RARITAN BAY AND SANDY HOOK BAY CSRM FEASIBILITY STUDY WELCOME & INTRODUCTIONS



<u>Presenter</u>: Gina Dotolo – Environmental Lead, USACE, Norfolk District

On the call: New Jersey Department of Environmental Protection; US Army Corps of Engineers Norfolk & New York Districts

Once you join the meeting...



- > Please type your name, town, and affiliation (if relevant) into the chat feature at top of screen
- > If you would like to be added to the mailing list, please also include your email in the chat

Presentation will begin at 6:05 p.m. During the presentation, please remain on mute. If you have questions or comments, please type in the chat and we will address them at the end.

Need help/assistance? Click on the raise your hand feature and someone will call on you.



WELCOME AND THANK YOU FOR ATTENDING!

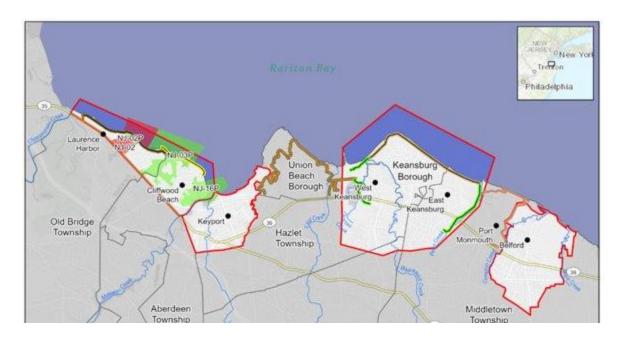
WE WANT TO HEAR FROM YOU!

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Raritan Bay and Sandy Hook Bay Coastal Storm Risk Management Feasibility Study Public Scoping Webinar

June 10, 2025
US Army Corps of Engineers
NJ Department of Environmental Protection



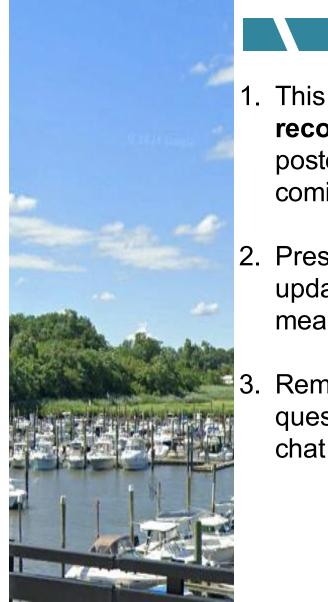
Purpose

WELCOME!

Opportunity for the public to offer comments on what is being proposed and to identify issues, measures, and potential impacts to be considered in the Study analysis.



- This meeting is being recorded and will be posted and shared in the coming weeks
- 2. Presentation on project updates and potential measures to be considered
- 3. Remain on mute, put questions/comments in chat

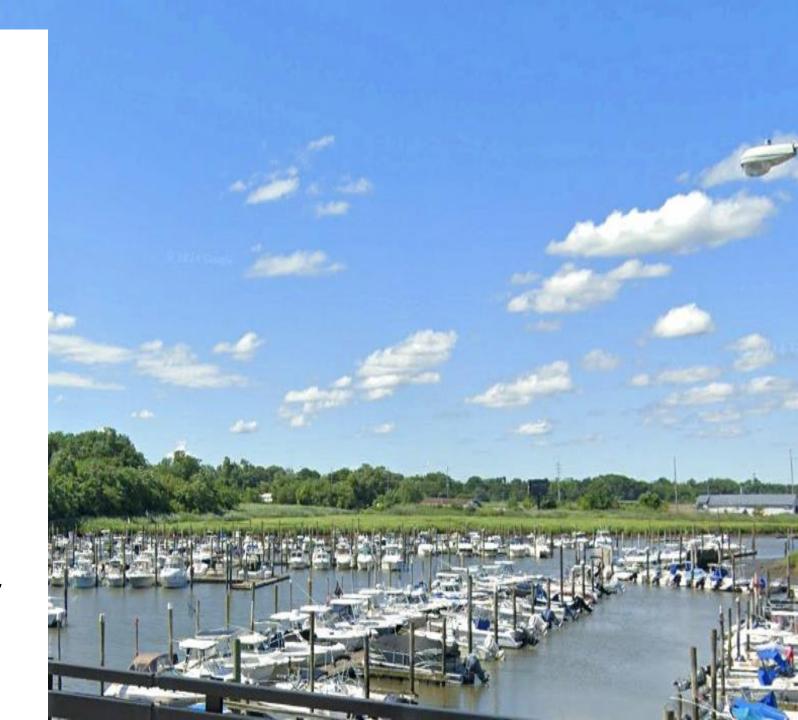






Agenda

- 1. Opening Remarks
- 2. Presentation and Project Overview
- 3. Contact Information
- 4. Community
 Feedback and
 Question & Answer



Raritan Bay and Sandy Hook Bay Coastal Storm Risk Management Feasibility Study Opening Remarks

- **1. Dennis Reinknecht**, Director of Resilience, Engineering, and Construction, NJDEP
- 2. Rose Araneo, Mayor
- 3. Richard Harr, Project Manager, USACE Norfolk District



NATIONAL ENVIRONMENTAL POLICY ACT



What is NEPA?

National Environmental Policy Act (NEPA) 1969 as amended:

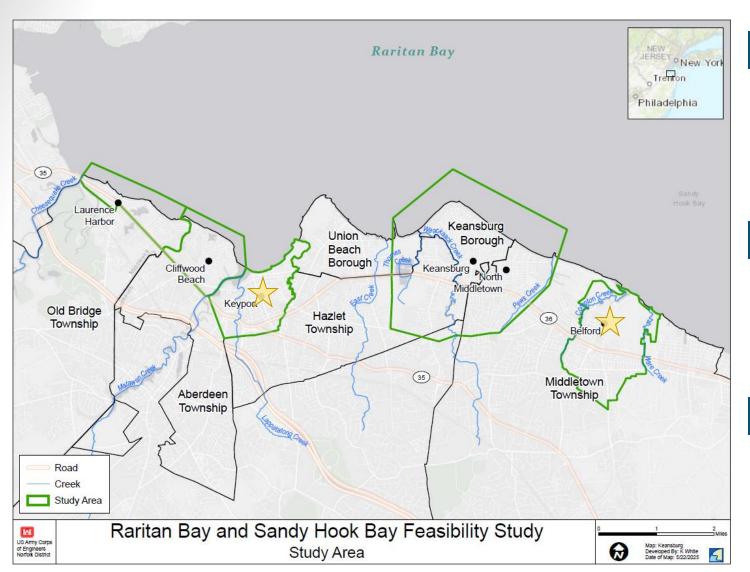
- Requires federal agencies to consider and disclose the environmental effects of their proposed actions and consider public input during the NEPA process.
- The NEPA process includes both decision making and public involvement.
- NEPA Documents:
 - Environmental Assessment (EA) is prepared if there are no significant impacts anticipated.
 - Environmental Impact Statement (EIS) is prepared if significant impacts are anticipated.



What Environmental Topics will be Considered?

- Air Quality
- Changing Conditions
- Cultural and Historic Resources
- Socioeconomics
- Wetlands
- Fish and Wildlife Resources
- Hazardous, Toxic, and Radioactive Materials
- Hydrology
- Land Use
- Navigation
- Noise and Vibration
- Recreation
- Protected Species
- Traffic
- Water Quality





STUDY AUTHORITY

Resolution of the Committee of Public Works and Transportation of the US House of Representatives, adopted 1 August 1990.

Section 216 of the River and Harbor and Flood Control Act of 1970.

PURPOSE AND NEED

Identify a plan to reduce the risk of coastal storm damage within the study area.

The study area is at risk from coastal storm impacts due to its location along the coast.

NON-FEDERAL SPONSOR

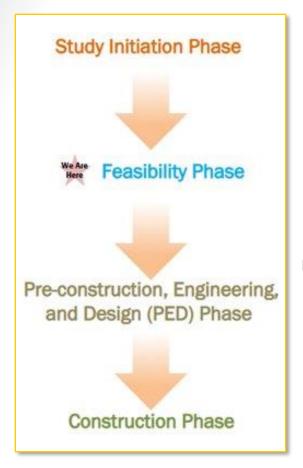


The New Jersey Department of Environmental Protection

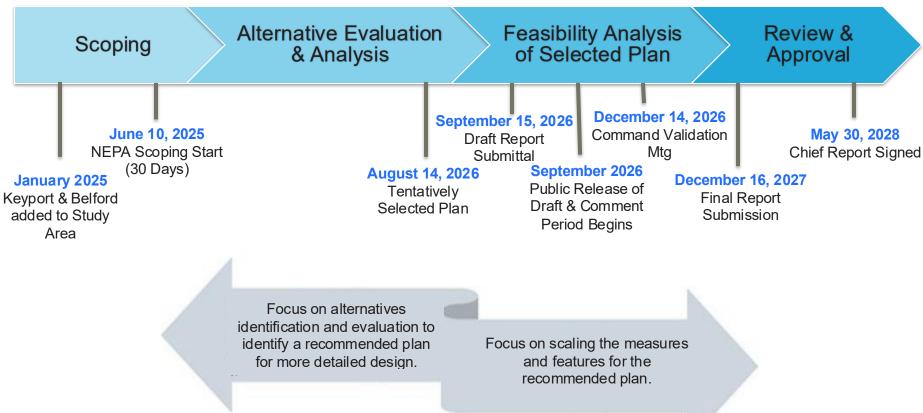


= new additions to study area





Feasibility Phase:





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PROBLEMS

- Aging storm protection structures
- ➤ Economic damage
- ➤ Health and life safety concerns
- Loss of natural resources and resiliency

OPPORTUNITIES

- Reduce economic loss and hardships due to coastal storms/ floods
- > Improve coastal resiliency
- Protect and preserve water quality and fishery resources
- Utilize nature-based solutions (NBS)
- Reduce costs for existing federal project features
- ➤ Increase community awareness on storm risk reduction measures

OBJECTIVES

- Manage risks associated with coastal storm surge to existing development, communities, and recreation
- Manage risks associated with coastal storm surge to human life, health, and safety
- ...over a 50-year period of analysis

CONSTRAINTS

- Do not create or exacerbate coastal storm impacts or risk to human life, health, or safety
- Avoid/ minimize effects to environmental resources
- Coastal Barrier Resources Act (CBRA)
- Avoid/ minimize effects on cultural and archaeological resources



PLANNING CONSIDERATIONS

CZM Rules

Cost Implications

Construction Methodology

Storm Vulnerability

Non-Federal Sponsor Acceptability

Community Buy-In

Private Property

Easements

Critical Habitat

Historic Properties & Archaeological Sites

CONCEPTUAL FRAMEWORK

Hazard

Storm Surge

Tidal Creek Flooding

Wave Attack

Shoreline/Beach Erosion

Effects

Inundation of Residential & Commercial Areas

Vulnerability / Exposure

Damage, Debris & Disorder

Loss of Transportation

Loss of Residence

Loss of Critical Infrastructure

Loss of Structures & Contents

Loss of Environmental Resources

Potential Measures

Structural

Surge Barriers, Breakwaters, Groins, Beach/Dune Nourishment, Tidal Gates, Floodwalls, Revetments, Ringwalls, Levees, Pump Stations, Reinforced Dunes

Nature-Based

Nearshore Reefs, Living Rocky Shorelines, Living Rocky Groins, Dunes, Surge Wetlands, Shrub/Prairie Hills

Nonstructural

Acquisitions,
Relocation/Rebuild,
Elevations, Floodproofing,
Warning Systems, Planning
Assistance





Potential Structural Measures





- Surge and wave attenuation
- Moveable gates for temporary closure to limit water levels







Levees

- Surge and wave attenuation
- Reduced flooding
- Accessory components likely needed (floodgates, pump station)

Floodwall

- Reduced flooding
- o Reduced wave overtopping
- Shoreline stabilization
- Accessory components likely needed (floodgates, pump station)

Tide Gate

- Prevents surge and high tides
- Tied into naturally elevated features

Which measures do **you** support?



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Potential Structural Measures









Beach Nourishment

- Reinforcement of sand barrier of the beach
- Manage risks from waves and inundation

Groins

- Perpendicular to beach
- Trapping or attenuating sand
- Wall-like structure

Breakwaters (detached)

- Reduces wave energy
- Reduce shoreline erosion
- Creates a low energy protected area behind structure
- Emergent or submergent

Reinforced Dune

- Reduce erosion and inundation by storm surge
- Feature consists of floodwall or revetment hidden beneath sand
- Top layer of sand maintained for beach aesthetics

Which measures do **you** support?





Potential Nature Based Measures



Artificial Reefs

- Reduces typical wave and storm wave conditions before reaching shoreline
- Marine/Estuarine nearshore reefs
- Estuarine oyster reefs
- Constructed from rock, concrete/stone, boulders, reef balls, shell, and/or oyster spat.



Surge Wetlands

- Assists with lowering risk associated with surge during storms/hurricanes
- Supports natural coastal protection
- Needs relatively large area for CSRM benefits

Which measures do you support?



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Potential Nature Based Measures





- Alternative to revetments
- Reduces surf zone waves
- Acts as retaining barrier for beach sands
- Constructed of rock material (blocks, slabs, boulders, and cobbles); and can be enhanced with woody debris



Living Rocky Groin

- Alternative to structural groins
- Provides shoreline stabilization and drift sand attenuation
- Provides rocky habitat for flora and fauna
- Constructed of rock material (blocks, slabs, boulders, and cobbles); can be enhanced with woody debris

Which measures do **you** support?



Dune with Native Vegetation

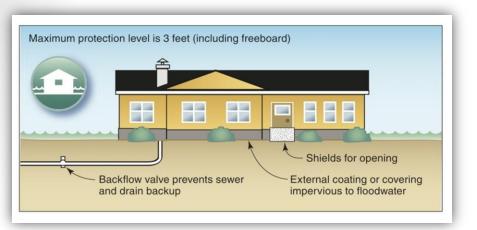
- Reduces inundation or flooding from coastal storm surge or waves
- One-time building of a dune with native vegetation plantings



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Potential Non-Structural Measures



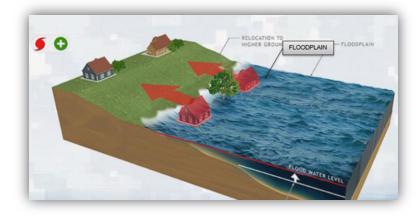
Floodproofing

- Stand-alone or combined
- Wet or dry
- Has limitations



Elevations

- Lifts an existing structure above flood elevation
- Most appropriate for single family homes



Acquisitions & Relocations

- Purchasing a structure(s) and land
- Relocated outside of the flood zone

Which measures do **you** support?



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Q&A Guidelines:

> How to participate

- Please enter all questions and comments into the chat box. The moderators will be monitoring the chat and reading the questions out loud
- If called upon, please state your name and affiliation (if relevant) when speaking

> Time Limits

One question per person, then return to the queue

> Respectful Conduct

Please be respectful and constructive

> Follow-Up

- Follow-up questions or submitting official scoping comments can be sent to <u>CENAO-RBSHB-CSRM@usace.army.mil</u>
- If you would like to be added to the mailing list, please put your name & email in the chat
- PDF of this presentation is available on project website



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How Can I Provide Comments?

Comments can be sent via email or mail to the addresses listed below. This information is also available on project website.

Deadline to provide comments: July 10, 2025

Study Website:

https://www.nao.usace.army.mil/About/Projects/-Raritan-Bay-and-Sandy-Hook-Bay-CSRM-Study/

USACE Contact Information:

Email:

CENAO-RBSHB-CSRM@usace.army.mil

Mail:

U.S. Army Corps of Engineers, Norfolk District

ATTN: Gina Dotolo

Planning and Policy Branch

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Norfolk, VA 23510

