## Passaic Tidal, New Jersey Coastal Storm Risk Management General Reevaluation Study

Public Meeting Newark, NJ November 2, 2017

"The views, opinions and findings contained in this report are those of the authors(s) and should not be construed as an official Department of the Army position, policy or decision, unless so designated by other official documentation."





## Purpose of Tonight's Meeting

- Overview of USACE Process
- Overview of Study Findings
- Announcement of Public Comment Period
- Release of Draft Report



### Civil Works Process

- Reconnaissance Phase
  - Determine Federal Interest
  - Identify Local Partner to Cost Share 50/50



Feasibility Phase (or reevaluation of a prior study)



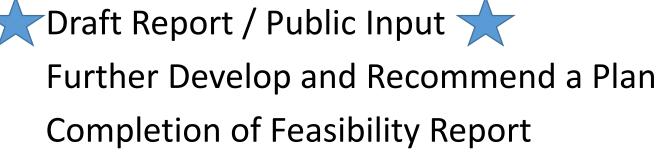
- Presents the Recommended Plan
- Congressional Authorization to Proceed to
- Pre-Construction Engineering & Design (PED)
  - Detailed Design the Authorized Plan
- Construction
- Operation & Maintenance





## Study Progress

Examine & Update Existing Conditions
Update Future Without Project Conditions
Update Authorized Plan
Analyze Alternatives
Tentatively Select a Plan







## Passaic Tidal Background

#### WRDA 1990 - Project Authorization

- Study for the entire Passaic Basin was authorized by in 1990.
- The tidal portion of the authorized plan includes levees/floodwalls in Newark, Kearny and Harrison.
- Current reevaluation study for tidally influenced area, authorized by Disaster Relief Appropriation Act of 2013 (P.L. 113-2).
  - Second Interim Report to Congress, May 2013
  - Provides money to:
    - Complete Existing Studies
    - Construct Authorized Projects







## Non-Federal Sponsor

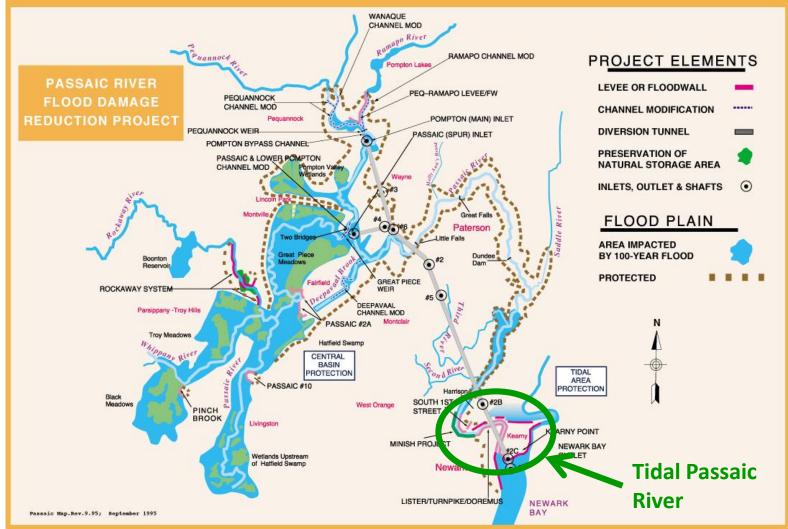
- New Jersey Department of Environmental Protection
  - Agreement for general reevaluation study executed 28 October 2014
- Study start date of 26 Jan 2015.





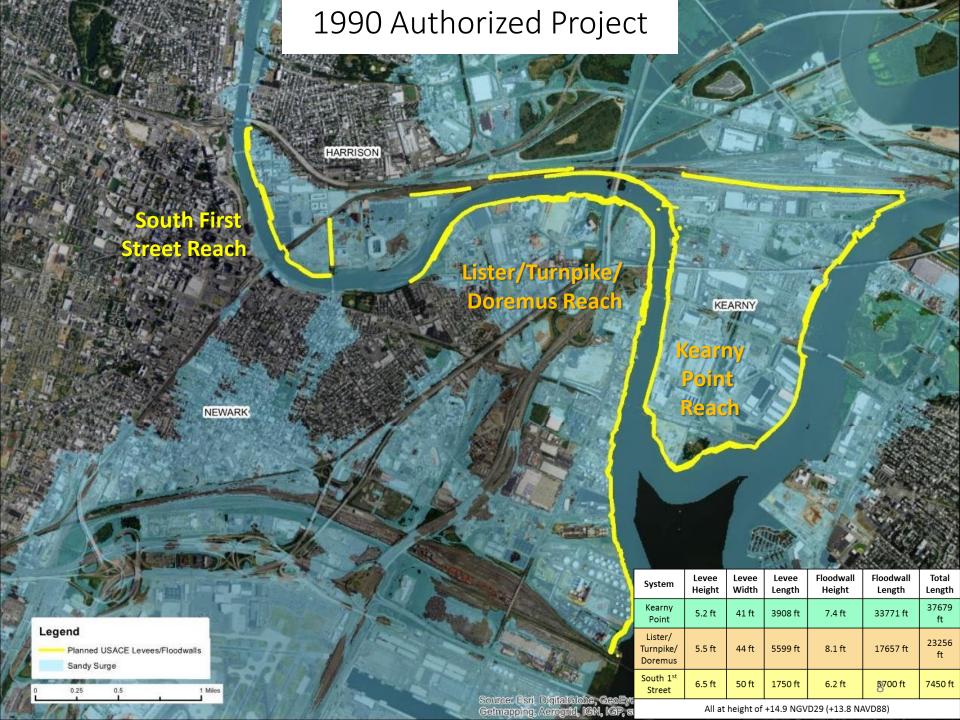


## Study Area









## Reevaluation of Authorized Project

 Reevaluate authorized project to determine technical feasibility, environmental acceptability, and that the plan is economically justifiable

- Incorporate and consider:
  - Three different levee heights (14', 16', 18')
  - Changes in study area conditions
  - New engineering standards and criteria
  - Ongoing and planned resilience projects by USACE and others



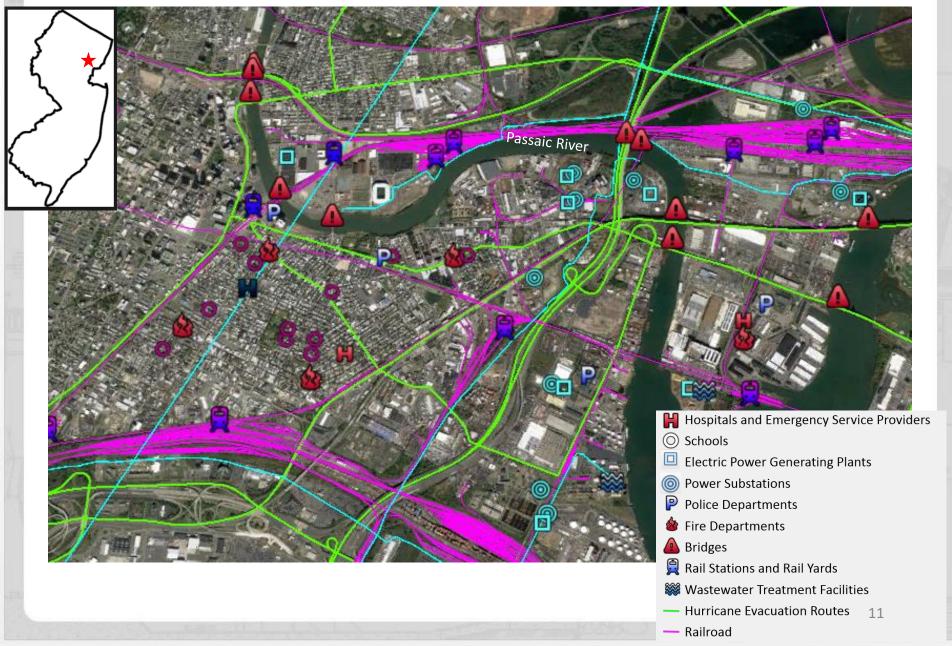


## Risk To Life Safety

- Two Hurricane Sandy related deaths in Newark.
- Vulnerable population, especially in Newark
  - High density residential urban area
  - Nursing homes and public housing
  - Many people without access to automobiles; high public transit ridership
  - Incomplete evacuations prior to emergencies
- Critical evacuation routes and bridges
- Many hospitals, firehouses, and police stations in the study area



## Critical Infrastructure



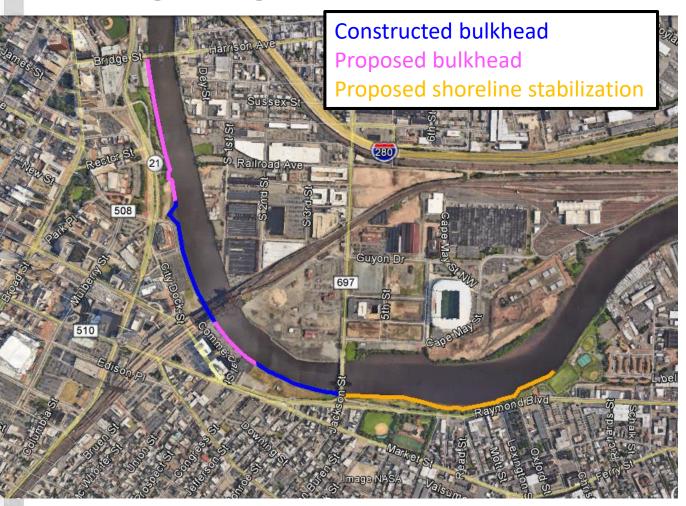
## Current Land Use



Industrial
Residential/Light Commercial

Mixed Industrial/Commercial Recreation & Open Space

# Minish Park - Existing and Ongoing Construction

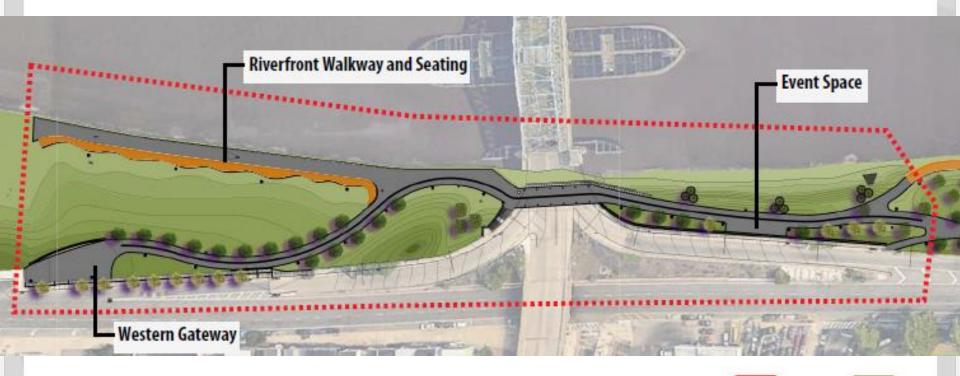


- USACE Minish (P.L. 113-2): erosion control and shoreline stabilization
- Completing design work and initiating construction in 2018.





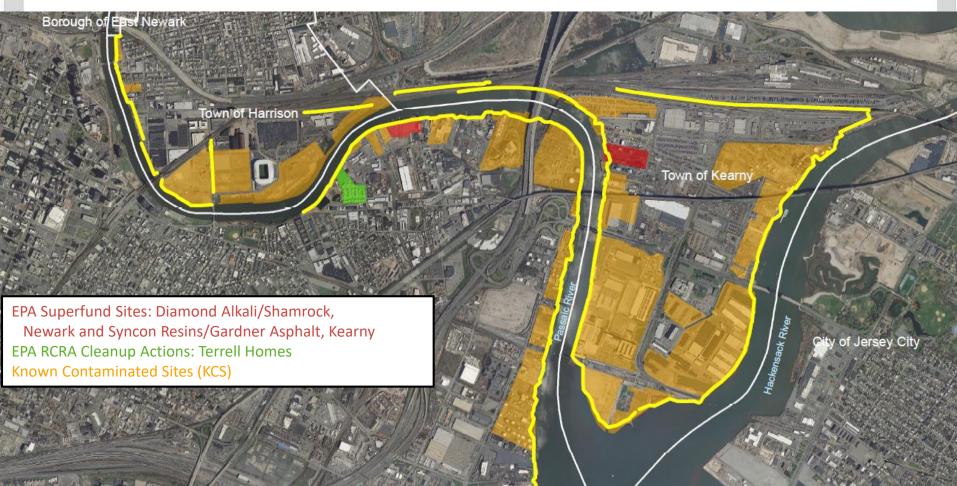
## The County Of Essex, NJ Plans Of Newark Riverfront Park Construction







# Contaminated Sites Within Authorized Alignment



## **Expected Future Conditions**

- Future conditions are predicted based on past events.
- Sea level rise: increase expected in water levels over next 50 years.
- Hurricane Sandy water levels were about 11ft above sea level.
- Long history of flood damages will continue.







## Alternatives Evaluated

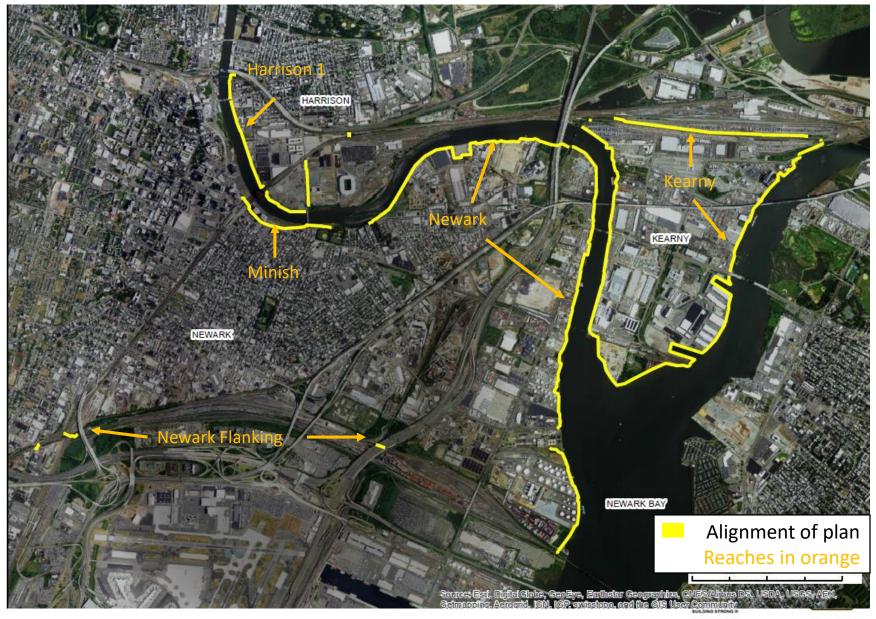
- The study re-evaluated the authorized project
  - Levees and floodwalls in Harrison, Kearny, and Newark
    - Examined varying heights of the authorized alignment
- Alignment changes as appropriate to account for past and projected land use changes

 Additional features were identified because of new topographic data.





#### **UPDATED ANALYSIS OF AUTHORIZED PLAN**



### Coordination With Partners

- Meeting with NJDEP Commissioner (9/28/16)
- NJDEP Letter of Support (11/18/16)
  - Supports the continued development of the Newark Coastal Storm Risk Management Plan (Newark Flanking Plan)
  - Provides the highest benefit-cost ratio (BCR)
  - Less risk of Hazardous, Toxic and Radioactive Waste (HTRW) in alignment
- Coordination with Cities and Local Groups
- Harrison and Kearny were not further developed due to HTRW.





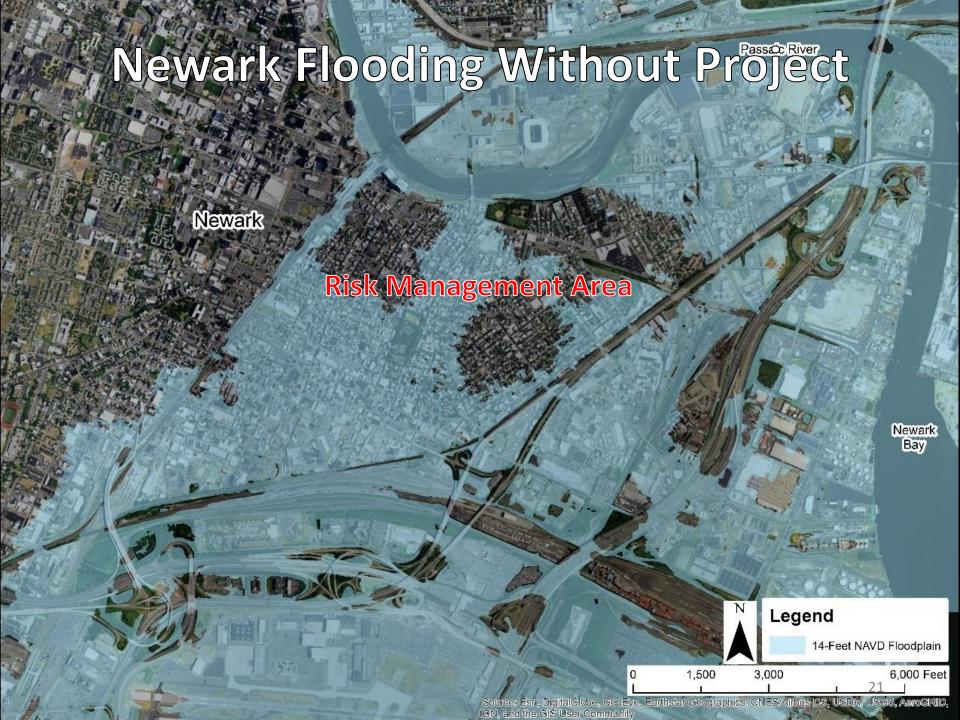
## Newark Flanking Plan

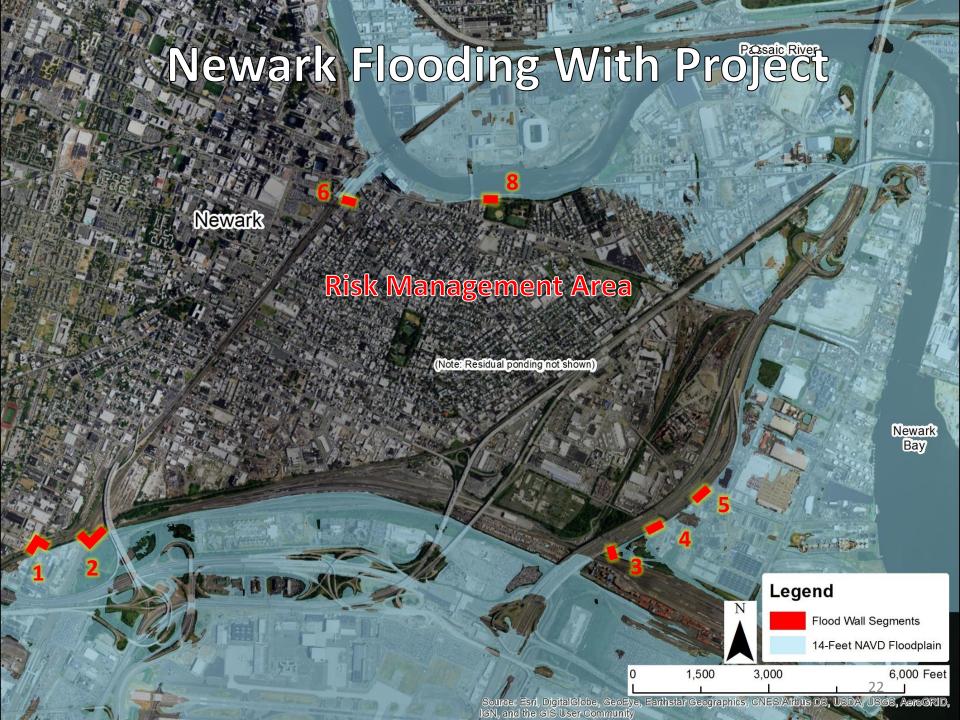
7 floodwall segments

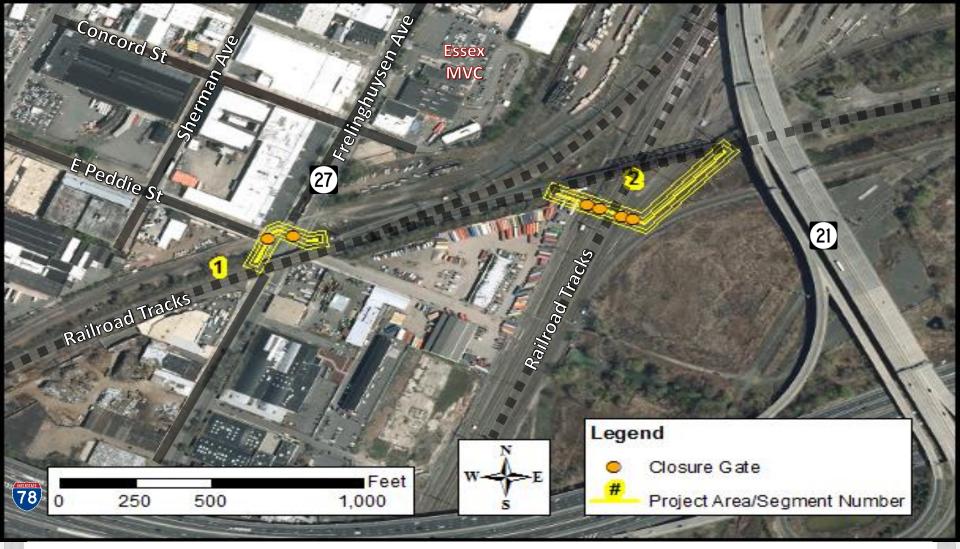
- Elements
  - 2,730 feet of floodwalls within the City of Newark
  - 5 road closure structures
  - 5 railroad closure structures (over 9 tracks)
  - 1 tide gate
- Interior Drainage for the City of Newark











#### **Element 1**

- 290 feet long
- Max. height above ground: 4 feet
- Includes two roadway closures
- Wall segments tie into railroad embankments

#### **Element 2**

- 705 feet long
- Max. height above ground: 8.2 feet
- Includes five railroad closure gates
- Crosses nine sets of railroad tracks



#### **Element 3**

- 139 feet long
- feet
- includes an outfall with backflow prevention

#### **Element 4**

- 180 feet long
- Max. height above ground: 9.4 Max. height above ground: 4.8 Max. Height above ground: 3.2 feet
  - includes a roadway closure gate includes a roadway closure gate

#### **Element 5**

- 226 feet long
- feet



#### **Element 6**

- 204 feet long
- Max. height above ground: 3.1 feet
- One roadway crossing

#### **Element 8**

- 297 feet long
- Max. height above ground: 3.4 feet
- Integrated into the Riverfront Park's natural slope

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New York District
BULDNO STRONG IS





## Floodwall









## Floodwalls







## Floodwall





## Newark Flanking Plan Cost

Project Cost	\$45,666,000
Benefit Cost Ratio (BCR)	4.7





## Environmental Impacts

- Coordinated with local, state, and federal stakeholders through Ironbound Community, CAG, and Urban Rivers meetings. These meetings have aided in plan development as community is heavily engaged as an Environmental Justice community
- Endangered Species Act, U.S. Fish and Wildlife Service, and National Marine Fisheries Service- Coordination initiated, no threatened and endangered species anticipated.
- Riparian zone and wetland impacts expected at less than 1 acre.
- Cultural Resources
  - Section 106, National Historic Preservation Act: Consultation ongoing.
  - Coordinating Draft Programmatic Agreement.
  - Potential for archaeological sites.
  - National Register of Historic Places listed/eligible Structures/Districts including Morris Canal, railroads, Newark Penn Station.

## Real Estate Impacts

- The Sponsor will acquire the real estate interests needed for the construction, operation and maintenance of the proposed project.
- The Project impacts **26 parcels**, as well as impacts to streets and right-of-ways.
  - 17 privately-owned parcels
  - 5 publicly-owned parcels
  - 4 parcels with owners unknown
- No parcels will be taken.

Permanent Easements: ±1.205 acres

Temporary Easements: ±1.038 acres

Total: ±2.243 acres





## Next Steps

- Draft Feasibility Report
  - 45 Day Public Review Ends on 16 November 2017
  - Independent External Peer Review
  - Agency Technical Review (Internal)
  - USACE Headquarters Review
- Final Report November 2018
- Washington Level Briefing January 2019
- Congressional Authorization 2019
- Project Partnership Agreement 2020
  - State and City Commitment to Project





## Comments / Questions

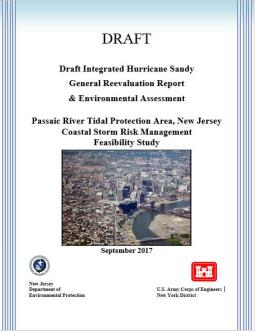
Tonight is for clarification of the technical details.

Comments formally submitted in writing:

- Email
- US Postal Service

Link to Draft Report:

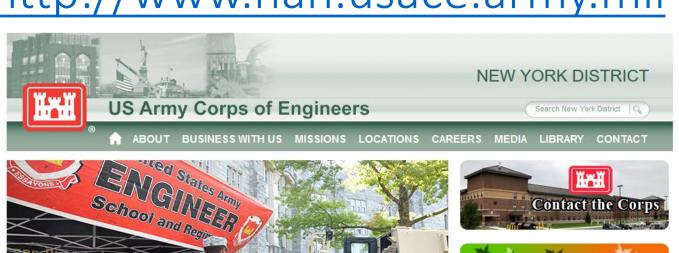
http://www.nan.usace.army.mil







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ARMY CORPS PARTICIPATES IN BRANCH WEEK





#### News Stories

USACE Participates in Estuary Day Celebration and STEM Event

10/13/2017

Army Corps participates in Branch Week 9/27/2017

Army Corps' New York District participates in commemoration of transit of Theodore Roosevelt and Bayonne Bridge Project Completion

#### News Releases

Champlain Canal Barrier Feasibility Study Targets Aquatic Invasive Species Spread Prevention

10/3/2017

Army Corps announces availability of the Draft Integrated Hurricane Sandy General Reevaluation Report/Environmental Assessment and Draft Finding of No Significant Impact for the Passaic Tidal Protection Area Coastal Storm Risk Management Study

10/3/2017

#### Most Requested

Navigation - Federal O&M Public Notices
Rockaways - Jamaica Bay NY Reformulation Study
Rahway NJ Feasibility Study
FIMP NY Reformulation Study
New York and New Jersey Harbor
Obtaining a Permit (Regulatory Branch)
NY & NJ HATS Fact Sheet
Controlling Depth Reports

Janaica Bay NY Marsh Island Restoration
Locate Regulatory Public Notice
Staten Island NYC Feasiblity Study
Hudson-Raritan Estuary Compr. Rest. Plan
Locate ay Army Corps Map

Employment with the Army Corps

Contracting Opportunities with the Army Corps
Locate an Army Corps Publication

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#### News Release Manager

Army Corps announces availability of the Draft Integrated Hurricane Sandy General Reevaluation Report/Environmental Assessment and Draft Finding of No Significant Impact for the Passaic Tidal Protection Area Coastal Storm Risk Management Study



Email Print

Posted 10/3/2017

Release no. 17-011

#### Contact

Hector Mosley 917-790-8007

NEW JERSEY – The U.S. Army Corps of Engineers, New York District, announces the availability of the Draft Integrated Hurricane Sandy General Reevaluation Report/Environmental Assessment (HSGRR/EA) and Draft Finding of No Significant Impact (FONSI) for the Passaic Tidal Protection Area Coastal Storm Risk Management Study is available for a 30-day public review ending October 29, 2017.

This Draft Integrated HSGRR/EA has been prepared to document the formulation and evaluation of plans to address coastal storm risk management in the Lower Passaic River Basin and the significance of potential environmental impacts of the Tentatively Selected Plan (TSP) recommended in the report. The report and associated documents are available at:



www.nan.usace.army.mil/Missions/Civil-Works/Projects-in-New-Jersey/Passaic-Tidal-Protection-Area/

Written comments on the Draft Integrated Feasibility Report and Environmental Assessment should be submitted to:

E-MAIL COMMENTS

U.S. Army Corps of Engineers, New York District Planning Division-Environmental Analysis Branch (Attn: Mr. Matthew Voisine)

26 Federal Plaza, New York, New York 10278-0090





## Comments / Questions

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Report and Comment Submission: <a href="http://www.nan.usace.army.mil">http://www.nan.usace.army.mil</a>

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