

CHARLESTON PENINSULA COASTAL FLOOD RISK MANAGEMENT STUDY

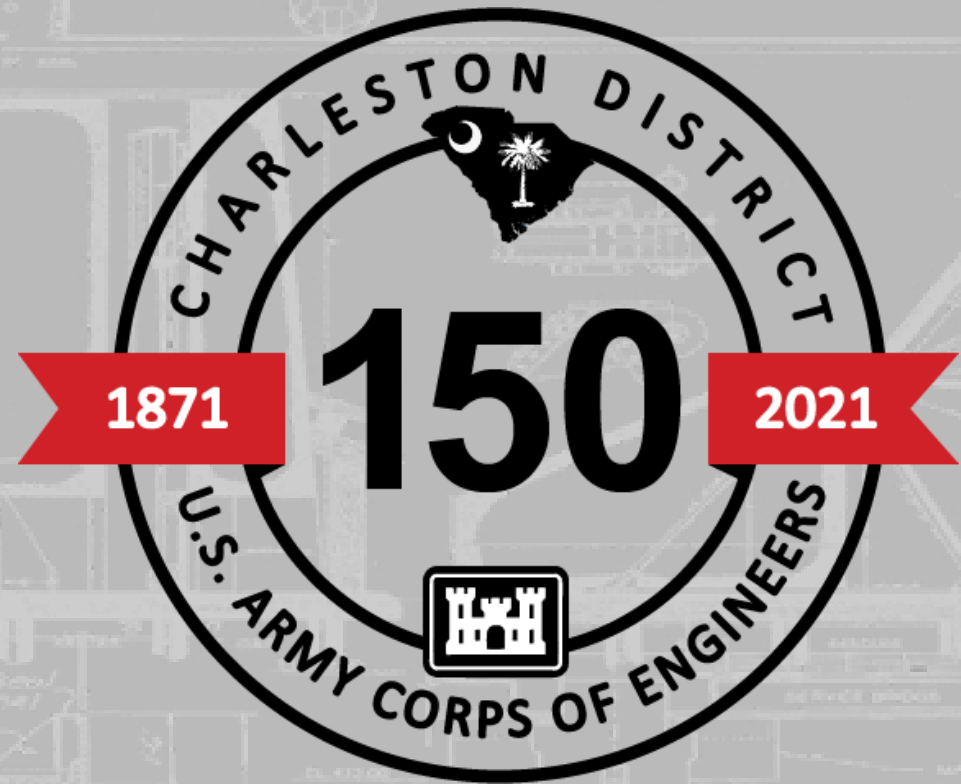
ENVIRONMENTAL IMPACT STATEMENT SCOPING MEETING

USACE Charleston District
March 30, 2021

Working Today to Build a Better Tomorrow



US Army Corps
of Engineers®



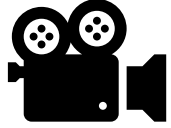
**Celebrating 150 Years of
Serving South Carolina
and the Nation**



WELCOME AND OPENING



Charleston-sc.gov



Meeting Purpose

Collect *comments* to inform scoping phase in the development of an *Environmental Impact Statement (EIS)*

Types of comments

1. Other potential **alternatives** for reducing coastal storm surge risks on the Charleston Peninsula *(please describe the alternative or action)*
2. Other potential **impacts** on the human environment to be evaluated *(please describe the activity and resulting impact)*
3. Existing **information**, studies, or analyses that may be relevant to the study *(please describe the information or how/where it can be obtained)*

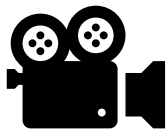


Agenda

Meeting Purpose

Collect comments to inform scoping phase in the development of an Environmental Impact Statement (EIS)

- Welcome and opening
- National Environmental Policy Act and Environmental Impact Statement Process
- Study Background, Alternatives, Tentatively Selected Plan and Project Schedule
- **Questions and Answers (10 minutes)**
- Next Steps for NEPA Scoping Phase
- **Public Comment Session**
- Adjourn no later than 7:30pm



YOUR PARTICIPATION!



On the WebEx:

1. Look for the Chat icon!
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Visit the project FAQs:

<https://www.sac.usace.army.mil/Missions/Civil-Works/Supplemental-Funding/Charleston-Peninsula-Study/>



OTHER WAYS TO COMMENT



- Email comments at: Chs-Peninsula-Study@usace.army.mil
- Online comments at the website:
www.sac.usace.army.mil/charlestonpeninsulastudy
- Mail-in comments: U.S. Army Corps of Engineers Charleston District, ATTN:
Planning and Environmental Branch, 69A Hagood Avenue, Charleston, SC 29403

Scoping Comment Period ends April 22, 2021



NATIONAL ENVIRONMENTAL POLICY ACT



WHAT IS NEPA?



The National Environmental Policy Act (NEPA) requires federal agencies to carefully consider the environmental, social, and economic effects of any major federal action.

The purpose of NEPA is to ensure that decision makers and the public are informed of the environmental and social consequences of a proposed action prior to making a decision and taking action, as well as providing meaningful opportunity for the public to comment.

NEPA requires that both adverse and beneficial effects be considered.





LEVELS OF NEPA REVIEW



A federal agency has three levels of review to assess the agency action:
a **categorical exclusion**, an **Environmental Assessment**, or an **Environment Impact Statement**.

Categorical exclusion (CatEx)

- Actions already determined to not have a significant effect on the human environment
- No public review is required of a CatEx

Environmental Assessment (EA)

- Purpose is to determine the significance of potential environmental effects of a proposed action and to look at different action alternatives
- Typically a concise public document
- Supports agency's determination of next step in the NEPA process:
 - prepare a finding of no significant impact (FONSI) if the alternatives will not have significant effects
 - prepare an Environmental Impact Statement if the alternatives will have significant effects that can not be mitigated to less than significant
- Public reviews and comments on the draft, and sometimes during a scoping process



LEVELS OF NEPA REVIEW (CONT.)



Environmental Impact Statement (EIS)

- Prepare for a major Federal action **significantly** affecting the quality of the human environment
- Regulatory requirements and process are more detailed and prescribed
- More public involvement requirements
- Process consists of four main stages
 - Scoping, with public input
 - Draft EIS, with public review and comment period
 - Final EIS for public and agency review
 - Record of decision (ROD)





NEPA PROCESS – SO FAR

- October 2018 – Began study; initiated NEPA process and USACE’s planning process
- December 2018 – Held public meeting; multiple subsequent stakeholder meetings
- April 2020 – Released Draft Integrated Feasibility Report / Environmental Assessment and Draft mitigated FONSI for public and agency review/comment
- March 2021 – Transition from EA to EIS for NEPA compliance

Why an EIS?

Received hundreds of informative comments on Draft EA

- Aesthetic/visual resource impacts
- Cultural resource impacts
- Compensatory wetland mitigation plan
- Environmental justice concerns

Continued analysis and refinement of the proposed plan produced new information

Concluded EA and mitigated FONSI were not appropriate for NEPA compliance

Made strategic, risk-informed decision to prepare an EIS

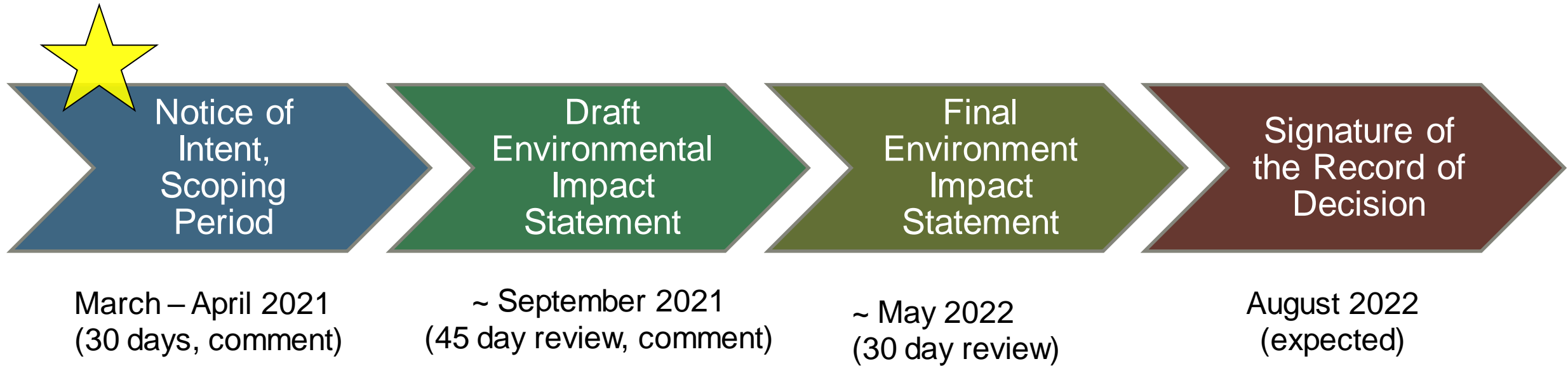
Allows for more detailed and robust analysis and mitigation plans; additional opportunities for public input



EIS PROCESS / TIMELINE AND PARTICIPATION



March 2021 – Begin EIS process



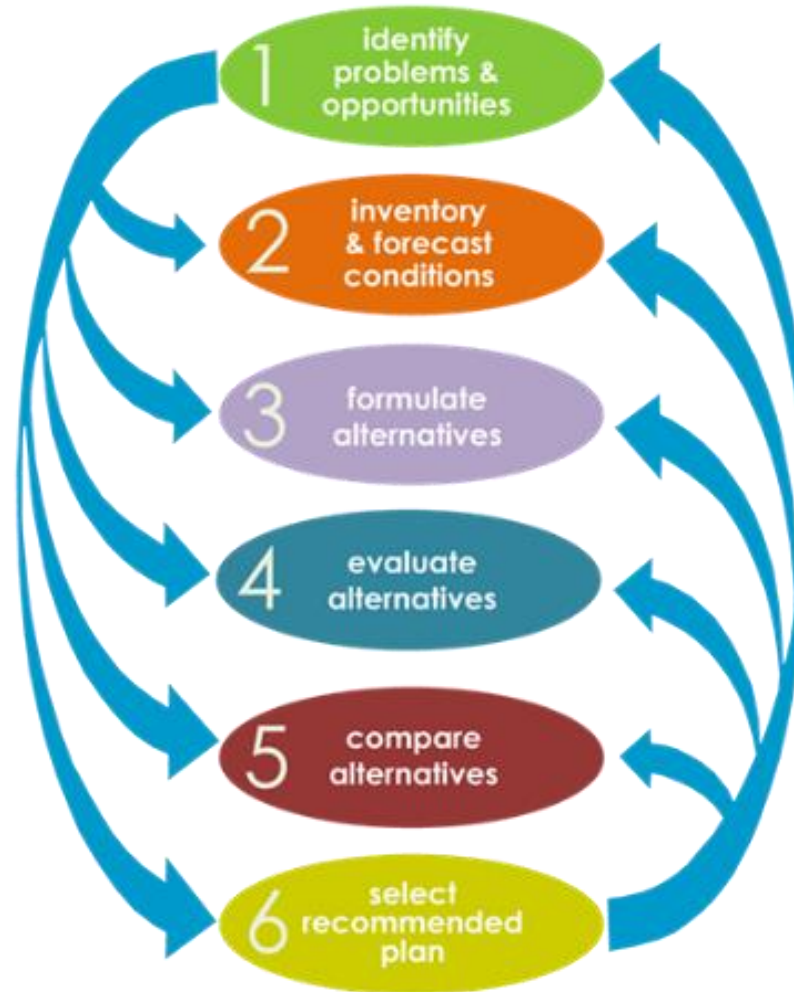


STUDY BACKGROUND AND ALTERNATIVES





USACE 6-STEP PLANNING PROCESS





THE PROBLEM

- Significant vulnerability to storm surge inundation
- Storm surge inundation impacts:
 - Public health including life loss
 - Access to critical facilities, emergency services, and evacuation routes
 - Economic sustainability of the City including businesses, organizations, and residents



FORMULATE ALTERNATIVES



- Management measures to address problems = 24
 - Structural
 - Nonstructural
 - Natural and nature based
- Initial array of conceptual alternatives = 7





INITIAL ARRAY OF CONCEPTUAL ALTERNATIVES

	Alternative	Summary
0	No Action	No action would be taken by the Federal Government to address problems identified by the study
1	Perimeter Protection	A wall along the perimeter of the peninsula with gates and pump stations
2	Perimeter Protection + Nonstructural	Alternative 1 + elevate, floodproof, relocation or buyout structures outside of the line of protection
3	Perimeter Protection + Nonstructural + Wave Attenuating Structure	Alternative 2 + wave attenuating structure in the Charleston Harbor
4	Nonstructural	Elevate, floodproof, relocate or buyout structures within a specified inundation footprint
5	Historical Creeks	Restoration of historical stream beds and perimeter protection along the western side of the peninsula and portions of the eastern side of the peninsula
6	Parks & Recreation	Detention basins at city parks; storage improvements at Colonial Lake and Marina Lagoon; canals along East Battery and Lockwood Blvd
7	Storage	Detention basins at city parks and parking lots; underground cisterns; canals and flood channels; restoration of historical streambeds



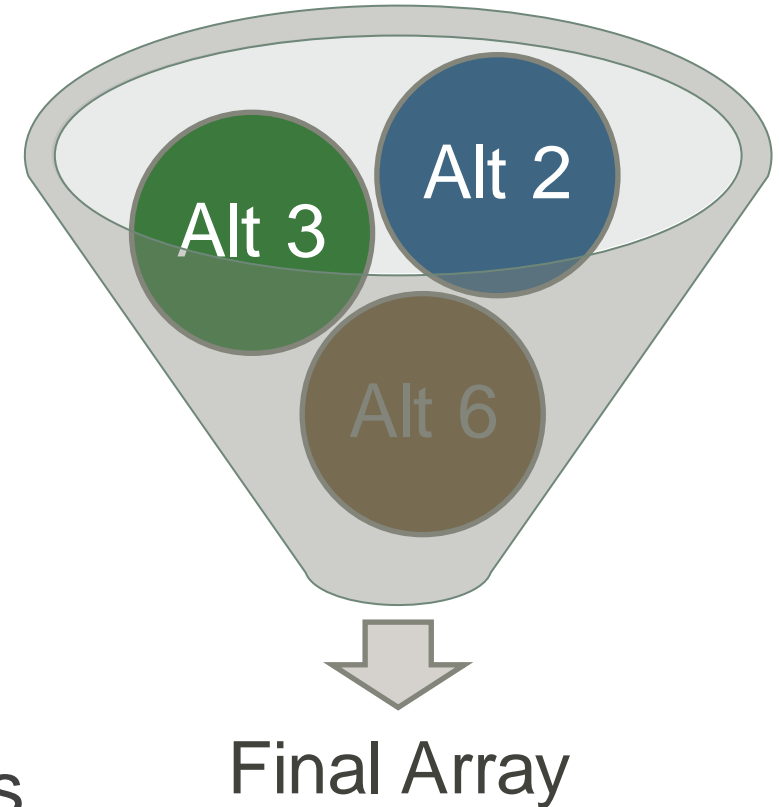
QUALITATIVE SCREENING



- Professional judgement used to assess how well alternatives met a set of criteria

Example outcomes:

- Restoring historical creeks would primarily address stormwater drainage issues
- Nonstructural alternative did not address limited access to critical facilities, emergency services, and evacuation routes
- Storage alternatives were determined to be ineffective because the volume of the ocean is effectively unlimited

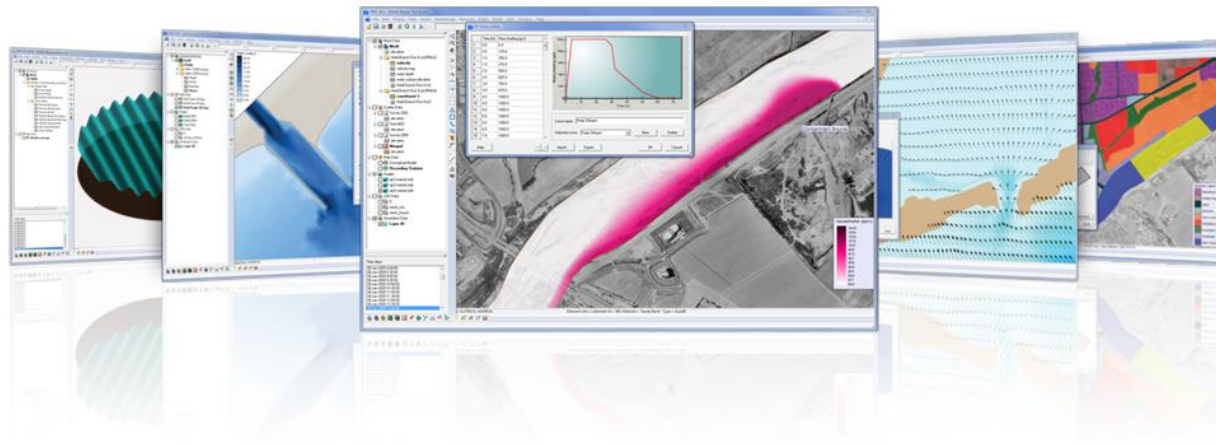




QUANTITATIVE SCREENING



- 2 action alternatives in the final array
- Numerical coastal and economic modeling to assess the performance and benefits of the final array
- Cost estimates developed for final array
- The alternative that “reasonably maximizes net economic benefits consistent with protecting the Nation's environment ... shall be selected”



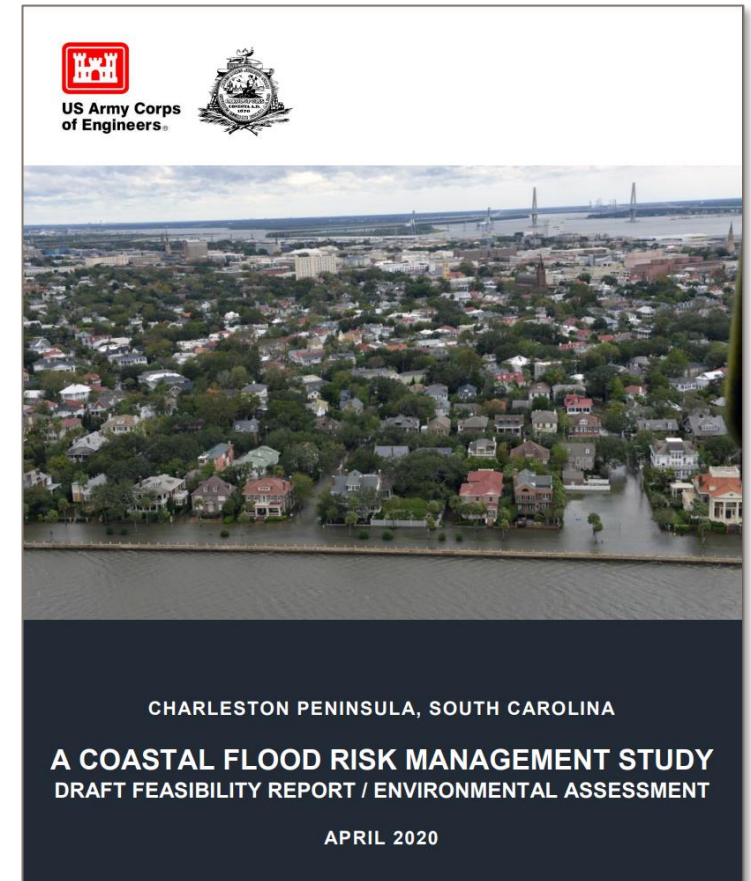


DRAFT FEASIBILITY REPORT & ENVIRONMENTAL ASSESSMENT



Concurrent Reviews:

- Agency Technical Review
- Independent External Peer Review
- Public Review
 - Significance of impacts requires transition to an Environmental Impact Statement





TENTATIVELY SELECTED PLAN AND PROJECT SCHEDULE



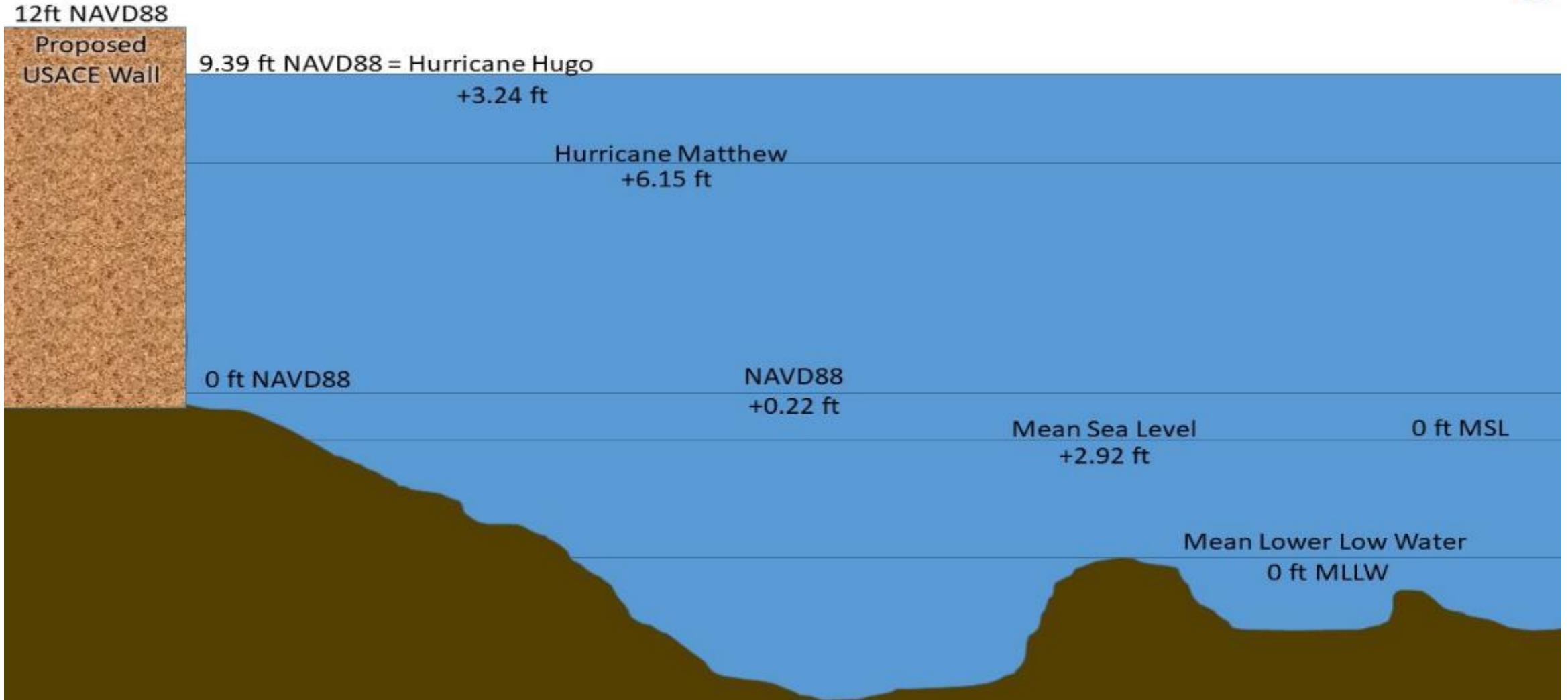
TENTATIVELY SELECTED PLAN (PROPOSED PLAN)



- Draft EA/Feasibility Report Released from April 2020 to June 2020
- TSP Total Project First Cost - \$1.4B
- TSP Annual Net Benefits - \$88M
- TSP BCR – 2.2
- Significant number of Public & Agency Comments
- Optimization of Tentatively Selected Plan continues with Engineering/Economic Modeling



HISTORICAL STORM SURGE



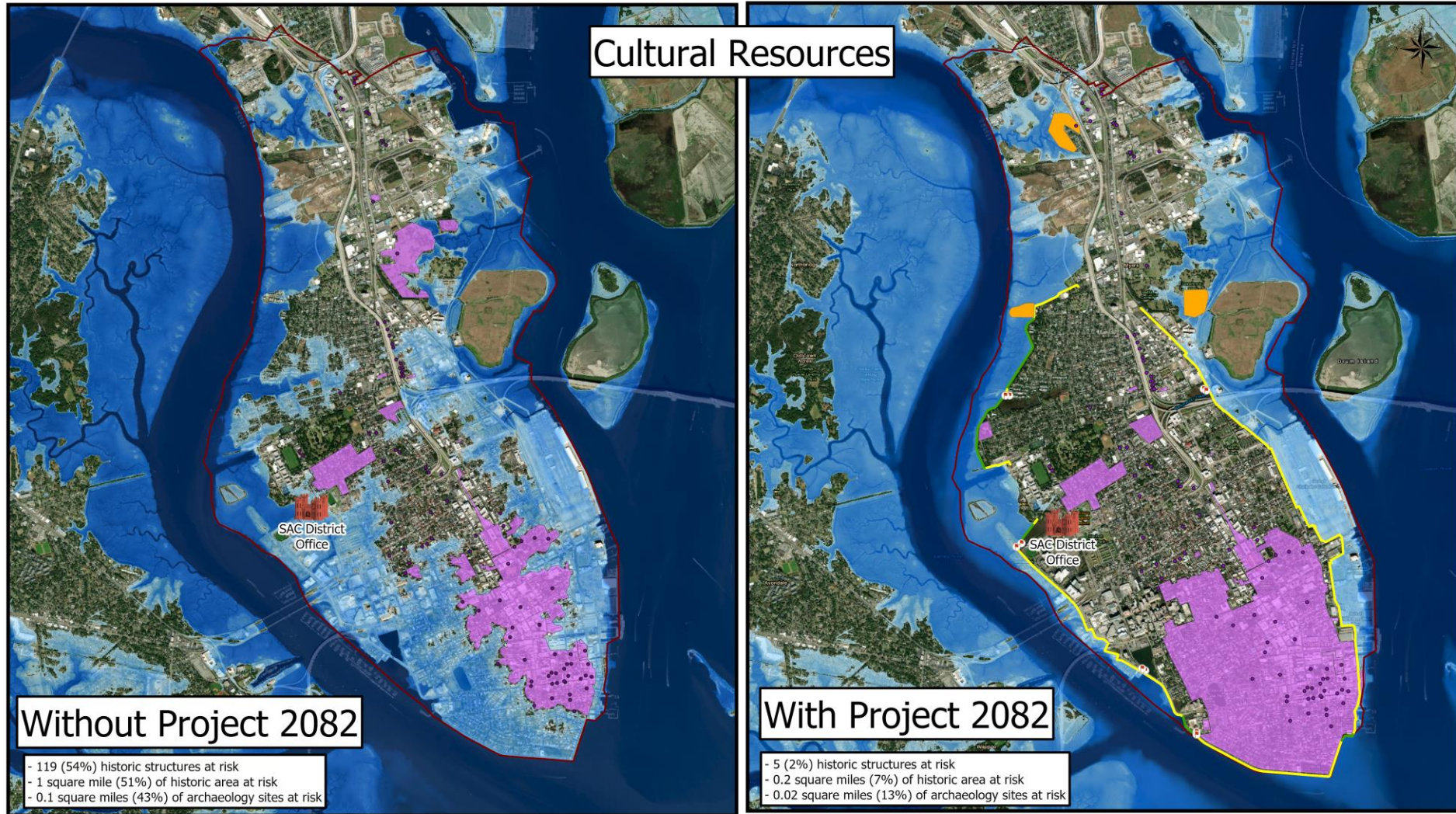


CRITICAL FACILITIES





CULTURAL RESOURCES



— T-Wall
— Combo Wall

■ Pump Stations
● Historic Structures

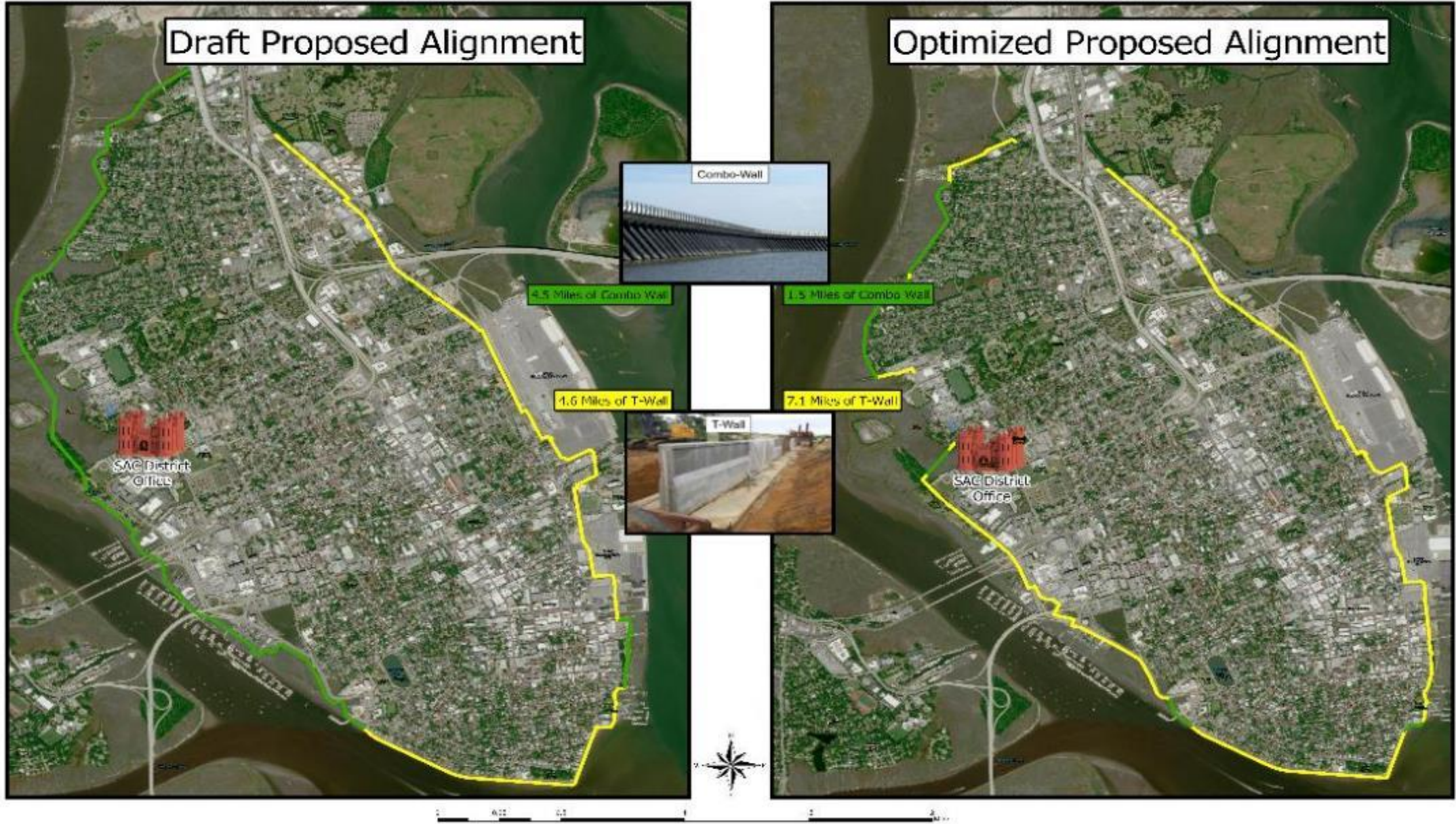
■ Charleston Peninsula Study Area
■ Historic Areas

Depth of Water (ft)



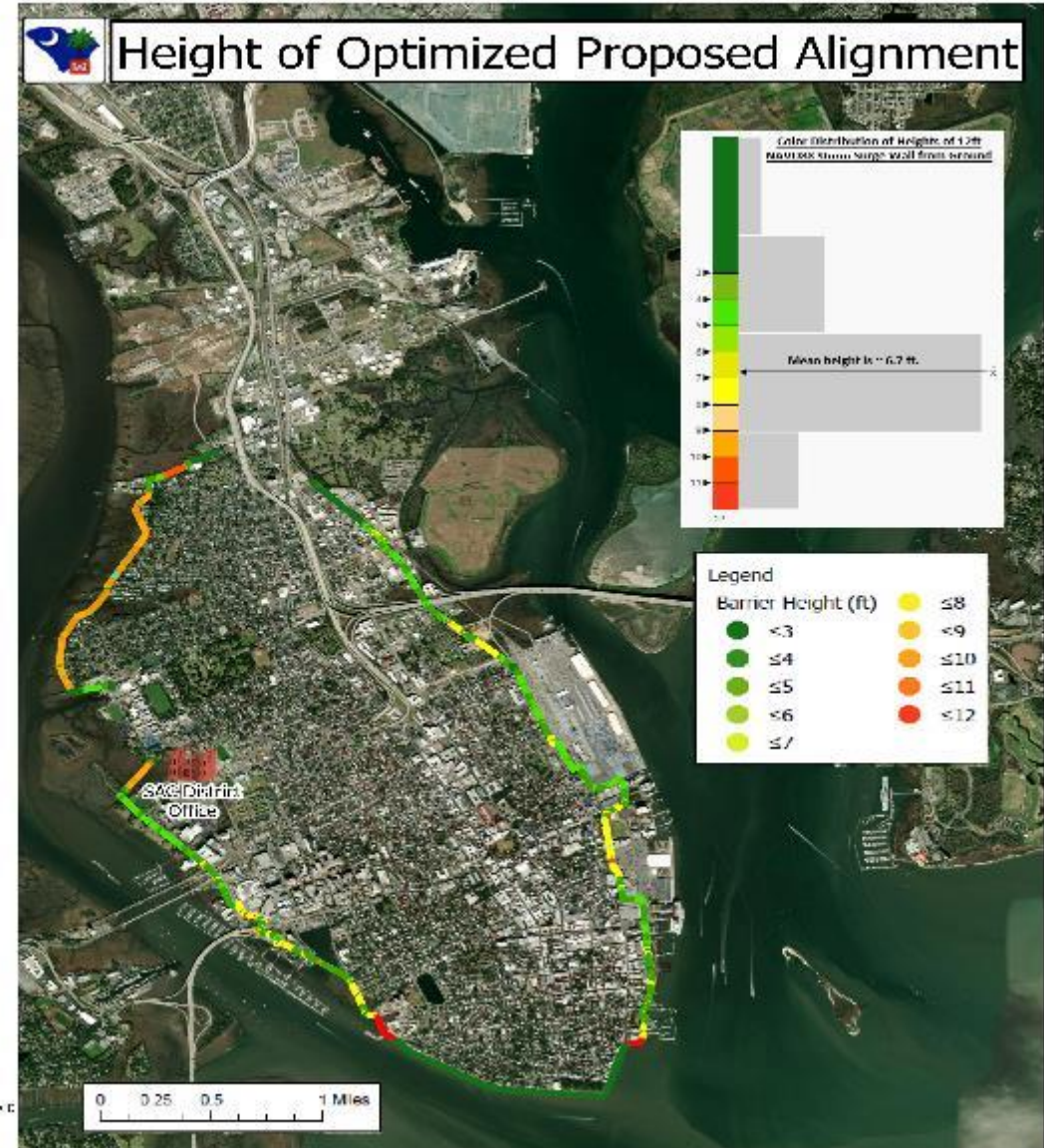


UPDATED ALIGNMENT





UPDATED ALIGNMENT W/ELEVATION





PROJECT SCHEDULE

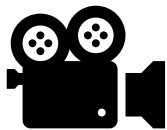


- March 2021 – Public Meeting (NEPA: Scoping input)
- August/September 2021 – Re-Release of Draft Report to Public/Agencies (NEPA: Draft EIS comment period, 45 Days)
- September 2021 – Public Meeting/Workshops
- March 2022 – Submit Final Report to USACE Division Office
- Spring 2022 – State/Agency Review Final Report (NEPA: Final EIS review, 30 days)
- August 2022 – Final Report Signed by Chief of Engineers (NEPA: proceeds signing of ROD)

- Design Phase
- Construction Phase
- O&M Phase



QUESTION AND ANSWER SESSION

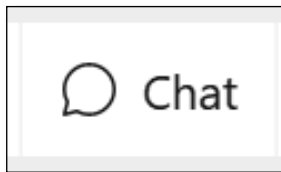


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NEXT STEPS



Mick Haupt | Unsplash

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NEXT STEPS FOR NEPA SCOPING PHASE



- Your comments along with all the comments received previously are considered in the development and preparation of the Draft IFR/EIS
- Your comments on the April 2020 Draft IFR/EA are part of our ongoing NEPA public process



Working Today to Build a Better Tomorrow



WHAT TO COMMENT ON DURING SCOPING



1. Other potential **alternatives** for reducing coastal storm surge risks on the Charleston Peninsula (*please describe the alternative or action*)
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3. Existing **information**, studies, or analyses that may be relevant to the study (*please describe the information or how/where it can be obtained*)



WAYS TO COMMENT BY APRIL 22, 2021



- Share comments during this meeting
- Email comments to: Chs-Peninsula-Study@usace.army.mil
- Use online comment form at the website:
www.sac.usace.army.mil/charlestonpeninsulastudy
- Mail in comments to: U.S. Army Corps of Engineers Charleston District, ATTN: Planning and Environmental Branch, 69A Hagood Avenue, Charleston, SC 29403



PUBLIC COMMENT PERIOD





HOW TO COMMENT DURING THE MEETING



1

I want to type my comment:

1. Look for the Chat icon!
2. Type your comment to the host.

2

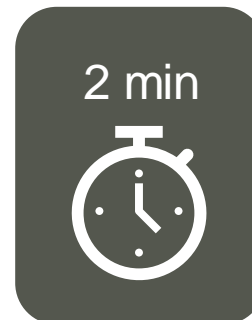
I'm on the computer, and want to speak my comment:

1. Chat "I would like to speak my comment" to the host.

3

I'm only on the phone, and want to speak my comment:

1. Press *3 to "raise your hand"
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Types of comments

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2. Other potential **impacts** on the human environment to be evaluated
3. Existing **information**, studies, or analyses that may be relevant to the study



Comments accepted until April 22, 2021



THANK YOU!

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