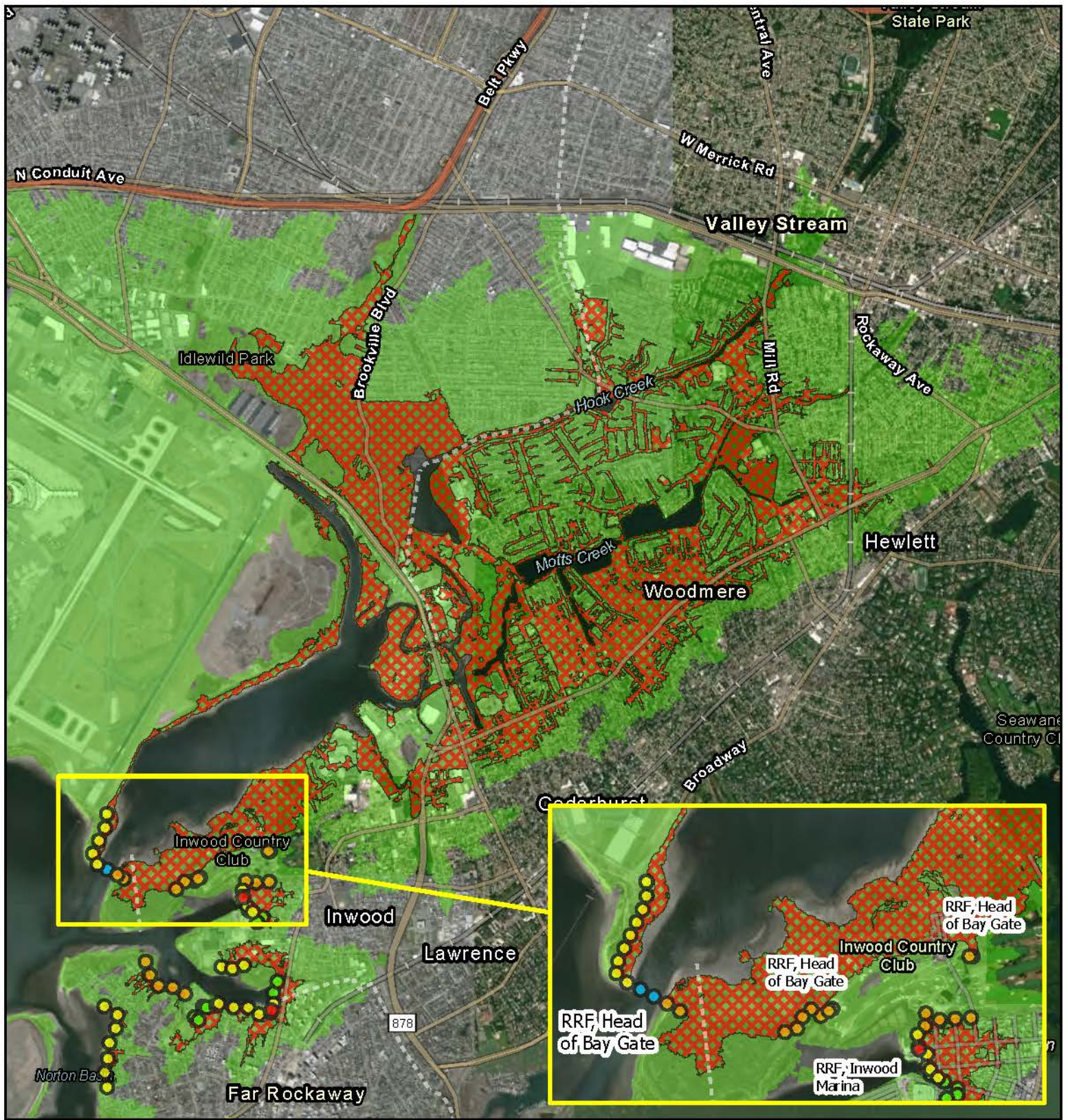
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0 600 Feet



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#### Legend

##### Alt2 Features/Measures

- SBM, Floodwall
- RRF, Berm
- RRF, Bulkhead
- RRF, Deployable Flood Barrier

- RRF, Floodwall
- RRF, Navigable Gate

##### Alt2 Reduced Risk Areas

- SSB/SBM Reduced Risk Areas
- RRF Reduced Risk Areas

#### NEW YORK - NEW JERSEY HARBOR & TRIBUTARIES STUDY

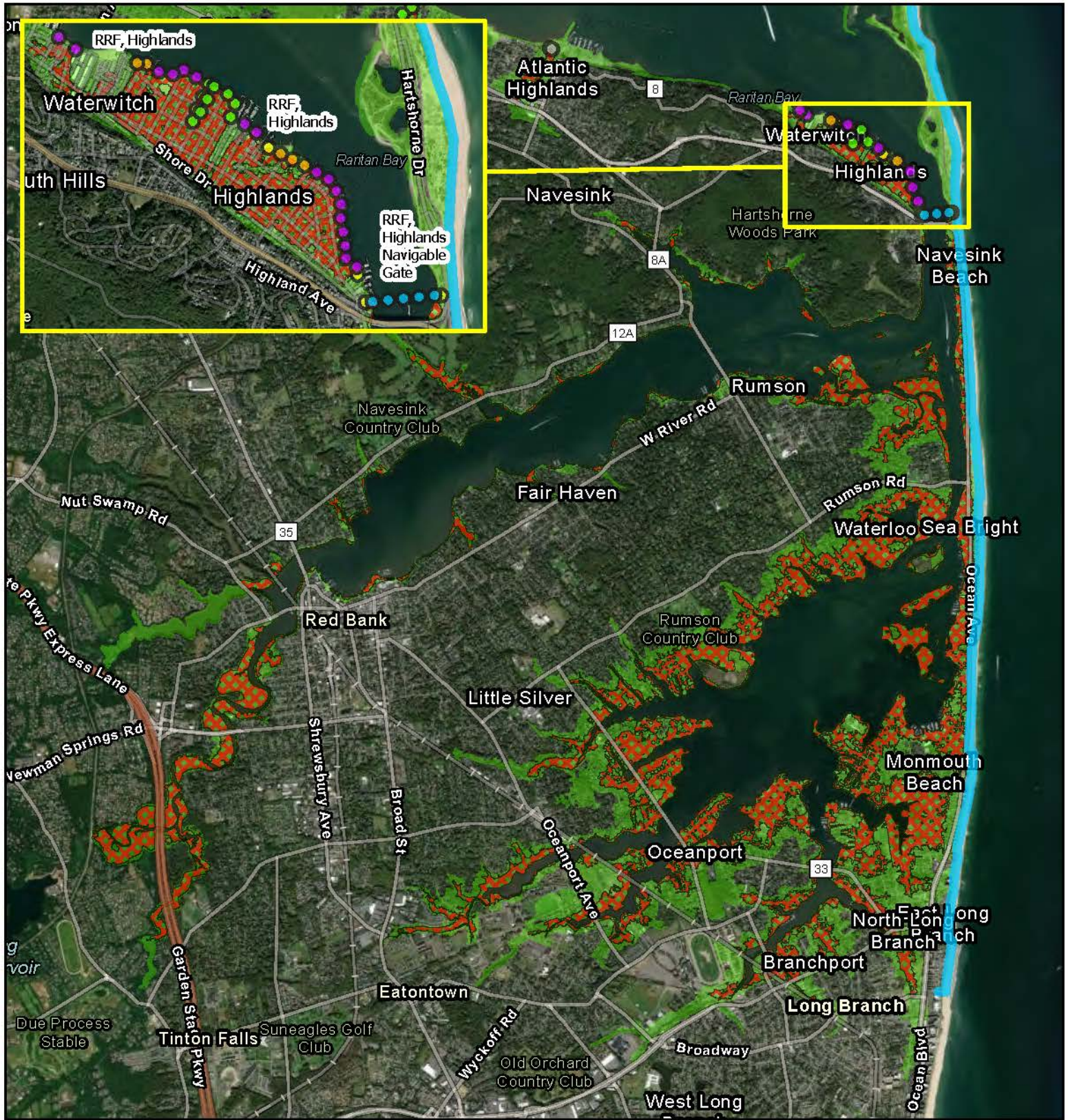
##### Alternative 2 - RRFs

Feature Name: Head of Bay Gate  
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### Legend

Alt2 Features/Measures

SBM, Reinforced Dune

RRF, Berm

RRF, Bulkhead

RRF, Floodwall

RRF, Navigable Gate

RRF, Revetment

RRF, Tide Gate

Alt2 Reduced Risk Areas

SSB/SBM Reduced Risk Areas

RRF Reduced Risk Areas

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### Alternative 2 - RRFs

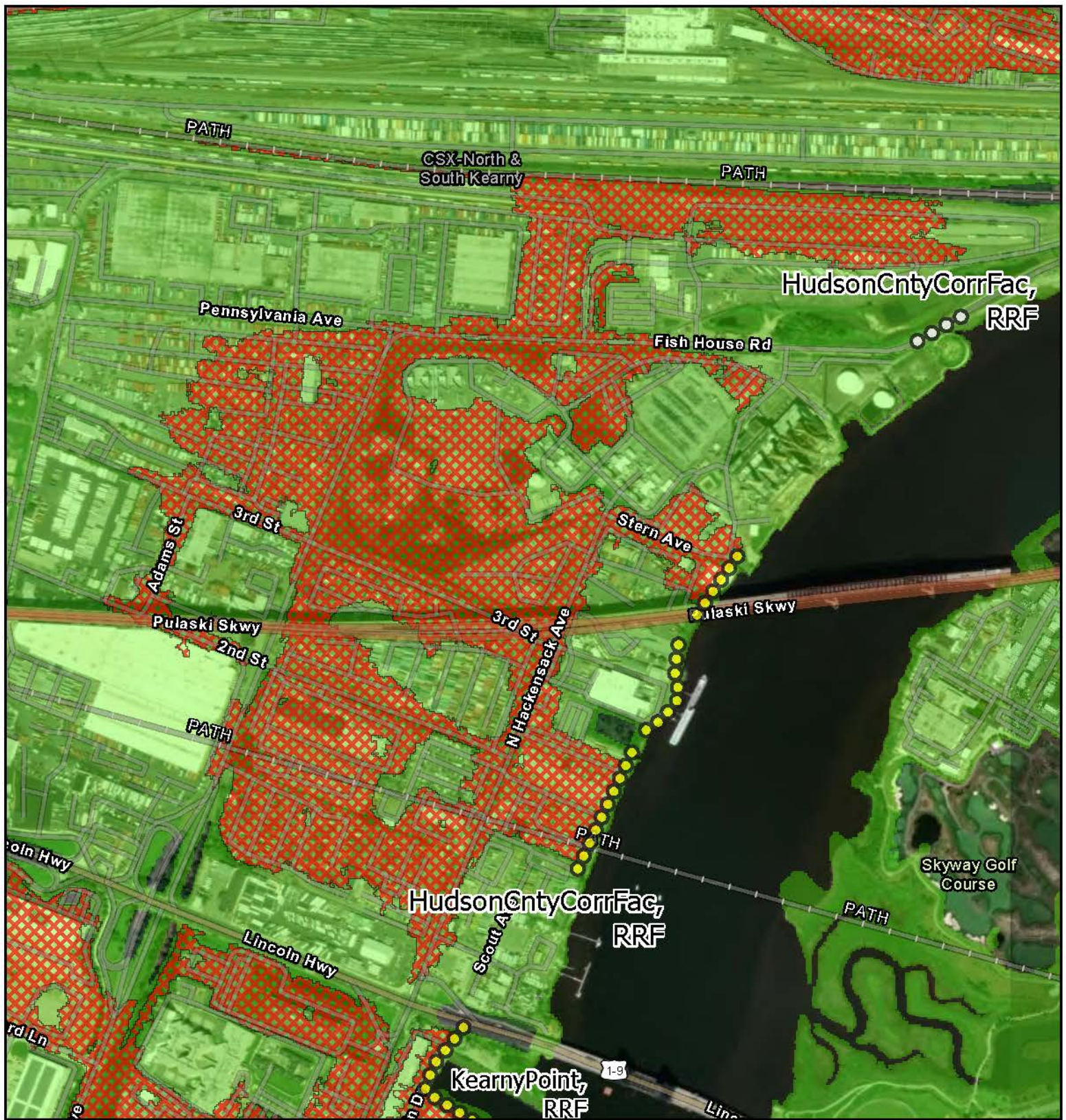
Feature Name: Highlands

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### Legend

Alt2 Features/Measures

●● RRF, Floodwall

○○ RRF, Road Raising

Alt2 Reduced Risk Areas

■ SSB/SBM Reduced Risk Areas

▨ RRF Reduced Risk Areas

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### Alternative 2 - RRFs

Feature Name: HudsonCntyCorrFac

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- Legend**
- Alt2 Features/Measures
- RRF, Floodwall
  - RRF, Berm
  - RRF, Bulkhead
  - RRF, Deployable Flood Barrier
  - Alt2 Reduced Risk Areas
  - SSB/SBM Reduced Risk Areas
  - RRF Reduced Risk Areas

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**Alternative 2 - RRFs**

Feature Name: Inwood Marina

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0 200 Feet

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### Legend

#### Alt2 Features/Measures

● RRF, Berm

● RRF, Bulkhead

#### Alt2 Reduced Risk Areas

SSB/SBM Reduced Risk Areas

RRF Reduced Risk Areas

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HARBOR & TRIBUTARIES STUDY

#### Alternative 2 - RRFs

Feature Name: Jersey City

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NEW YORK DISTRICT





### Legend

#### Alt2 Features/Measures

●● RRF,Floodwall

#### Alt2 Reduced Risk Areas

■ SSB/SBM Reduced Risk Areas

▨ RRF Reduced Risk Areas

NEW YORK - NEW JERSEY  
HARBOR & TRIBUTARIES STUDY

#### Alternative 2 - RRFs

Feature Name: Kearny Point & S. Kearny-Passaic  
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0 700 Feet



U.S. ARMY CORPS OF ENGINEERS  
NEW YORK DISTRICT





### Legend

#### Alt2 Features/Measures

●● RRF, Floodwall

#### Alt2 Reduced Risk Areas

SSB/SBM Reduced Risk Areas

RRF Reduced Risk Areas

NEW YORK - NEW JERSEY  
HARBOR & TRIBUTARIES STUDY

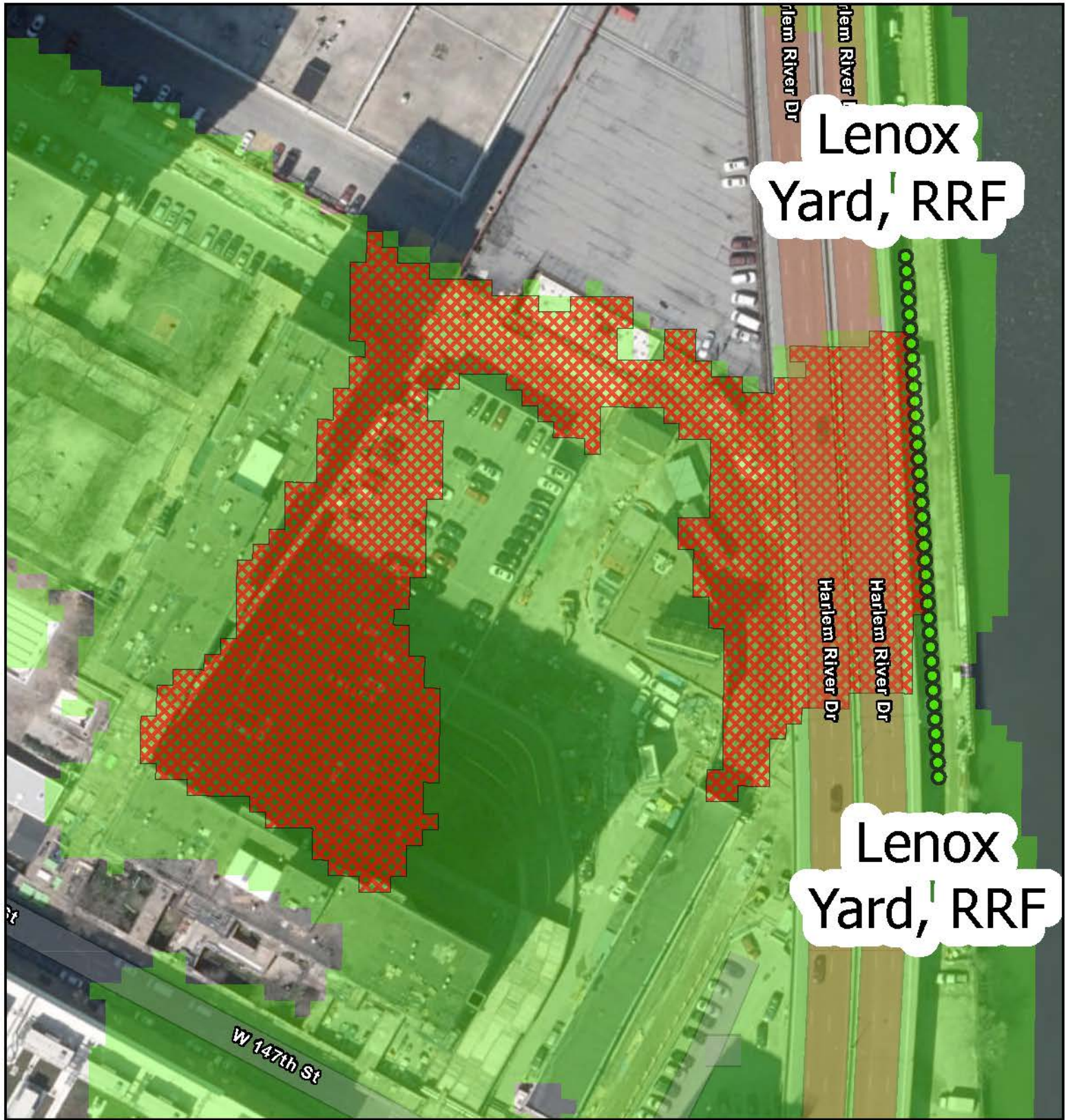
#### Alternative 2 - RRFs

Feature Name: Kips Bay  
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U.S. ARMY CORPS OF ENGINEERS  
NEW YORK DISTRICT





### Legend

#### Alt2 Features/Measures

●● RRF, Bulkhead

#### Alt2 Reduced Risk Areas

■ SSB/SBM Reduced Risk Areas

■ RRF Reduced Risk Areas

NEW YORK - NEW JERSEY  
HARBOR & TRIBUTARIES STUDY

#### Alternative 2 - RRFs

Feature Name: Lenox Yard

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0 50 Feet



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NEW YORK DISTRICT





### Legend

#### Alt2 Features/Measures

●● RRF, Bulkhead

●● RRF, Floodwall

#### Alt2 Reduced Risk Areas

■ SSB/SBM Reduced Risk Areas

▨ RRF Reduced Risk Areas

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HARBOR & TRIBUTARIES STUDY

#### Alternative 2 - RRFs

Feature Name: Leonardo

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0 200 Feet



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NEW YORK DISTRICT





### Legend

#### Alt2 Features/Measures

●● RRF, Bulkhead

#### Alt2 Reduced Risk Areas

■ SSB/SBM Reduced Risk Areas

■ RRF Reduced Risk Areas

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HARBOR & TRIBUTARIES STUDY

#### Alternative 2 - RRFs

Feature Name: Long Island City  
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0 200 Feet



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NEW YORK DISTRICT





### Legend

#### Alt2 Features/Measures

●● RRF, Floodwall

●● RRF, Tide Gate

#### Alt2 Reduced Risk Areas

■ SSB/SBM Reduced Risk Areas

▨ RRF Reduced Risk Areas

NEW YORK - NEW JERSEY  
HARBOR & TRIBUTARIES STUDY

#### Alternative 2 - RRFs

Feature Name: Many Mind Creek

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0 300 Feet



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NEW YORK DISTRICT





### Legend

#### Alt2 Features/Measures

● RRF, Bulkhead

#### Alt2 Reduced Risk Areas

■ SSB/SBM Reduced Risk Areas

■ RRF Reduced Risk Areas

NEW YORK - NEW JERSEY  
HARBOR & TRIBUTARIES STUDY

#### Alternative 2 - RRFs

Feature Name: Mariners Harbor SI E

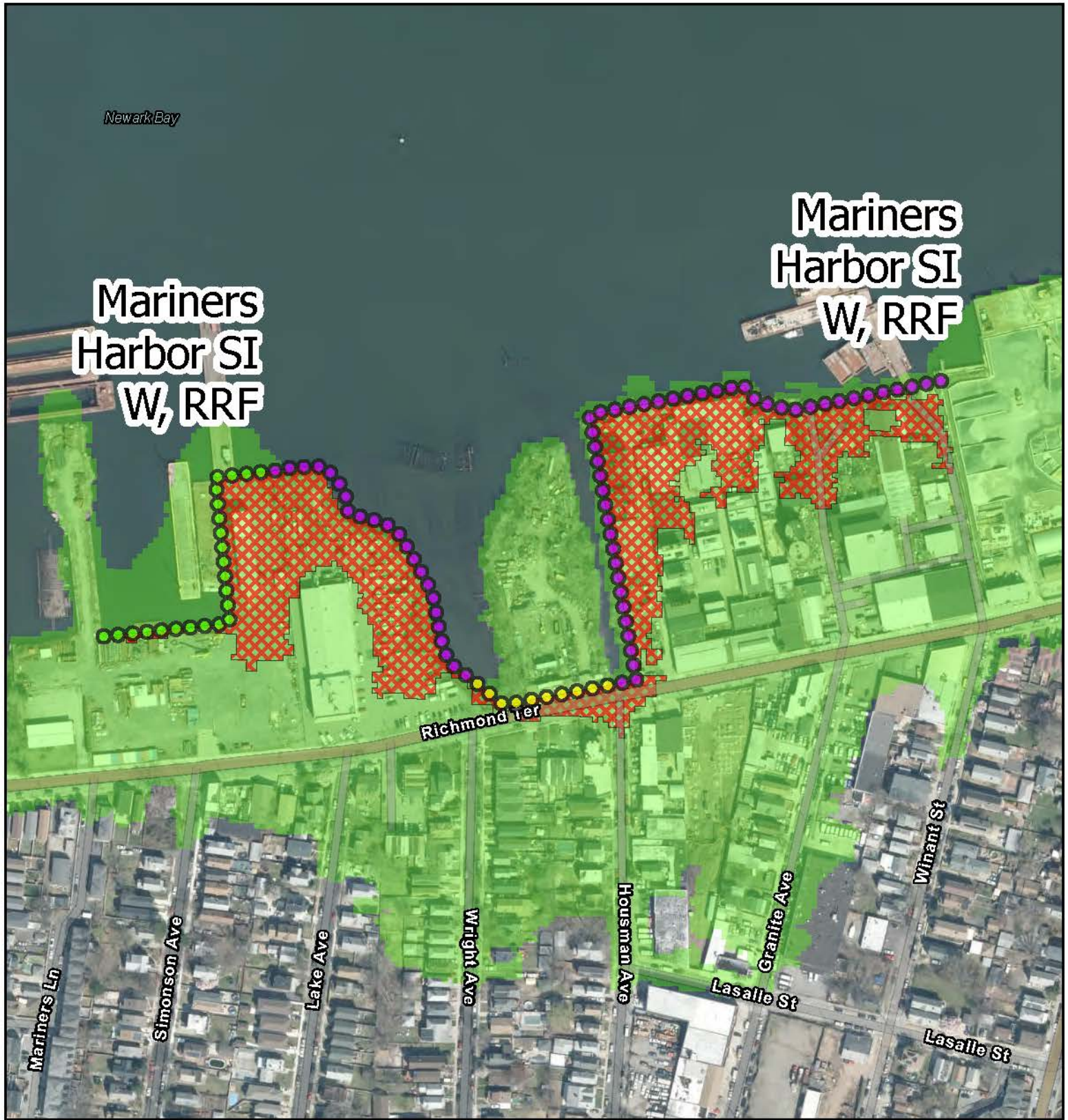
Page 34 of 59

0 400 Feet



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NEW YORK DISTRICT





- Legend**
- Alt2 Features/Measures**
- RRF,Bulkhead
  - RRF,Floodwall
  - RRF,Revetment
- Alt2 Reduced Risk Areas**
- SSB/SBM Reduced Risk Areas
  - RRF Reduced Risk Areas

NEW YORK - NEW JERSEY  
HARBOR & TRIBUTARIES STUDY

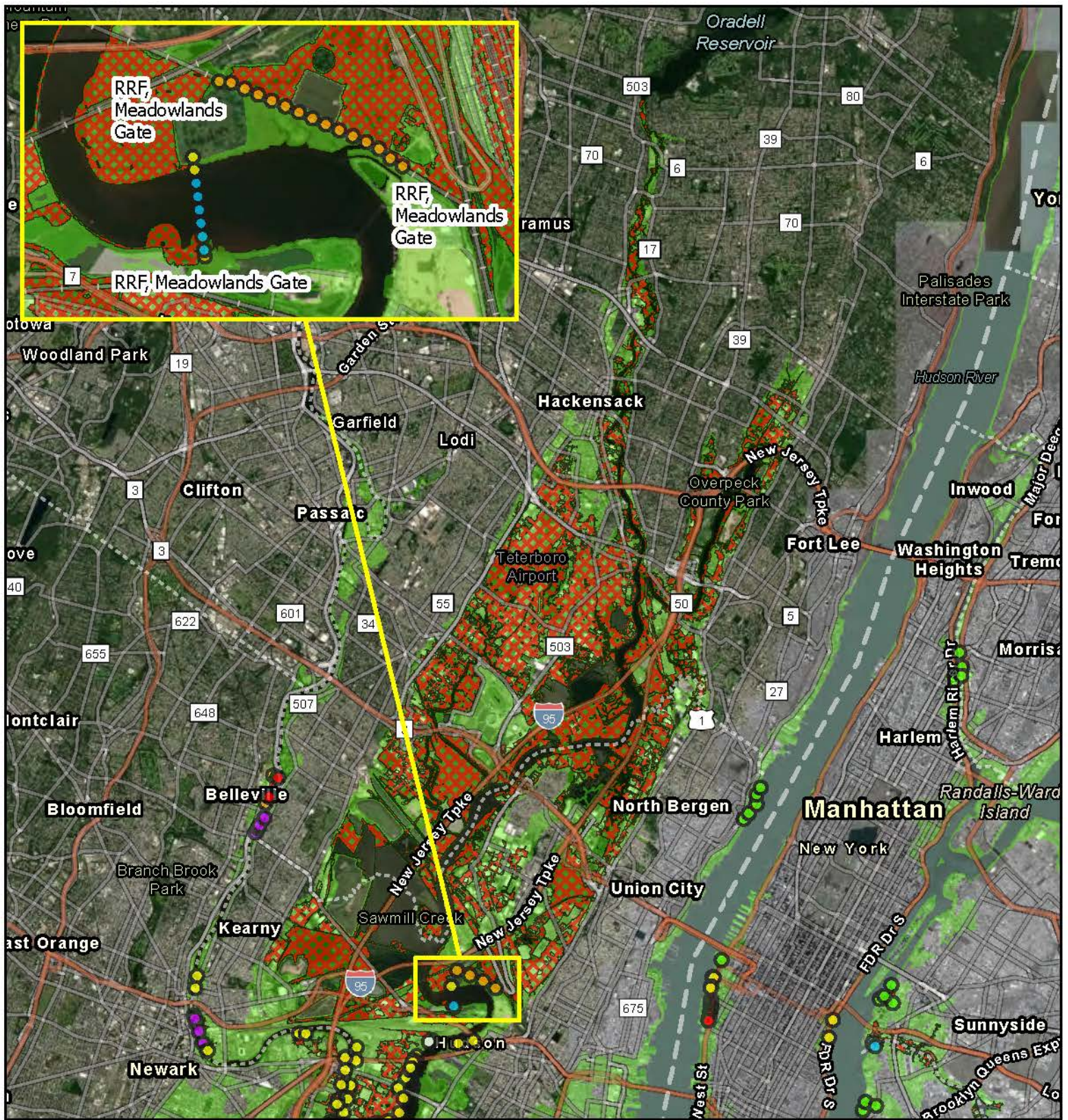
**Alternative 2 - RRFs**

Feature Name: Mariners Harbor SI W  
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NEW YORK DISTRICT





#### Legend

##### Alt2 Features/Measures

- RRF, Berm
- RRF, Bulkhead
- RRF, Deployable Flood Barrier
- RRF, Floodwall
- RRF, Navigable Gate

- RRF, Revetment
- RRF, Road Raising

##### Alt2 Reduced Risk Areas

- SSB/SBM Reduced Risk Areas
- RRF Reduced Risk Areas

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##### Alternative 2 - RRFs

Feature Name: Meadowlands Gate  
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NEW YORK DISTRICT





### Legend

#### Alt2 Features/Measures

●● RRF,Floodwall

#### Alt2 Reduced Risk Areas

■ SSB/SBM Reduced Risk Areas

■ RRF Reduced Risk Areas

NEW YORK - NEW JERSEY  
HARBOR & TRIBUTARIES STUDY

#### Alternative 2 - RRFs

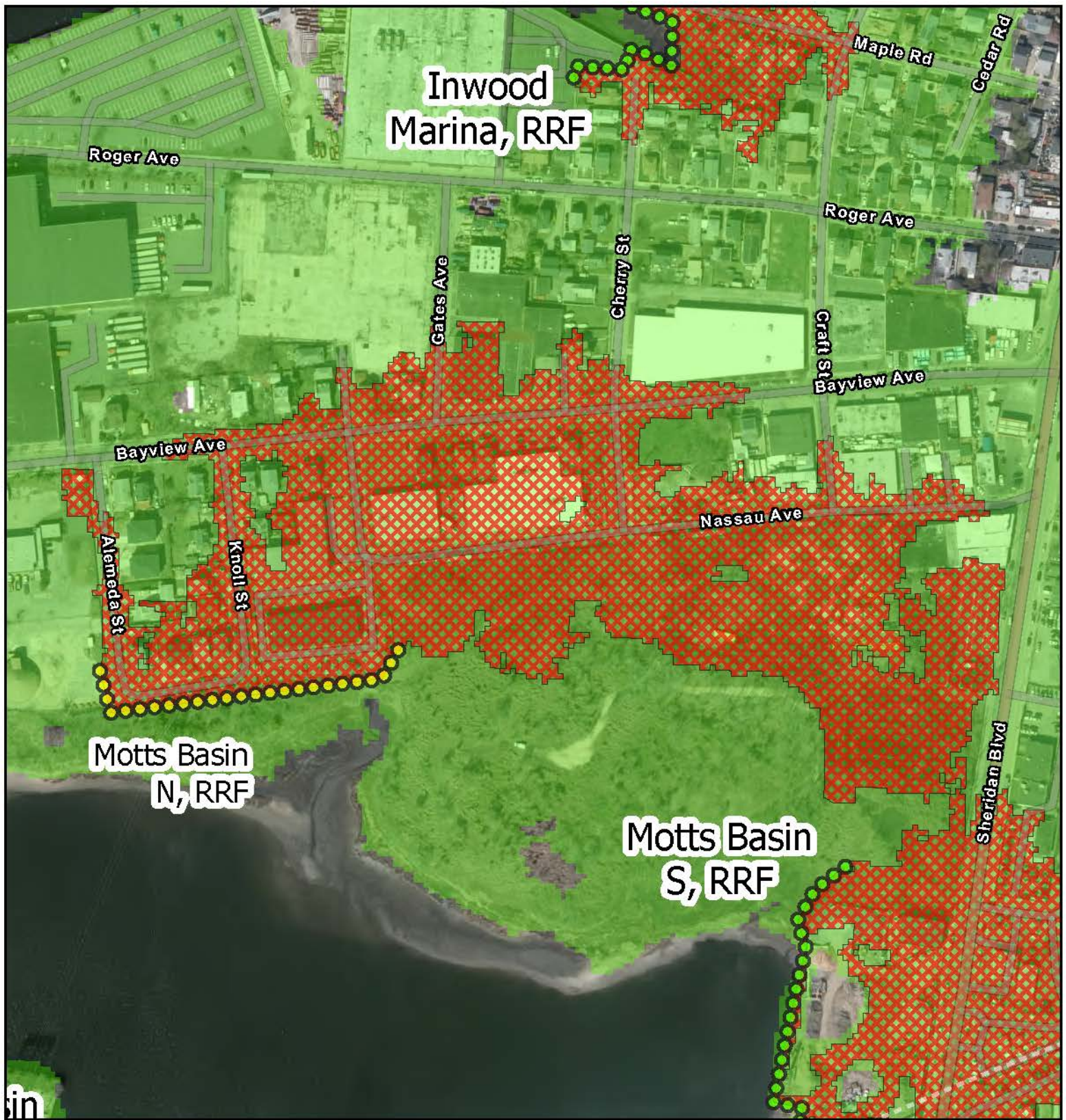
Feature Name: Morses Creek  
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0 50 Feet



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NEW YORK DISTRICT





### Legend

#### Alt2 Features/Measures

- RRF, Bulkhead
- RRF, Floodwall

#### Alt2 Reduced Risk Areas

- SSB/SBM Reduced Risk Areas
- ▨ RRF Reduced Risk Areas

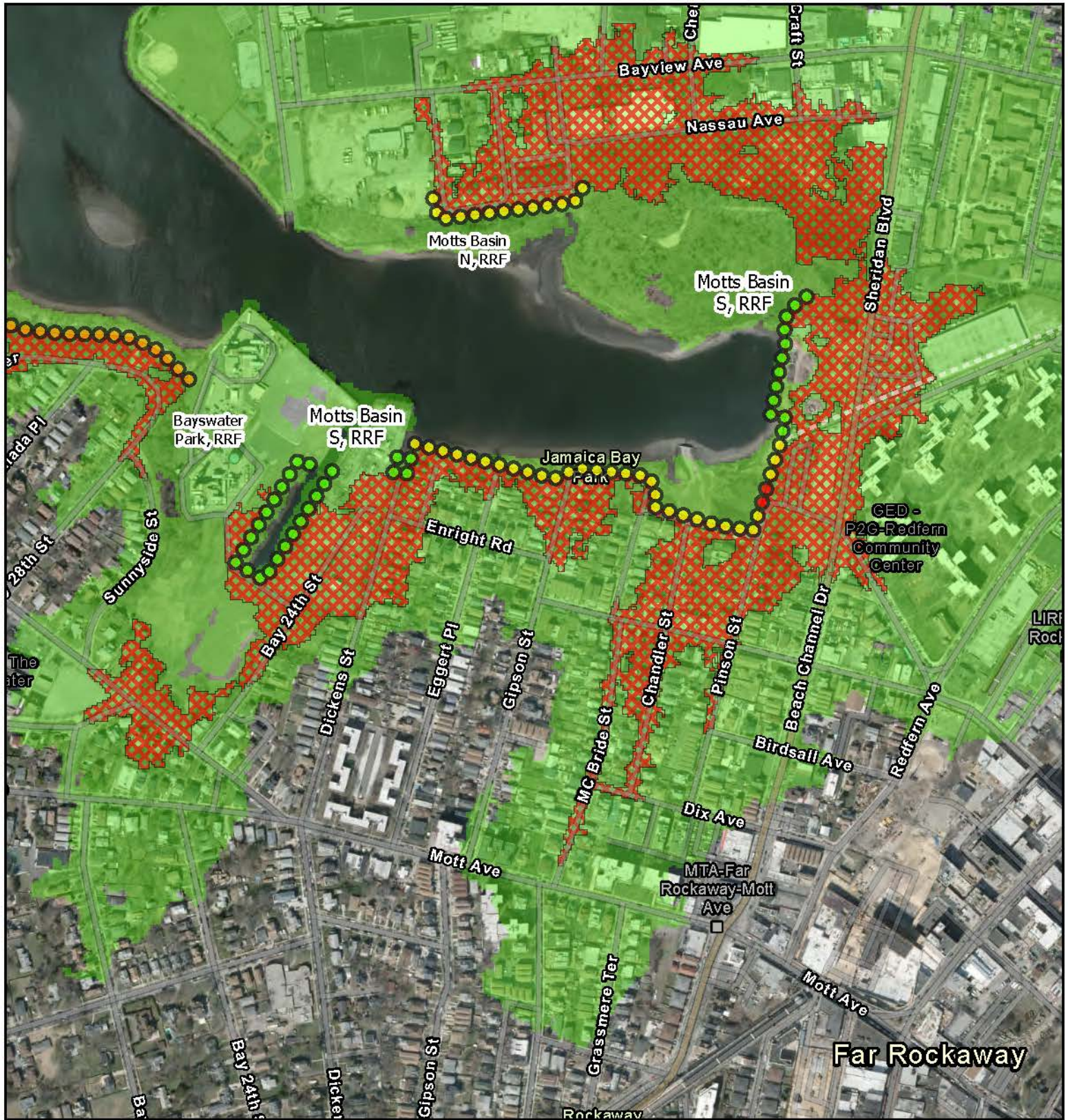
NEW YORK - NEW JERSEY  
HARBOR & TRIBUTARIES STUDY

### Alternative 2 - RRFs

Feature Name: Motts Basin N  
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#### Legend

##### Alt2 Features/Measures

RRF, Berm

RRF, Bulkhead

RRF, Deployable Flood Barrier

RRF, Floodwall

Alt2 Reduced Risk Areas

SSB/SBM Reduced Risk Areas

RRF Reduced Risk Areas

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HARBOR & TRIBUTARIES STUDY

#### Alternative 2 - RRFs

Feature Name: Mott's Basin S

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0 500 Feet



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NEW YORK DISTRICT



 RRF Reduced Risk AreasU.S. ARMY CORPS OF ENGINEERS  
NEW YORK DISTRICT





**Legend**

- Alt2 Features/Measures
- RRF, Floodwall
- RRF, Revetment
- Alt2 Reduced Risk Areas
- SSB/SBM Reduced Risk Areas
- ▨ RRF Reduced Risk Areas

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HARBOR & TRIBUTARIES STUDY

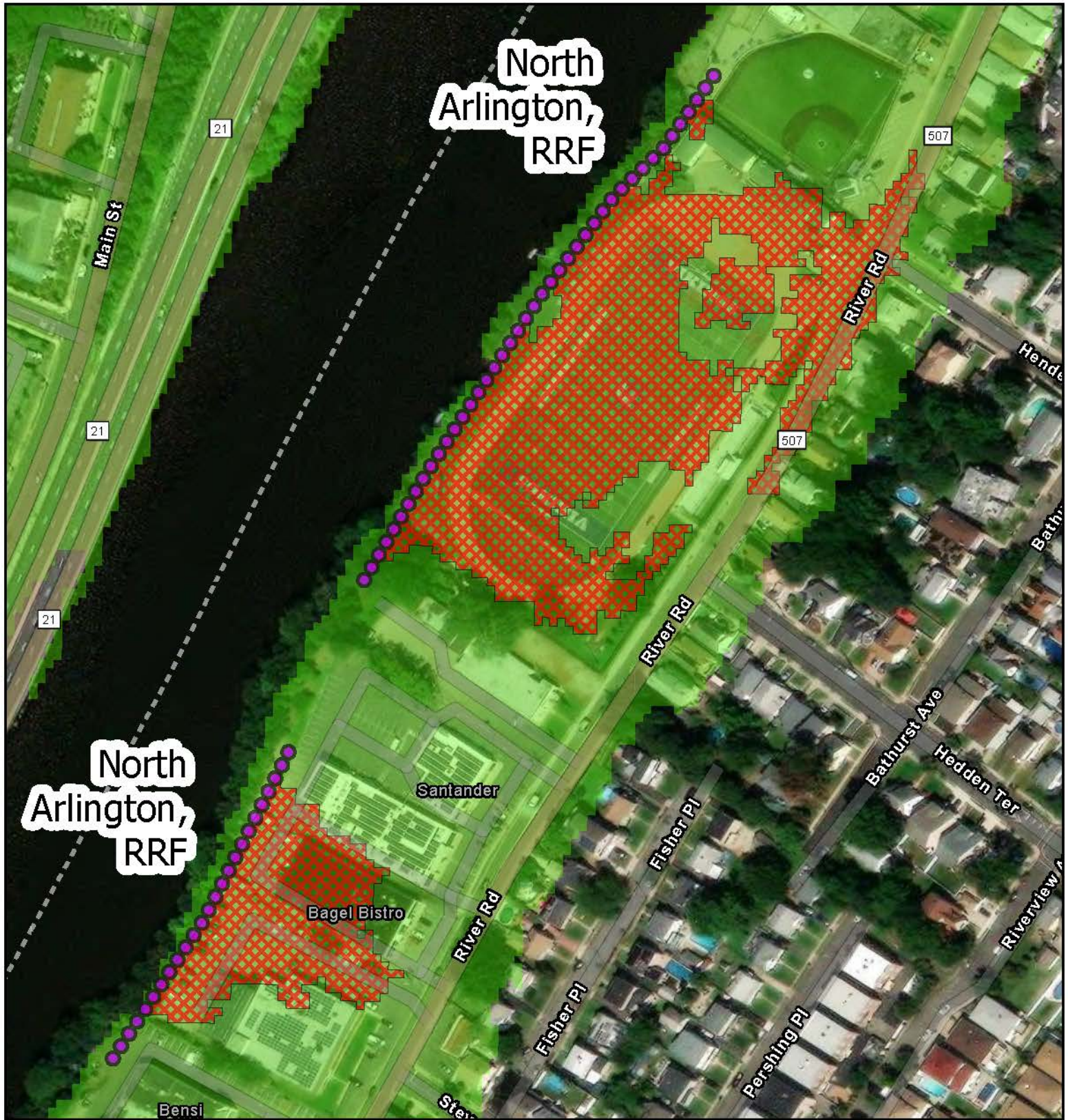
**Alternative 2 - RRFs**

Feature Name: Norfolk Southern  
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NEW YORK DISTRICT





### Legend

#### Alt2 Features/Measures

● RRF, Revetment

#### Alt2 Reduced Risk Areas

SSB/SBM Reduced Risk Areas

RRF Reduced Risk Areas

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HARBOR & TRIBUTARIES STUDY

#### Alternative 2 - RRFs

Feature Name: North Arlington  
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NEW YORK DISTRICT



# Norton Basin, RRF



## Legend

### Alt2 Features/Measures

●● RRF, Floodwall

### Alt2 Reduced Risk Areas

■ SSB/SBM Reduced Risk Areas

▨ RRF Reduced Risk Areas

NEW YORK - NEW JERSEY  
HARBOR & TRIBUTARIES STUDY

### Alternative 2 - RRFs

Feature Name: Norton Basin  
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0 200 Feet



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- Legend**
- Alt2 Features/Measures**
- RRF,Berm
  - RRF,Floodwall
  - RRF,Navigable Gate
- Alt2 Reduced Risk Areas**
- SSB/SBM Reduced Risk Areas
  - RRF Reduced Risk Areas

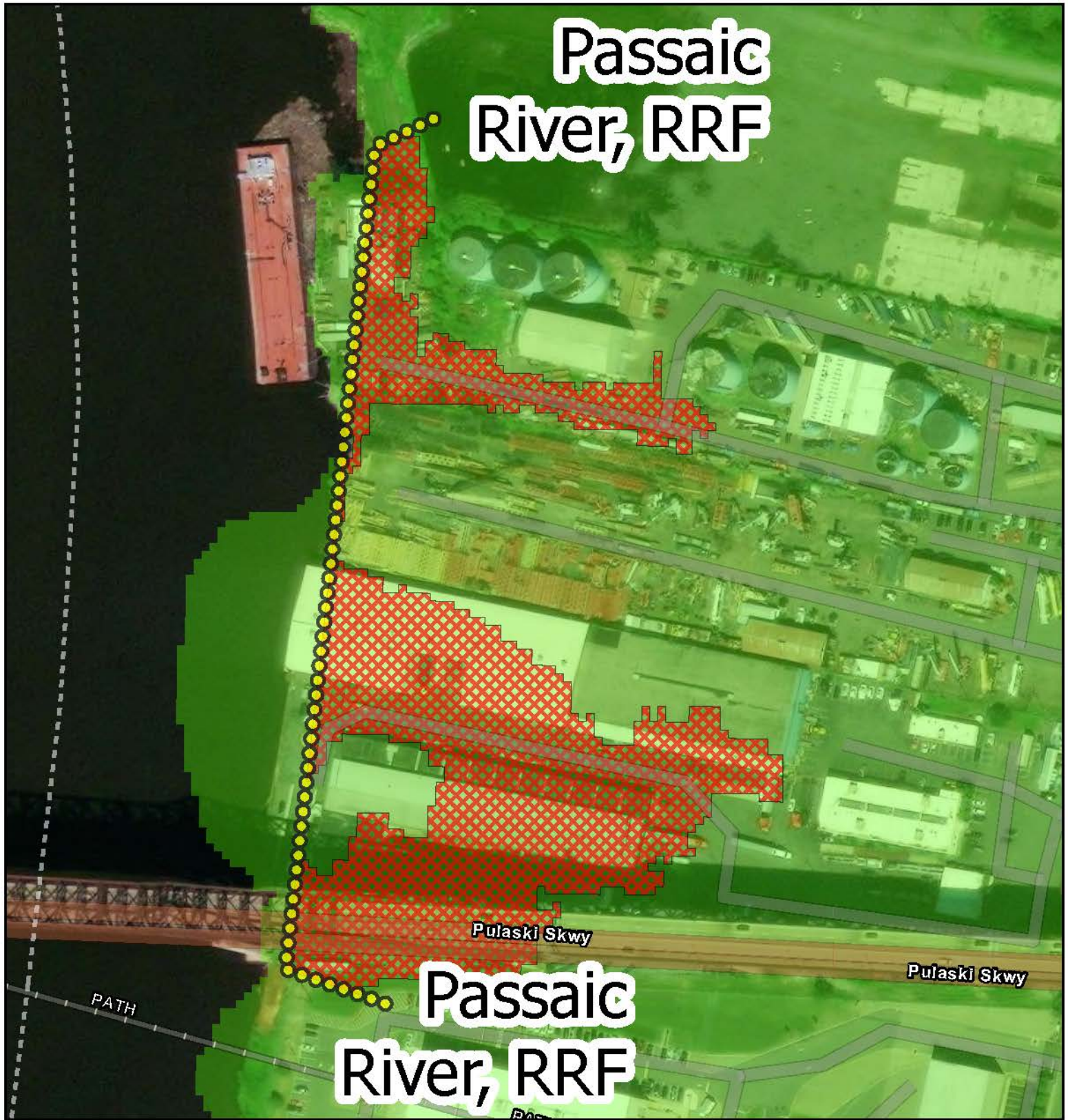
NEW YORK - NEW JERSEY  
HARBOR & TRIBUTARIES STUDY

**Alternative 2 - RRFs**  
Feature Name: Old Howard Beach  
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U.S. ARMY CORPS OF ENGINEERS  
NEW YORK DISTRICT





### Legend

#### Alt2 Features/Measures

●● RRF, Floodwall

#### Alt2 Reduced Risk Areas

■ SSB/SBM Reduced Risk Areas

▨ RRF Reduced Risk Areas

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#### Alternative 2 - RRFs

Feature Name: Passaic River  
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NEW YORK DISTRICT





### Legend

#### Alt2 Features/Measures

- RRF, Berm
- RRF, Deployable Flood Barrier
- RRF, Floodwall

#### Alt2 Reduced Risk Areas

- SSB/SBM Reduced Risk Areas
- RRF Reduced Risk Areas

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HARBOR & TRIBUTARIES STUDY

### Alternative 2 - RRFs

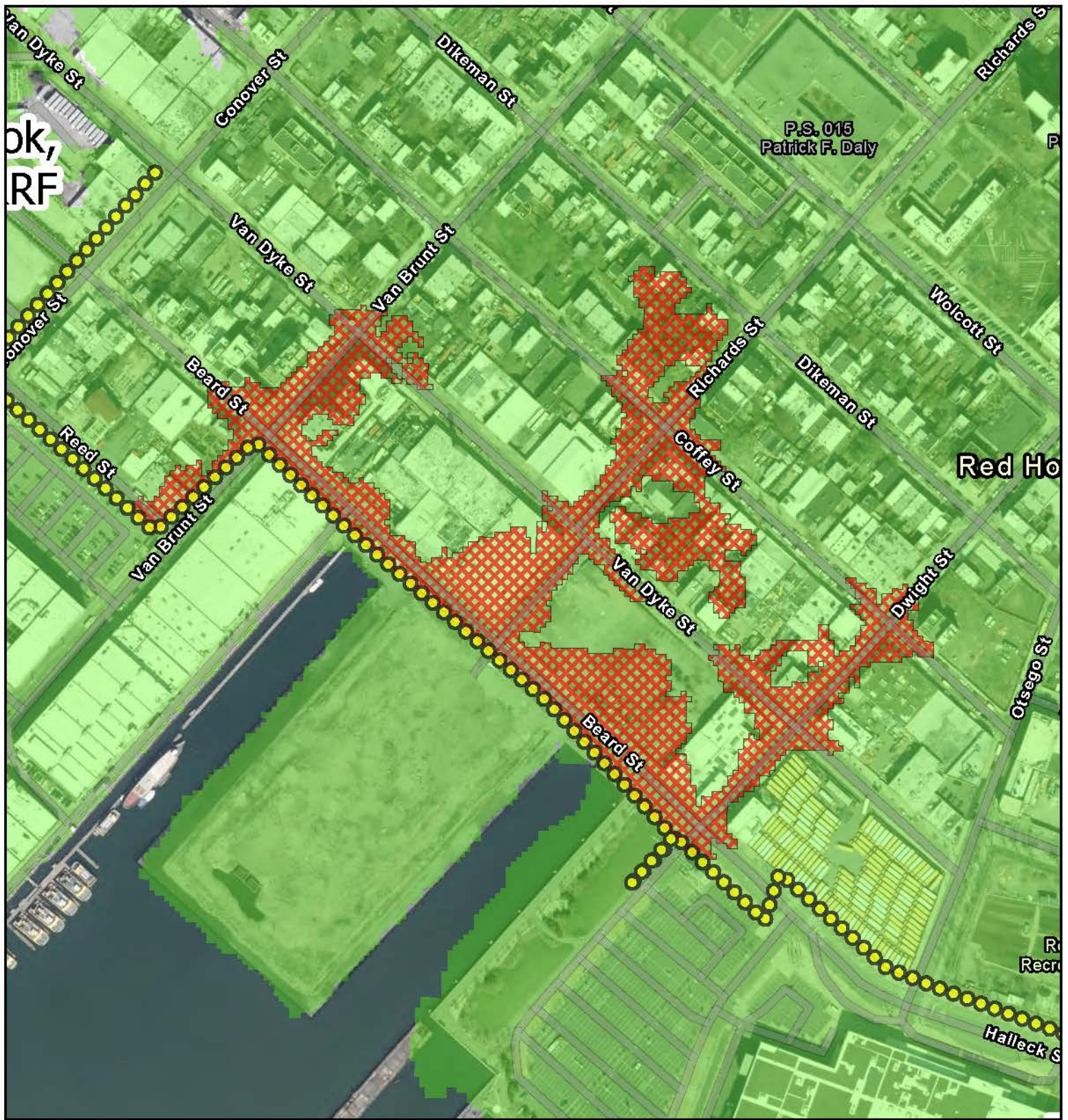
Feature Name: Passaic Upriver  
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0 200 Feet



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NEW YORK DISTRICT





### Legend

#### Alt2 Features/Measures

● RRF, Floodwall

#### Alt2 Reduced Risk Areas

■ SSB/SBM Reduced Risk Areas

■ RRF Reduced Risk Areas

NEW YORK - NEW JERSEY  
HARBOR & TRIBUTARIES STUDY

#### Alternative 2 - RRFs

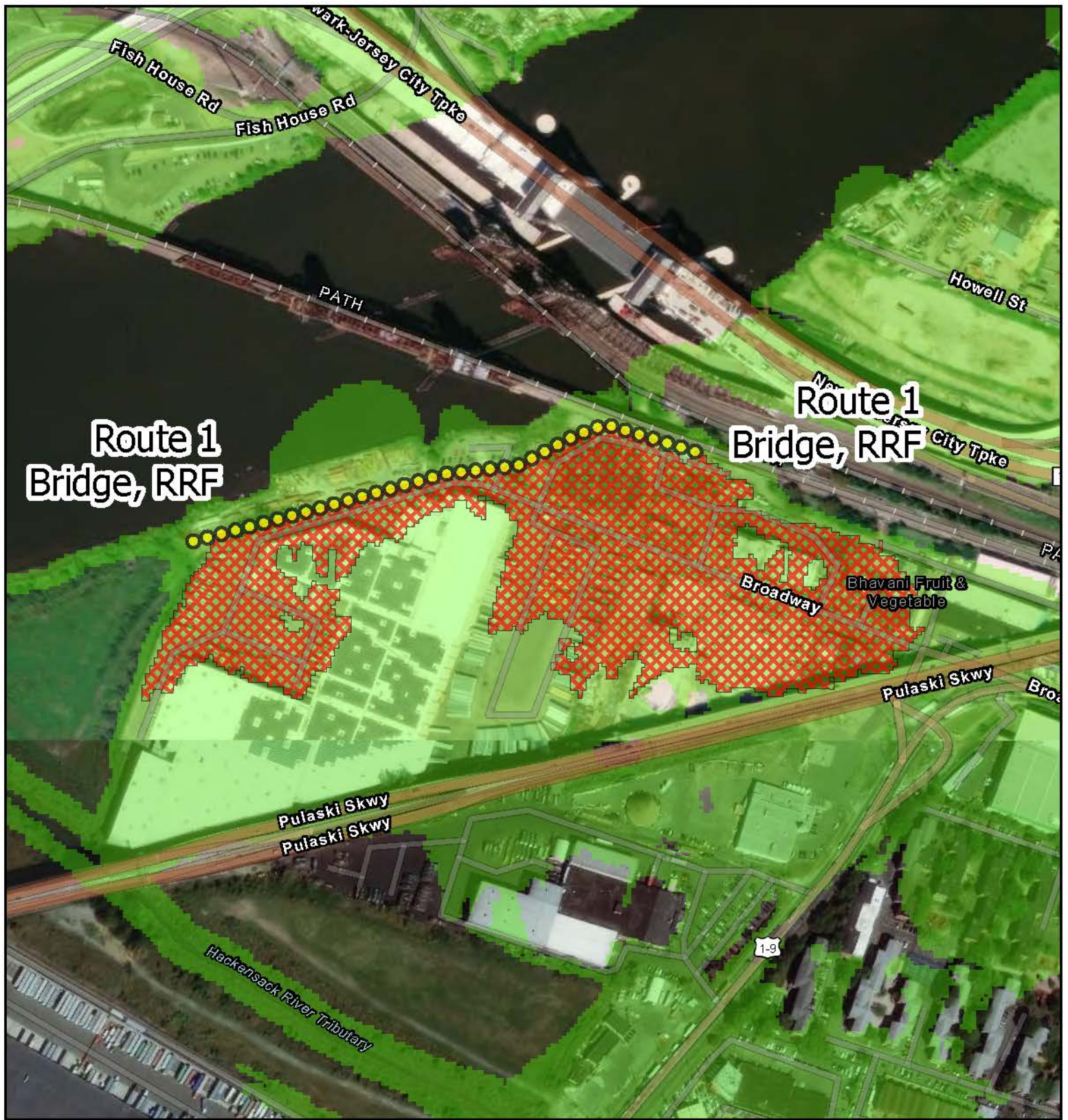
Feature Name: Red Hook  
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0 200 Feet



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NEW YORK DISTRICT





### Legend

#### Alt2 Features/Measures

●● RRF, Floodwall

#### Alt2 Reduced Risk Areas

SSB/SBM Reduced Risk Areas

RRF Reduced Risk Areas

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HARBOR & TRIBUTARIES STUDY

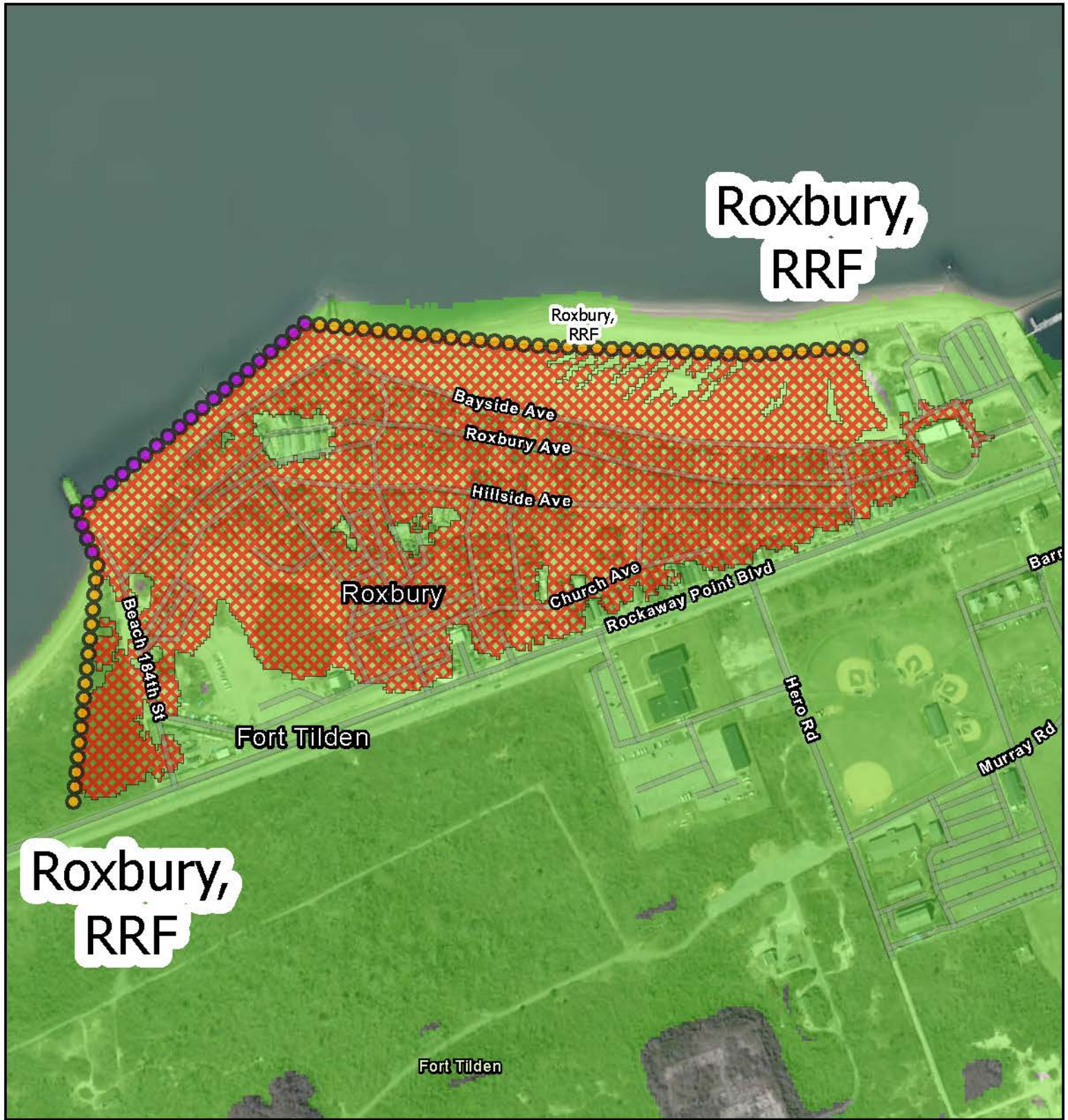
#### Alternative 2 - RRFs

Feature Name: Route 1 Bridge  
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U.S. ARMY CORPS OF ENGINEERS  
NEW YORK DISTRICT





### Legend

#### Alt2 Features/Measures

● RRF, Berm

● RRF, Revetment

#### Alt2 Reduced Risk Areas

■ SSB/SBM Reduced Risk Areas

■ RRF Reduced Risk Areas

NEW YORK - NEW JERSEY  
HARBOR & TRIBUTARIES STUDY

#### Alternative 2 - RRFs

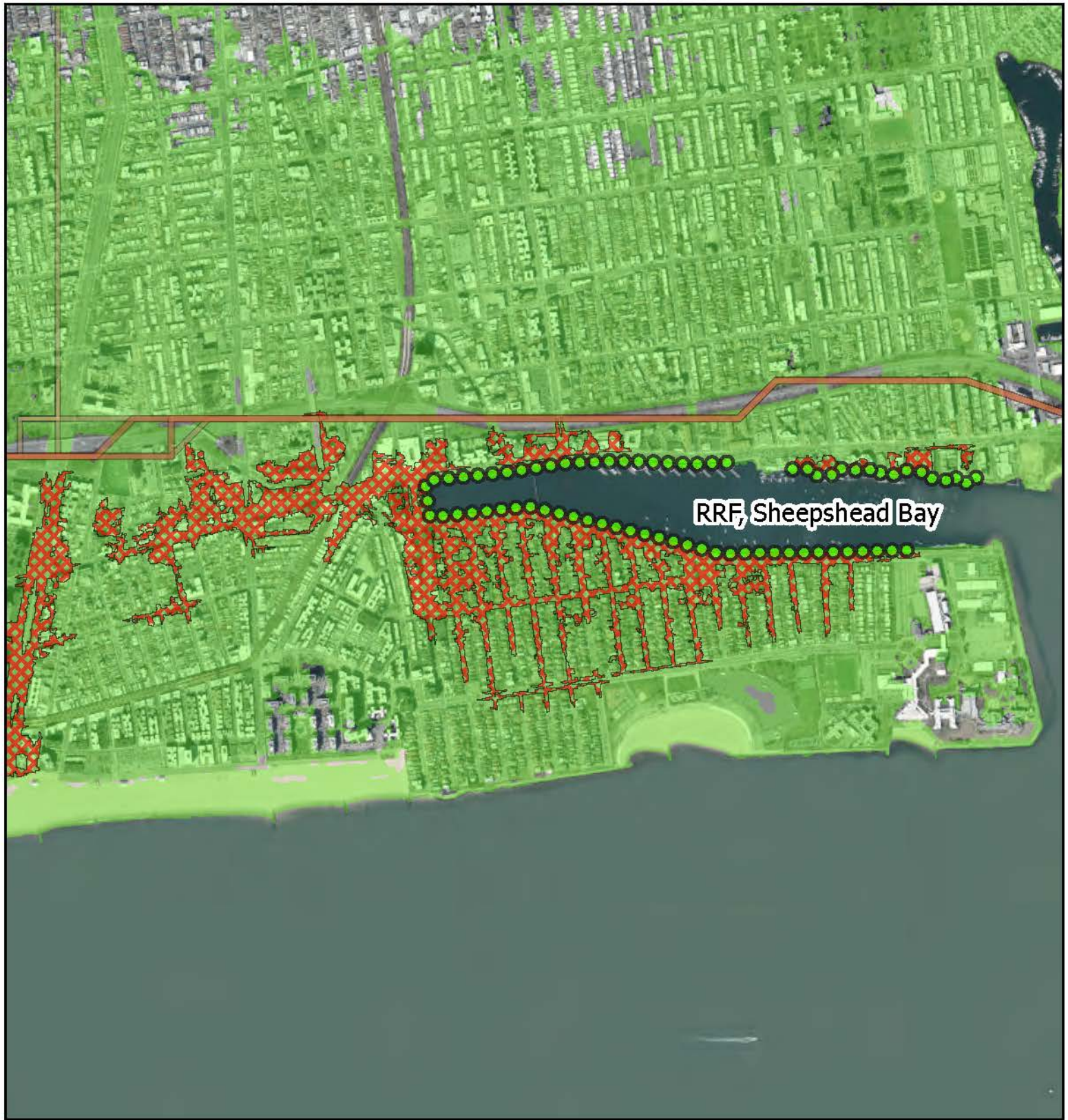
Feature Name: Roxbury

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U.S. ARMY CORPS OF ENGINEERS  
NEW YORK DISTRICT





### Legend

#### Alt2 Features/Measures

● RRF, Bulkhead

#### Alt2 Reduced Risk Areas

■ SSB/SBM Reduced Risk Areas

■ RRF Reduced Risk Areas

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HARBOR & TRIBUTARIES STUDY

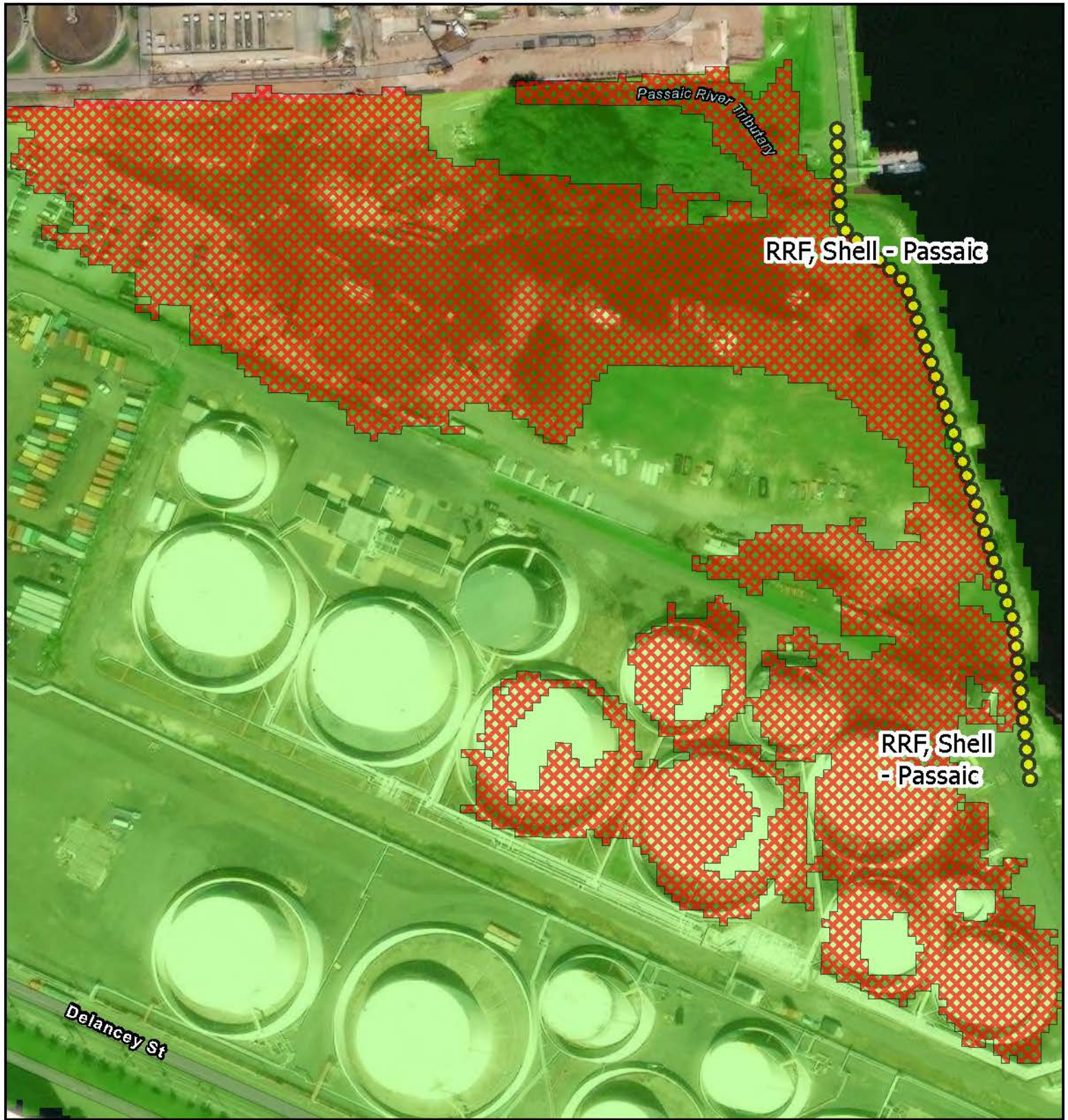
#### Alternative 2 - RRFs

Feature Name: Sheepshead Bay  
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NEW YORK DISTRICT





### Legend

#### Alt2 Features/Measures

●● RRF, Floodwall

#### Alt2 Reduced Risk Areas

■ SSB/SBM Reduced Risk Areas

■ RRF Reduced Risk Areas

NEW YORK - NEW JERSEY  
HARBOR & TRIBUTARIES STUDY

#### Alternative 2 - RRFs

Feature Name: Shell - Passaic

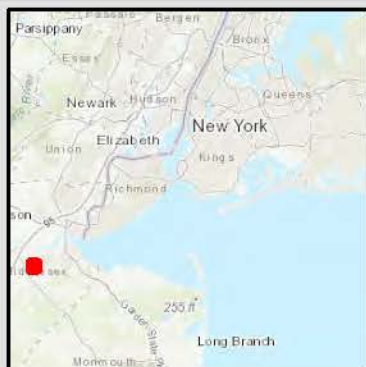
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0 200 Feet



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NEW YORK DISTRICT





#### Legend

##### Alt2 Features/Measures

● RRF, Berm

● RRF, Floodwall

● RRF, Revetment

##### Alt2 Reduced Risk Areas

SSB/SBM Reduced Risk Areas

RRF Reduced Risk Areas

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#### Alternative 2 - RRFs

Feature Name: South River

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0 400 Feet



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NEW YORK DISTRICT





### Legend

#### Alt2 Features/Measures

●● RRF, Bulkhead

#### Alt2 Reduced Risk Areas

■ SSB/SBM Reduced Risk Areas

▨ RRF Reduced Risk Areas

NEW YORK - NEW JERSEY  
HARBOR & TRIBUTARIES STUDY

#### Alternative 2 - RRFs

Feature Name: South Slope

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0 200 Feet



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**Legend**

**Alt2 Features/Measures**

- RRF, Bulkhead
- RRF, Floodwall
- RRF, Revetment

**Alt2 Reduced Risk Areas**

- SSB/SBM Reduced Risk Areas
- RRF Reduced Risk Areas

NEW YORK - NEW JERSEY  
HARBOR & TRIBUTARIES STUDY

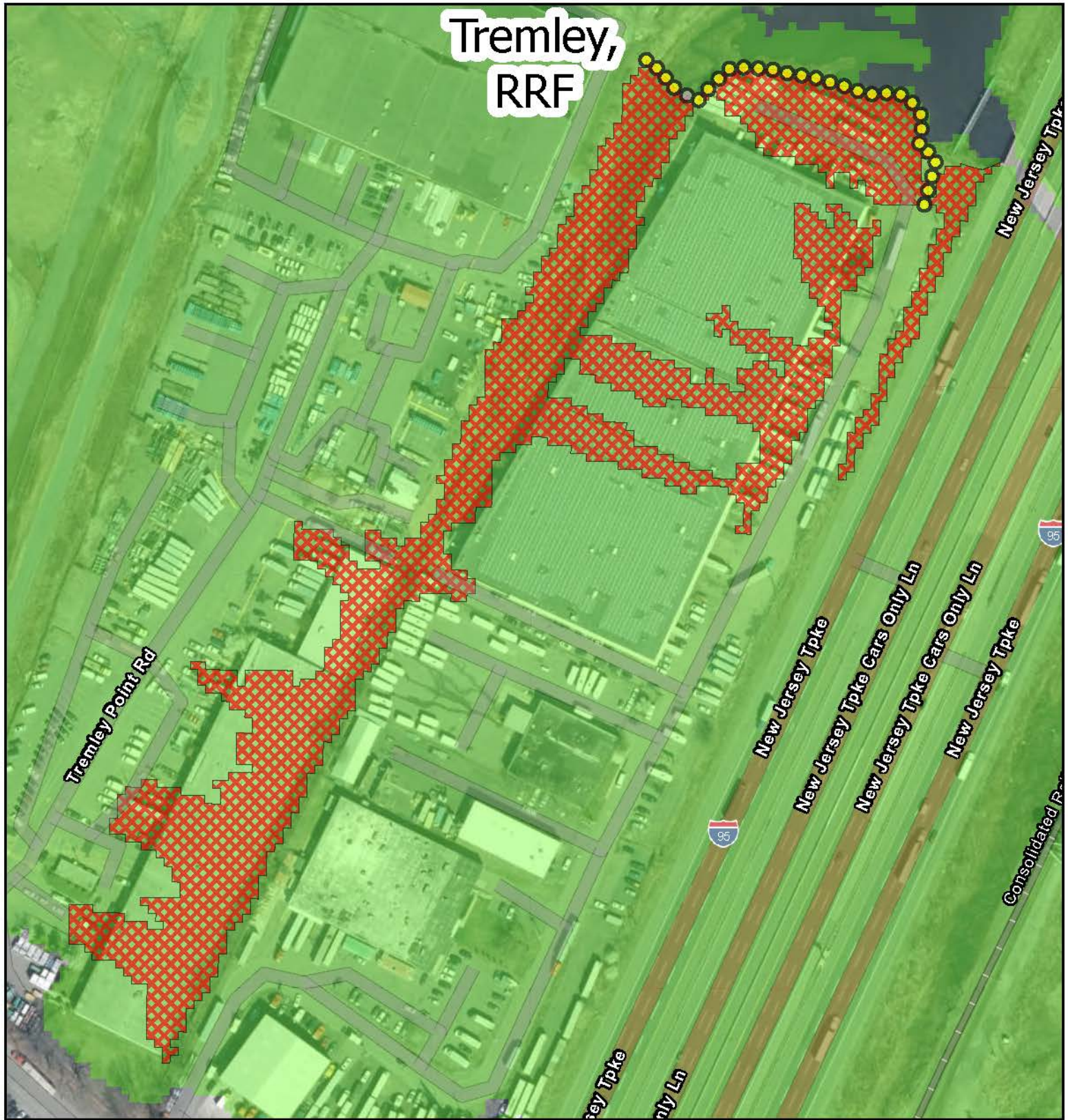
**Alternative 2 - RRFs**

Feature Name: Tottenville  
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NEW YORK DISTRICT





### Legend

#### Alt2 Features/Measures

●● RRF, Floodwall

●● RRF, Tide Gate

#### Alt2 Reduced Risk Areas

■ SSB/SBM Reduced Risk Areas

▨ RRF Reduced Risk Areas

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#### Alternative 2 - RRFs

Feature Name: Tremley

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NEW YORK DISTRICT





### Legend

#### Alt2 Features/Measures

●● RRF, Bulkhead

#### Alt2 Reduced Risk Areas

■ SSB/SBM Reduced Risk Areas

▨ RRF Reduced Risk Areas

NEW YORK - NEW JERSEY  
HARBOR & TRIBUTARIES STUDY

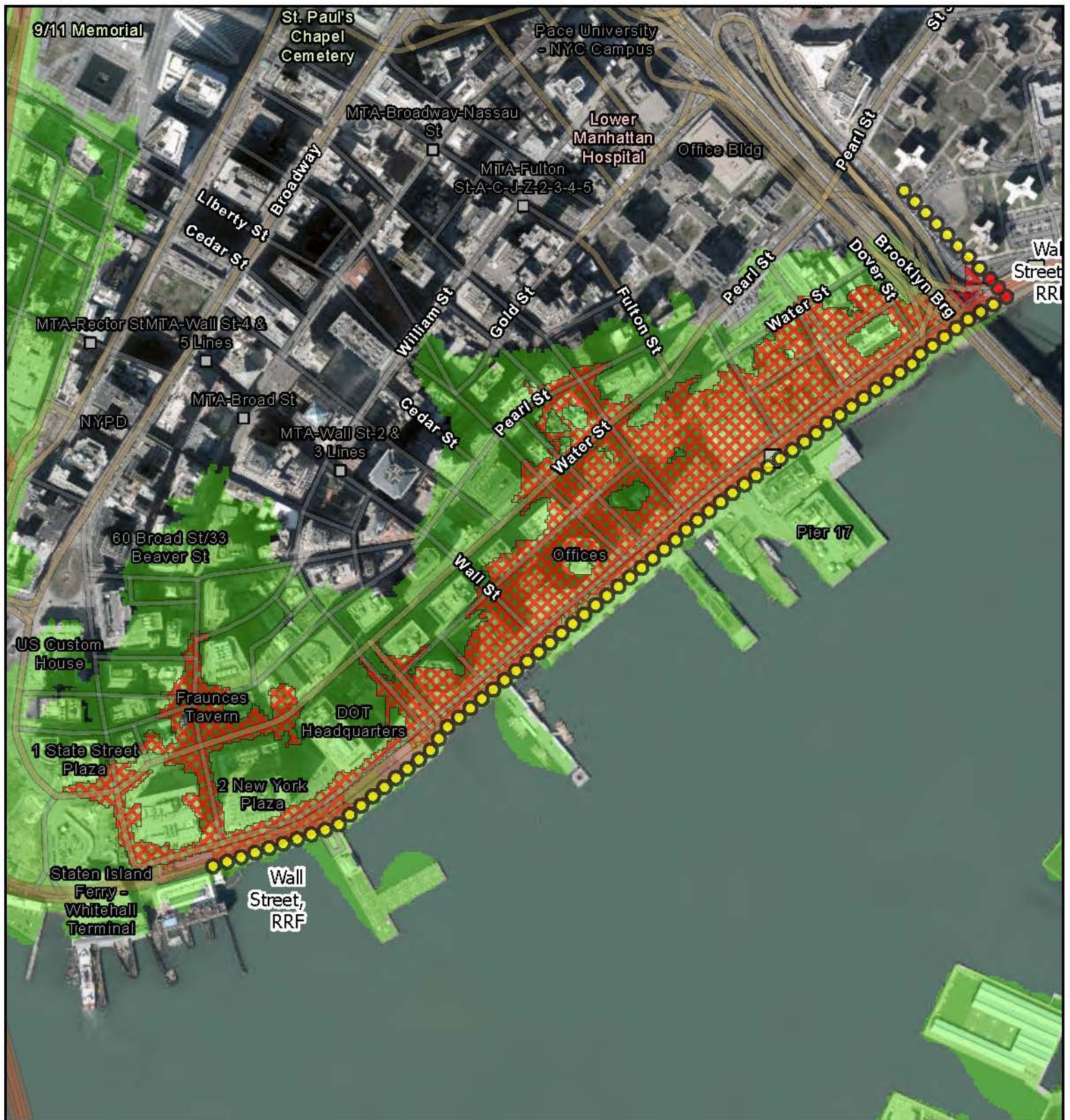
#### Alternative 2 - RRFs

Feature Name: UpperHudson  
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NEW YORK DISTRICT





### Legend

#### Alt2 Features/Measures

- RRF, Deployable Flood Barrier
- RRF, Floodwall

#### Alt2 Reduced Risk Areas

- SSB/SBM Reduced Risk Areas
- RRF Reduced Risk Areas

NEW YORK - NEW JERSEY  
HARBOR & TRIBUTARIES STUDY

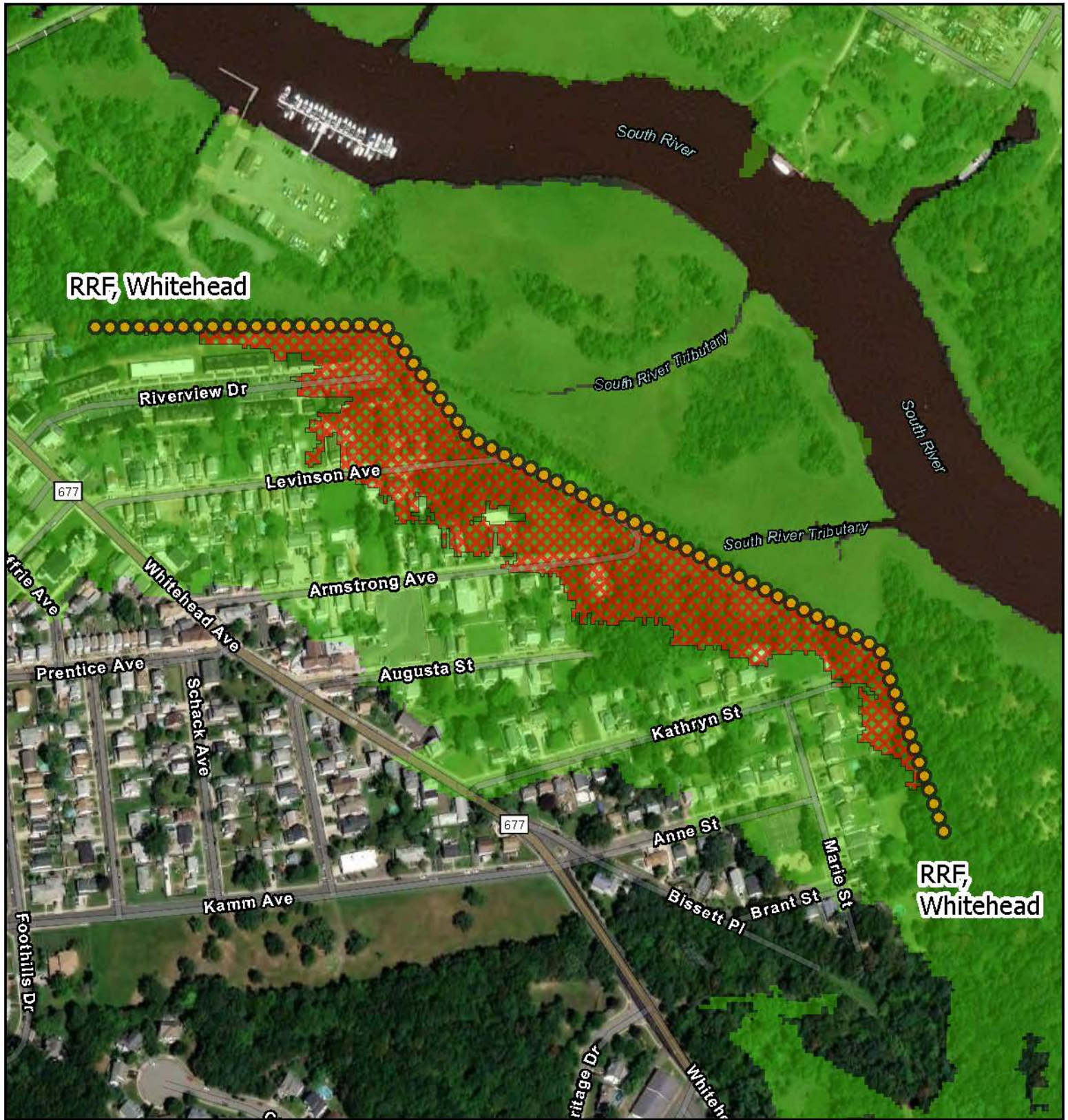
#### Alternative 2 - RRFs

Feature Name: Wall Street  
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NEW YORK DISTRICT





### Legend

#### Alt2 Features/Measures

● RRF, Berm

#### Alt2 Reduced Risk Areas

SSB/SBM Reduced Risk Areas

RRF Reduced Risk Areas

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HARBOR & TRIBUTARIES STUDY

#### Alternative 2 - RRFs

Feature Name: Whitehead

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0 300 Feet



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 RRF Reduced Risk Areas

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