





### Study Authority

Public Law 84-71, dated June 15, 1955, authorizes the examination and survey of coastal and tidal areas of the eastern and southern United states, with particular reference to areas where severe damages have occurred from hurricane winds and tides. This study aims to identify long-term solutions to minimize risk from coastal storms through the project life.

### Nonfederal Sponsor

City of Hampton

### Purpose and Need

The purpose of the study is to investigate solutions to reduce potential damage and risk to human life, health, and safety caused by coastal storms throughout the Peninsula

The Peninsula is extremely vulnerable to flooding from coastal storm surge. Impacts from climate change, such as sea level rise, are expected to increase risk and vulnerability in the region.

The study area includes the Cities of Hampton, Newport News, Poquoson, Williamsburg, and the Counties of James City and York.







| MILESTONE                      | TENTATI<br>COMPLETION |
|--------------------------------|-----------------------|
| Alternatives Milestone         | November              |
| Tentatively Selected Plan      | July 202              |
| Public Release of Draft Report | September             |
| Agency Decision Milestone      | February 2            |
| Final Report Submittal         | March 20              |
| Signed Chief's Report          | July 202              |

\*The study schedule, scope, and budget can vary depending upon the complexity of the study area and corresponding problems identified throughout the study process; changes to the 3-year, \$3 million parameters require documentation and approval of Division and Headquarters USACE and concurrence of the local sponsor.

### **Civil Works Process**

#### **Operations & Maintenance** Phase



National Environmental Policy Act (NEPA) Public Engagement Opportunities





### "Problems, Opportunities, Objectives, & Constraints" – The Foundation of the Study!

#### WHAT ARE PROBLEMS AND OPPORTUNITIES? • • •

|                                     | PROBLEMS  | OPPORTUNITIES                                      |
|-------------------------------------|---|--|
| Focus                               | Existing, undesirable conditions                      | Future, desirable conditions                       |
| Message                             | Negative; objection                                   | Positive; desire                                   |
| Occurrence                          | Past, present, expected in future                     | Not in past, maybe in present, possibly in future  |
| Relationship to Other<br>Resources  | Existing condition negatively affects other resources | Existing condition does not affect other resources |
| <b>Consequence of Doing Nothing</b> | Direct, immediate, adverse                            | Indirect & long term                               |

Developing a comprehensive list of existing problems and potential opportunities allows the study team to:

- Understand the existing issues and desired outcomes of the study
- Focus on <u>why</u> we are undertaking a study
- Develop planning <u>objectives</u> and <u>constraints</u> for the study

### WHAT ARE OBJECTIVES AND CONSTRAINTS?

Objectives and constraints focus the study and are the basis of plan development and evaluation.

Objectives are:

- Planning outcomes that are aimed at or striven for
- Statements of the intended purpose of feasibility study planning or what a plan should try to achieve

Constraints are:

- Statements of things unique to a planning study that will limit the formulation of alternative plans
- Define what a plan cannot or should not do



define what the study is evaluating and the why & how solutions are developed

Important!



**Objective** = do good

**Constraint** = don't do, can't do

### PROBLEMS

Coastal storms pose a risk to life, health, and safety of the population in the Virginia Peninsula.

Increasing flooding from rain events due to the higher groundwater elevations and higher tailwater elevations from sea level rise threaten properties and infrastructure and exacerbate coastal storm risk.

National strategic and military assets are at risk from coastal storm impacts and sea level rise (Joint Base Langley Eustis, Camp Perry, Yorktown Naval Weapons Station, Yorktown Coast Guard Training Station, Huntington-Ingalls Shipyard and DTA Coal terminal).

Coastal storms pose a risk to the economic vitality of the Virginia Peninsula (i.e., flooded roads block routes to employment centers, businesses closed due to flooding, school closures increase childcare burden, tourism).

**Are there Additional Problems** that should be included?



#### Problems are the existing, negative conditions in a study area that relate to the study authority (Coastal Storm Risk Management, Public Law 84-71).

Increasing high tides and king tides resulting from sea level rise result in recurrent flooding to roads and properties.

Critical infrastructure and facilities (evacuation routes, utilities, schools, hospitals, etc.) and structures (commercial, institutional, and residential) are damaged by the effects of coastal storms.

Natural infrastructure, including Coastal Barrier Resources, is at risk from sea level rise and increased erosion from coastal storms, resulting in reduced flood storage capacity, increased wave impacts, and inland flooding.

Please use post-it notes provided to add additional problems here.

Significant cultural resources are at risk from coastal storm impacts and sea level rise (Jamestown, Yorktown, Fort Monroe and Hampton University).

Vulnerable populations and **Environmental Justice** Communities experience disproportionate impacts from coastal storms (repetitive property damage, housing insecurity, inability to evacuate, loss of wages).

### **OPPORTUNITIES**

Opportunities are positive statements that focus on desirable future conditions in the study area, i.e., what could the study accomplish?

Improve the community resilience of the Virginia Peninsula to the impacts of coastal storms and flooding.

Utilize nature-based solutions (wetland and reef restoration, living shorelines) and/or restoration of the natural coastal system of defenses to manage coastal storm risk.

Increase the resiliency of critical infrastructure, critical facilities, and transportation networks.

Enhance the resilience of cultural resources across the Virginia Peninsula by reducing storm surge, sea-level rise, and coastal flooding risks, ensuring protection for cultural resources during coastal storm events.

**Are there Additional Opportunities** that should be included?



Improve floodplain management and flood storage capacity.

Enhance the resilience of national strategic assets and military assets to mitigate the effects of coastal storms.

Utilize beneficial reuse of dredged material to increase resilience of natural infrastructure and coastal barrier resources.

Please use post-it notes provided to add additional opportunities here.

Conserve and improve waterfront recreation opportunities and support connections to the water.

Engage the public through education and outreach on storm risks, resilience strategies, and hazard mitigation efforts, particularly for vulnerable populations and **Environmental Justice** Communities.

### **OBJECTIVES**

Objectives are statements that describe the results a study aims to achieve by solving the problems that have been identified.

#### In the Virginia Peninsula, over the 50-year period of analysis, the feasibility study should:

- Strengthen economic resilience by mitigating coastal storm and flooding impacts on development.
- Enhance resilience of critical infrastructure and manage risk to human life, health, and safety from coastal storm impacts.
- Improve community resilience and manage coastal storm risks for socially vulnerable populations and Environmental Justice Communities.
- Improve resilience by utilizing a framework of multiple lines of defense, or methods of managing coastal storm risk across the natural, built, and hybrid environments in the water, along the shoreline, and on land, that are adaptable and flexible.
- Manage the risk to utilities including water, wastewater, electricity, phone, etc. that are at risk to the effects of coastal storms and are essential for human health and safety.

### Are there Additional Objectives or **Constraints that should be included?**



### CONSTRAINTS

Constraints are factors that are unique to a study area that may limit plan formulation. This can include legal or policy limitations.

#### The feasibility study should avoid, minimize, and/or mitigate:

- including federal facilities in the vicinity
- Creating or exacerbating risk to human life, health, or safety
- Impacts to cultural and environmental resources
- Impacts to utilities
- population of the study area
- Impacts to view sheds
- Exacerbating water quality and/or quantity impacts

Please use post-it notes provided to add additional objectives or constraints here.

• Exacerbating coastal storm impacts and/or flooding within and around the study area,

• Impacts to military readiness, and/or operations within the study area and vicinity

• Disruption of economic drivers, including connectivity, due to the regional nature of the

• Fragmentation of communities due to implementation of measures

## **COASTAL STORM RISK MANAGEMENT FEASIBILITY STUDY**

Sea Level Change

Navigation

Existing and Future Projects

**Are there Additional Planning Considerations that should be** included?

Please use post-it notes provided to add additional planning considerations here.



### **PLANNING CONSIDERATIONS**

Planning considerations are factors that are important to think about, but do not limit plan formulation.



Actions by Other Agencies/Organizations

Federal Facilities and Military Operations

Protected Resources

### **3 WAYS TO MANAGE COASTAL STORM RISK**



Surge Barriers

### **1** STRUCTURAL MEASURES

Structural measures are physical structures that are designed to reduce the frequency of damaging levels of coastal storm inundation. Levees, floodwalls, and coastal storm surge barriers are examples of structural measures.



**Living Shorelines** 

Wetland Restoration



Hybrid Reef

### **2** NATURE-BASED SOLUTIONS

Nature-based solutions are engineered features designed to act in concordance with natural features to provide flood risk management. Living shorelines, beach/dune enhancement, and oyster reef restoration are examples of nature-based solutions

Nonstructural measures reduce flood damages without significantly altering the nature or extent of flooding. Structure elevation, floodproofing, relocation, and advanced warning systems are examples of nonstructural measures.



Floodproof Commercial Buildings

### **3** NONSTRUCTURAL MEASURES

Do you have management measure recommendations (structural, nonstructural, nature-based)?

### **National Environmental Policy Act Compliance**

### National Environmental Policy Act (NEPA)

- One of the nation's oldest environmental laws.
- Requires federal agencies to consider and disclose the environmental effects of their proposed actions and consider public input during the NEPA process.
- Encourages federal agencies to make environmentally responsible decisions.



### What type of NEPA document will be prepared?

- The U.S. Army Corps of Engineers (USACE) intends to prepare either an Environmental Assessment (EA) or an Environmental Impact Statement (EIS).
- An EA would be prepared if there are no anticipated significant impacts. An EIS would be prepared if there are anticipated significant impacts.
- If preparation of an EIS is needed, a Notice of Intent would be published online in the Federal Register.
- The NEPA documentation will be integrated into the feasibility study report.

**What is** 

### How can you provide comments?

You may mail comments to:

Miranda Ryan

U.S. Army Corps of Engineers, Norfolk District Planning and Policy Branch 803 Front Street Norfolk, VA 23510

You may email comments to: PeninsulaCSRM@usace.army.mil

You may fill out a written comment form at this meeting and place it in the comment box.

#### What environmental topics may be considered?

- Air Quality
- Climate Change/ Sea Level Rise
- Cultural and Historic Resource
- Demographics
- Socioeconomics **Environmental Ju**
- Wetlands
- Fish and Wildlife
- Commercial and Fisheries



"Scoping" is the step in the NEPA process when the public is invited to participate in identifying issues, alternatives, and potentially significant effects to be considered in the analysis. This helps the USACE identify and eliminate from detailed study issues that are not significant or that have been covered by prior environmental review.

> **Please submit scoping** comments in writing at the meeting, via mail, or email by **October 31, 2024**.

|              | 0 | Hazardous, toxic,   |
|--------------|---|---------------------|
|              |   | and radioactive     |
|              |   | materials           |
|              | 0 | Hydrology           |
|              | 0 | Land Use            |
| es           | 0 | Navigation          |
|              | 0 | Noise and Vibration |
| and          | 0 | Recreation          |
| ustice       | 0 | Protected Species   |
|              | 0 | Traffic             |
| Resources    | 0 | Water Quality       |
| Recreational | 0 | Floodplains         |
|              |   |                     |

Are you interested in structural, nonstructural or nature-based solutions?

What are the existing coastal storm risk management problems in your community?

Is there information or data that may help with the planning process?