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
Draft Report / Public Input
Further Develop and Recommend a Plan
Completion of Feasibility Report
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

Tidal Passaic River
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
Current Land Use

- Industrial
- Mixed Industrial/Commercial
- Residential/Light 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.

**Map legend:**
- Constructed bulkhead
- Proposed bulkhead
- Proposed shoreline stabilization
The County Of Essex, NJ Plans Of Newark Riverfront Park Construction
Contaminated Sites Within Authorized Alignment

EPA Superfund Sites: Diamond Alkali/Shamrock, Newark and Syncon Resins/Gardner Asphalt, Kearny
EPA RCRA Cleanup Actions: Terrell Homes
Known Contaminated Sites (KCS)
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

Alignment of plan
Reaches in orange

Newark Flanking
Minish
Harrison 1
Kearny
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
Newark Flooding Without Project

Risk Management Area
Newark Flooding With Project

Risk Management Area

(Note: Residual ponding not shown)

Legend
- Flood Wall Segments
- 14-Feet NAVD Floodplain

Source: ESRI, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AaeroGRID, IGN, and the GIS User Community
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
- Max. height above ground: 9.4 feet
- includes an outfall with backflow prevention

Element 4
- 180 feet long
- Max. height above ground: 4.8 feet
- includes a roadway closure gate

Element 5
- 226 feet long
- Max. Height above ground: 3.2 feet
- includes a roadway closure gate
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
What will the project look like?
Floodwall
Floodwalls
Floodwalls
Floodwall
Evacuation!
Newark Flanking Plan Cost

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<th>Description</th>
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<tr>
<td>Project Cost</td>
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<td>Benefit Cost Ratio (BCR)</td>
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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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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:


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

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

Public Comments can also be submitted by email to Mr. Voisine at Matthew.Voisine@usace.army.mil.
Comments / Questions

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Report and Comment Submission:
http://www.nan.usace.army.mil