

# St. Augustine, Florida Back Bay Coastal Storm Risk Management (CSRM) Feasibility Study

## MONTHLY PROGRESS MEETING FEBRUARY 2024

**PLEASE MUTE YOUR PHONE AND COMPUTER  
TO AVOID BACKGROUND DISRUPTIONS.**

**WE WILL START PROMPTLY AT 1:05**

### Presented by:

Jason Harrah, Senior Project Manager (Jacksonville District, USACE)

Marty Durkin, Planning Technical Lead (Jacksonville District, USACE)

Jessica Beach, Chief Resiliency Officer (City of St. Augustine)





# AGENDA



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- Opening Remarks
- Study Overview
- Overall Study Schedule & Budget
- Initial Array of Alternatives Being Considered
- Schedule Updates (90-Day Window)
- Discipline Specific Study Updates
- Upcoming Public Engagements
- Sponsor Remarks
- Agency Questions/Comments
- Public Comments
- Closing Remarks



# STUDY SCHEDULE & BUDGET

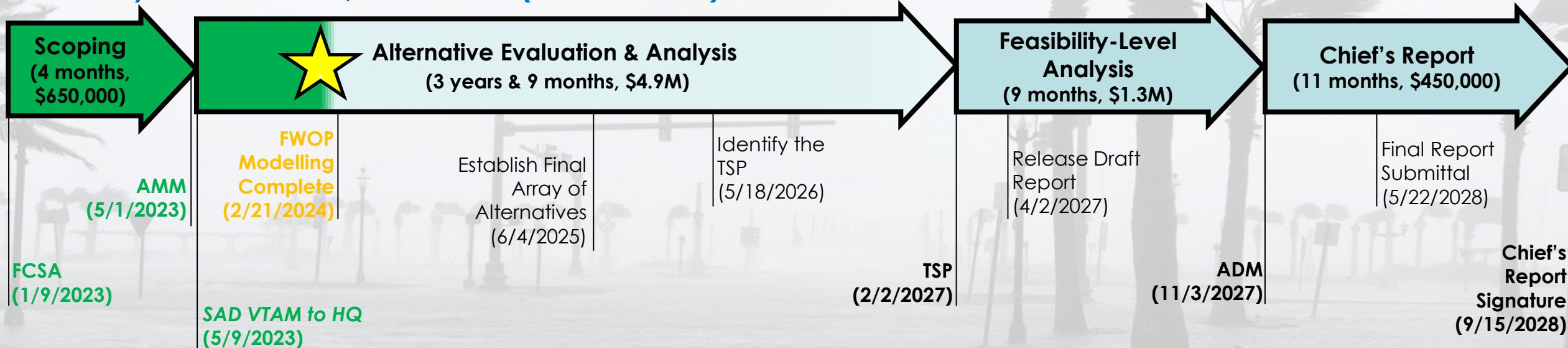
★ We Are Here



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Schedule & Budget Overview: 5 years & 9 months, \$7.3M, Cost Share ~50% Fed, 50% Sponsor

Total Study Costs to Date: \$1,069,566.71 (as of Jan 2024)



## Key Components of the Study Scope:

- Entire City of St. Augustine (COSA)
- Compound Flooding
- Full Array of Alternatives & Comprehensive Benefits
- Environmental Impact Statement (EIS) Likely
- Robust Community Outreach



# STUDY OVERVIEW



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## Study Authority: House Resolution 2646 (June 21, 2000): St. Johns County, Florida

Resolved by the Committee on Transportation and Infrastructure of the United States House of Representatives, That in accordance with Section 110 of the River and Harbor Act of 1962, the Secretary of the Army, acting through the Chief of Engineers, is **requested to survey the shores of St. Johns County, Florida**, with particular reference to the advisability of providing beach erosion control works in the area north of St. Augustine Inlet, the shoreline in the vicinity of Matanzas Inlet, and adjacent shorelines, as may be necessary in the interest of **hurricane protection, storm damage reduction, beach erosion control, and other related purposes**.

## Non-Federal Sponsor: City of St. Augustine (COSA)

POC: Jessica Beach, P.E., Chief Resilience Officer, [jbeach@citystaug.com](mailto:jbeach@citystaug.com)

## Study Area

- Entire COSA Municipal Boundary
- **17 Distinct Neighborhoods**
- **3 Separate Land Masses**
- **Interconnected Water Bodies**

**Objectives** to be achieved within the City of St. Augustine over a 50-year period of analysis from 2035-2085 are to...

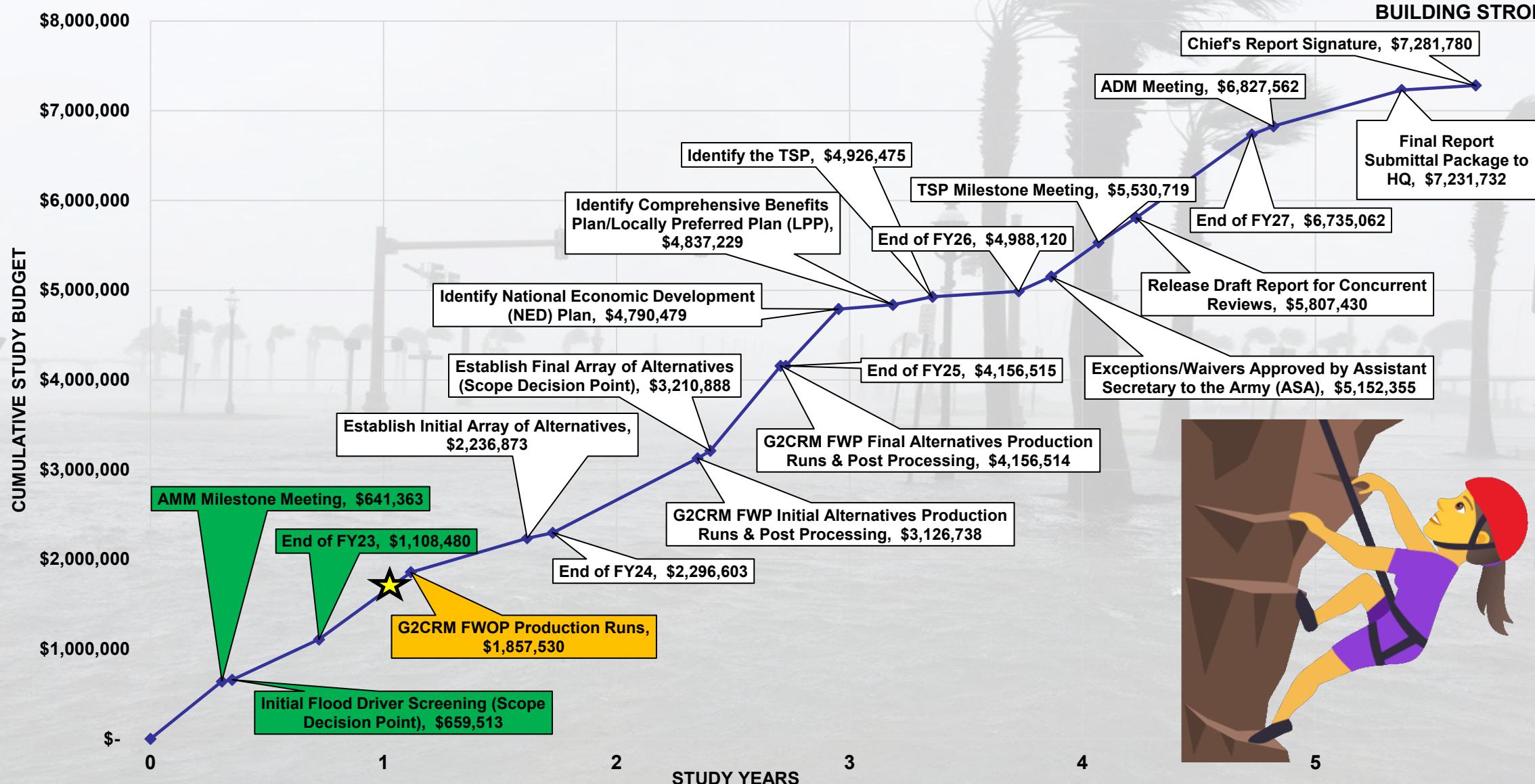
1. Manage risk of coastal flood damages.
2. Manage risk to health and life-safety.
3. Manage risk to cultural and natural resources.
4. Manage flooding impacts to the local economy.



# STUDY SCHEDULE & BUDGET



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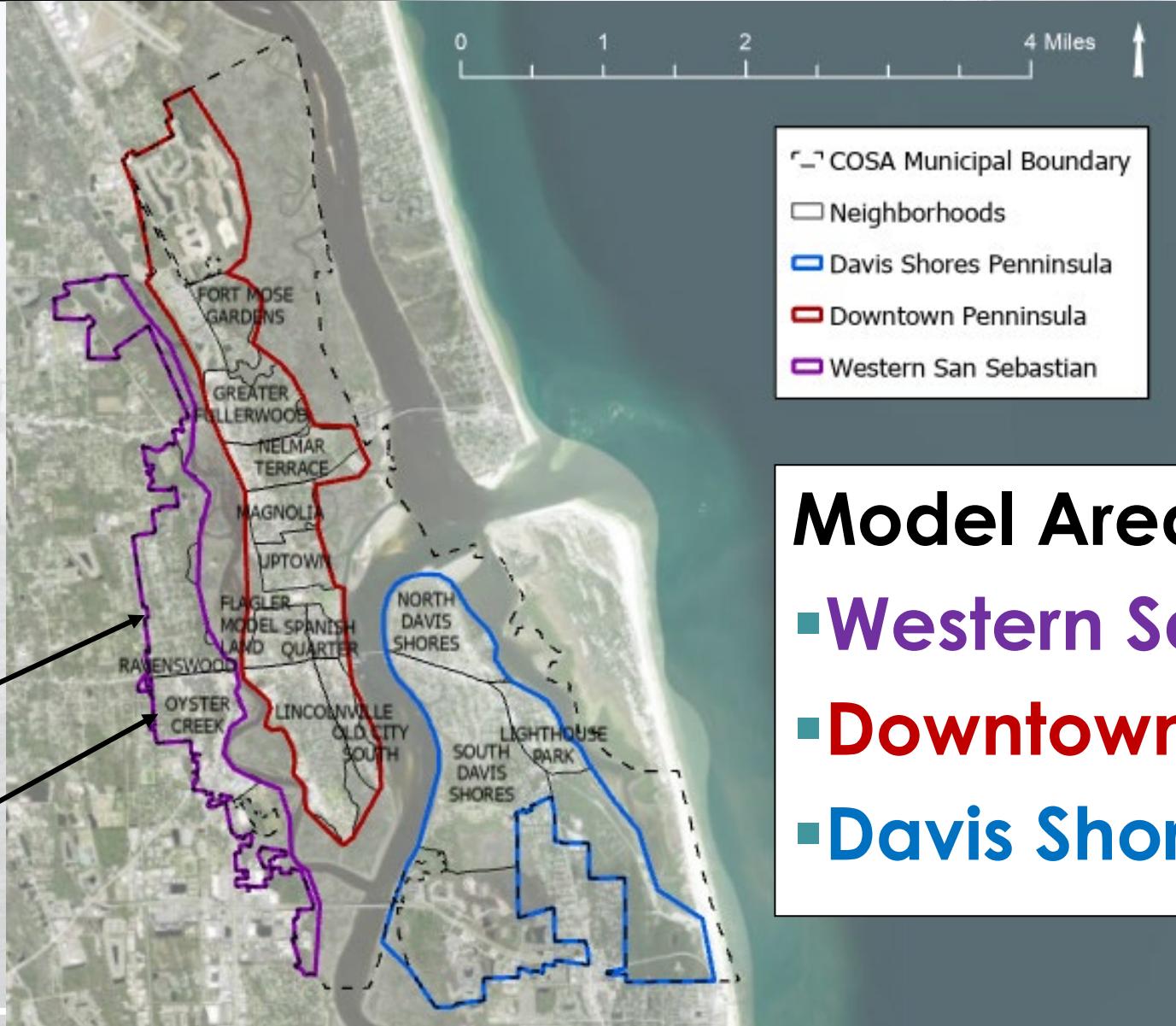




# STUDY MODEL REACHES



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## Model Areas

- **Western San Sebastian**
- **Downtown Peninsula**
- **Davis Shores Peninsula**



# INITIAL ARRAY OF ALTERNATIVES



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## Measure Function

Wall/Levee/Dune features stop flooding at the back bay shoreline.

Surge Barrier/Gate features stop flooding before it gets into the back bay waters.

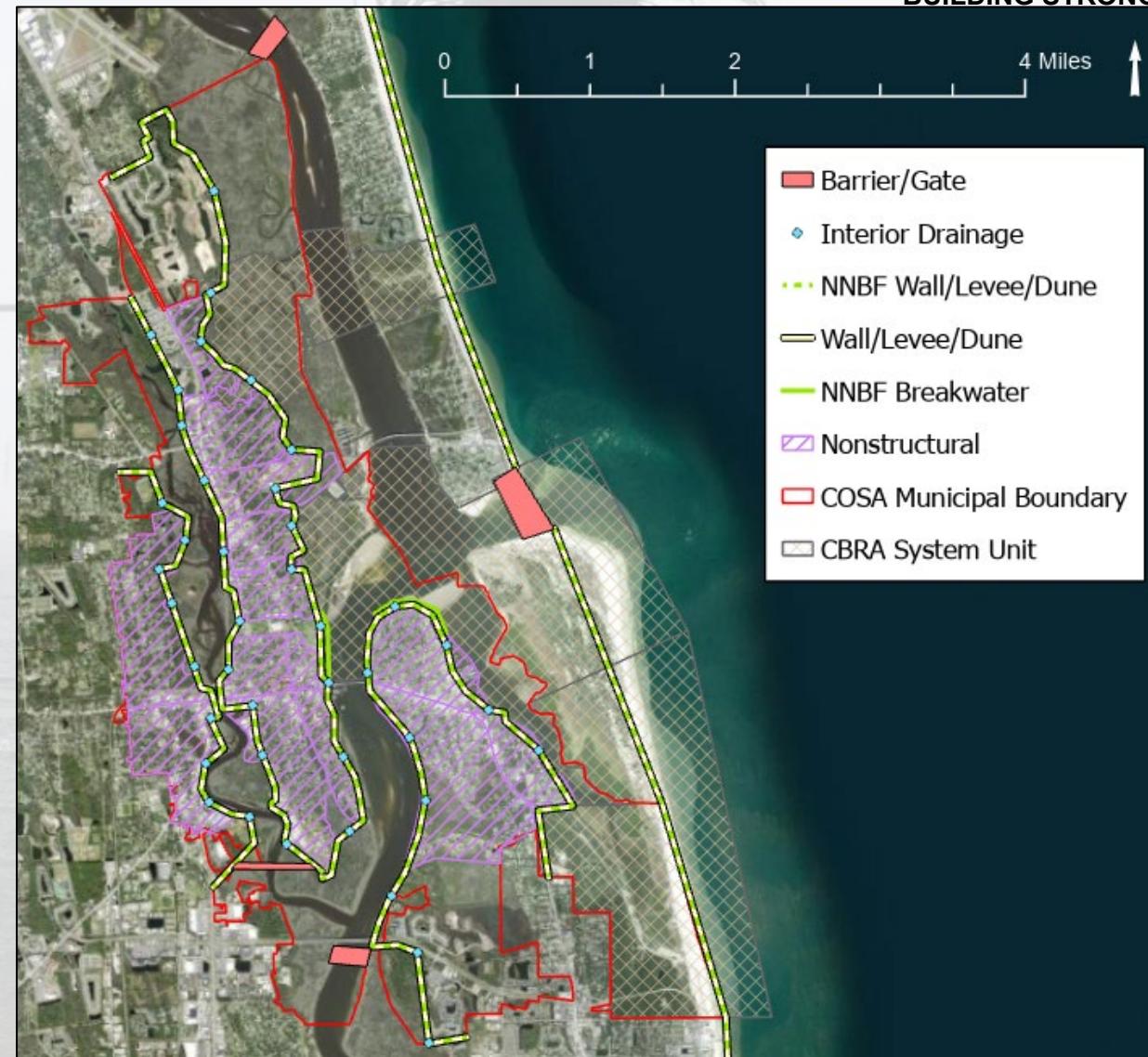
Interior Drainage features get flooding out of upland areas.

Nonstructural features reduce flood risk without directly effecting flooding processes.

Breakwaters/NNBFS can reduce wave energy before it gets to the back bay shoreline.

## Initial Array of Alternatives

0. No Action
1. Wall/Levee with Interior Drainage Features & Breakwaters/NNBFs
2. Storm Surge Barrier at Inlet(s)/IWW with Wall/Levee/Dune tiebacks
3. San Sebastian River Flood Gate with Wall/Levee & Interior Drainage Features & Breakwaters/NNBFs
4. All Nonstructural
5. Wall/Levee with Interior Drainage Features & Breakwaters/NNBFs & Nonstructural
6. Storm Surge Barrier at Inlet(s)/IWW with Wall/Levee/Dune tiebacks & Nonstructural



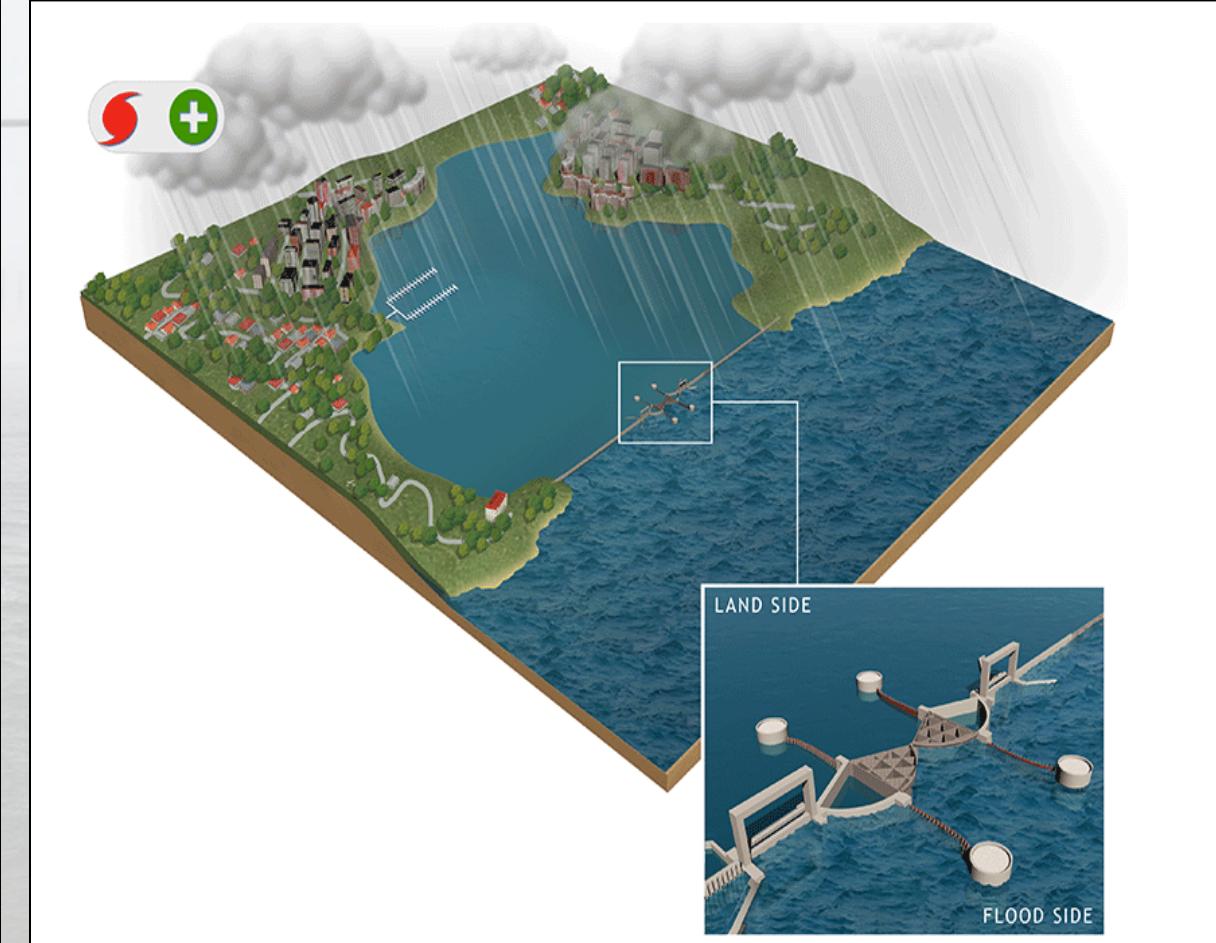
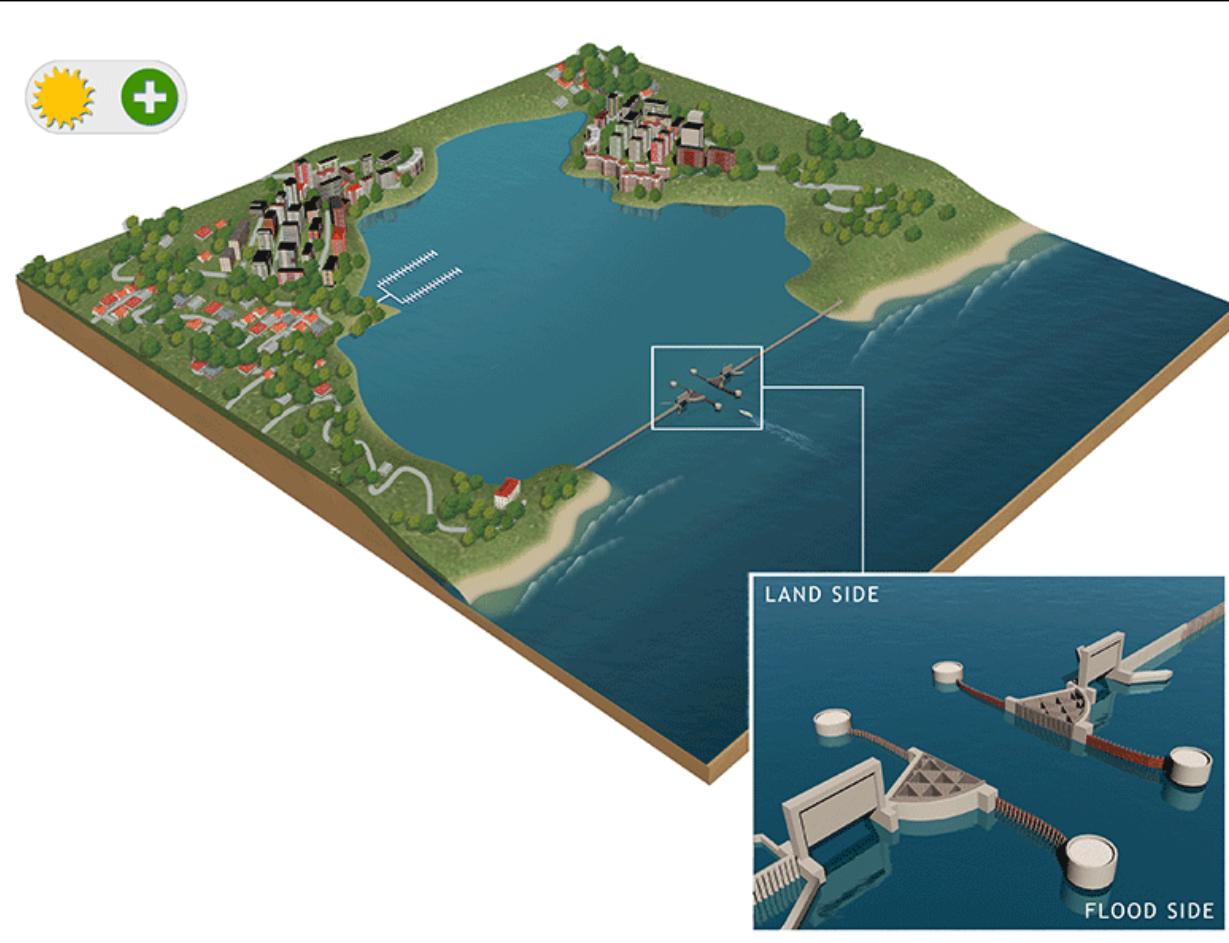


# ALTERNATIVES EVALUATION



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## Alternative Example: Storm Surge Barriers



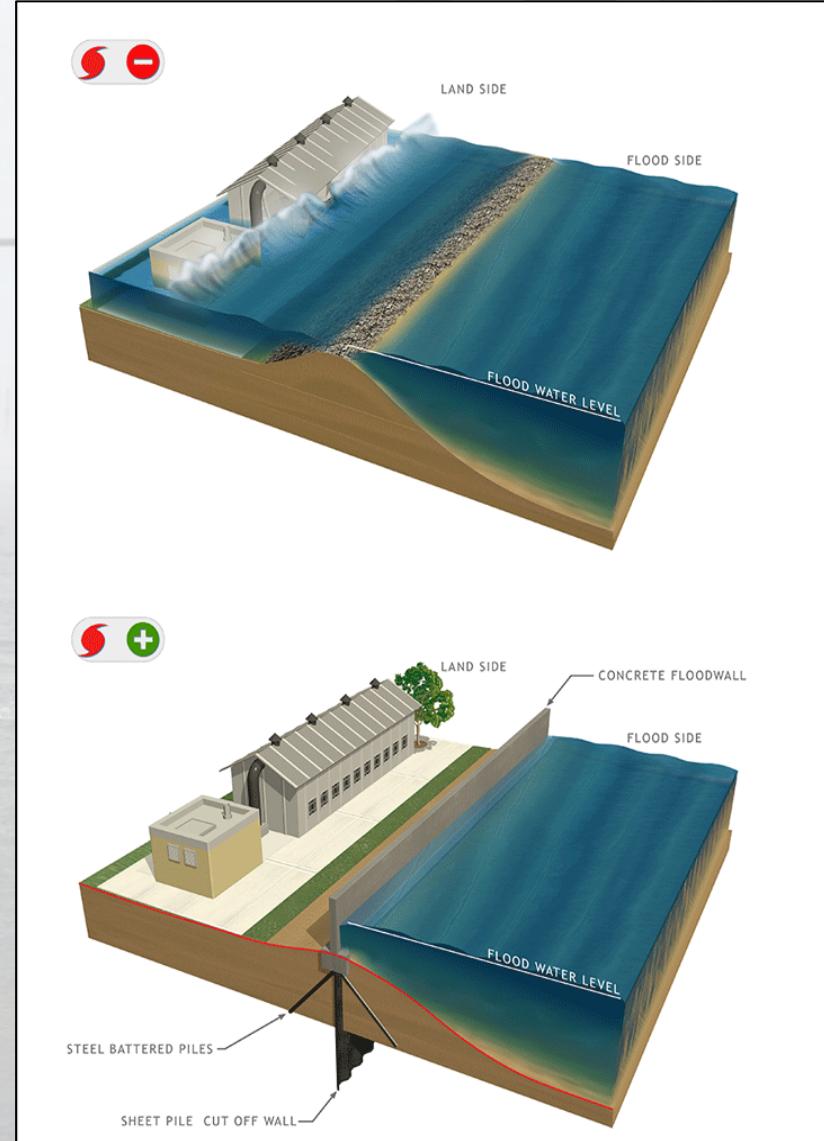
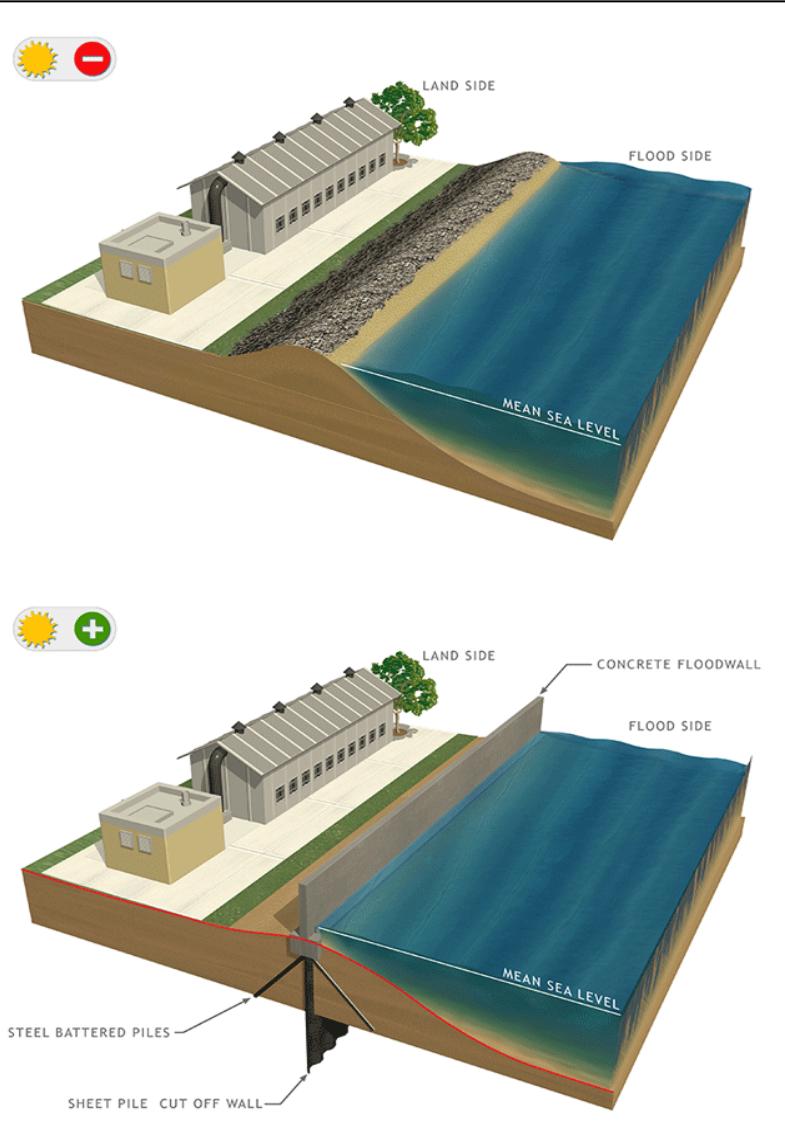


# ALTERNATIVES EVALUATION



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## Alternative Example: Floodwalls



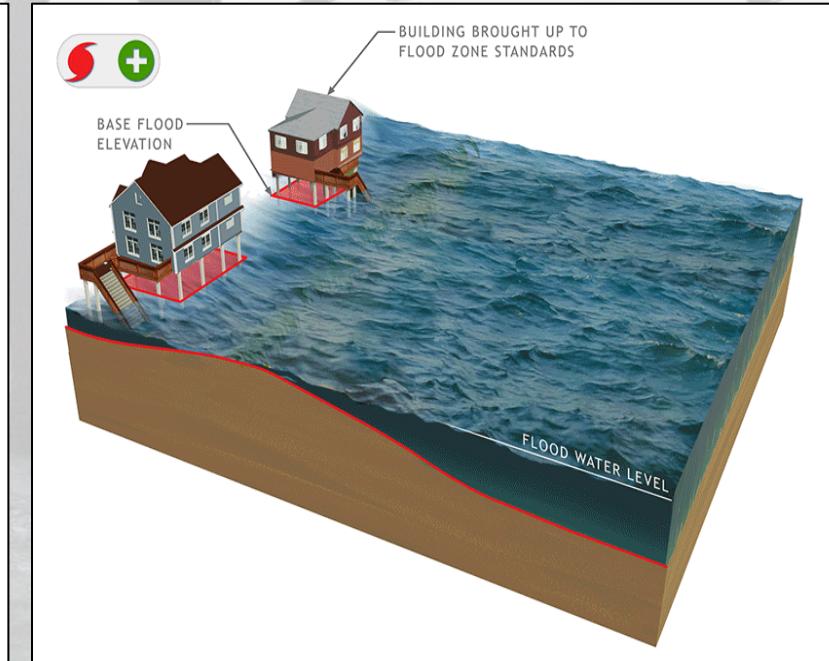
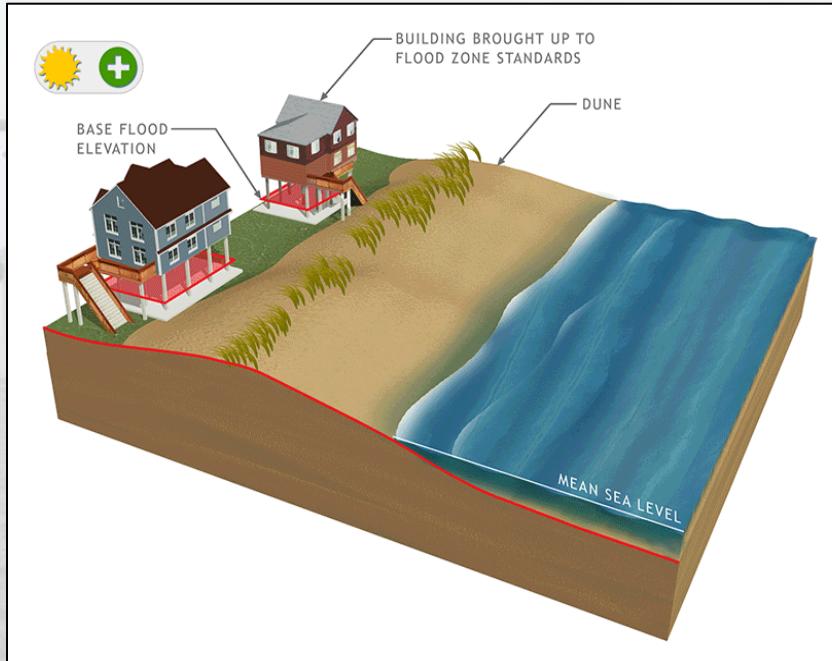
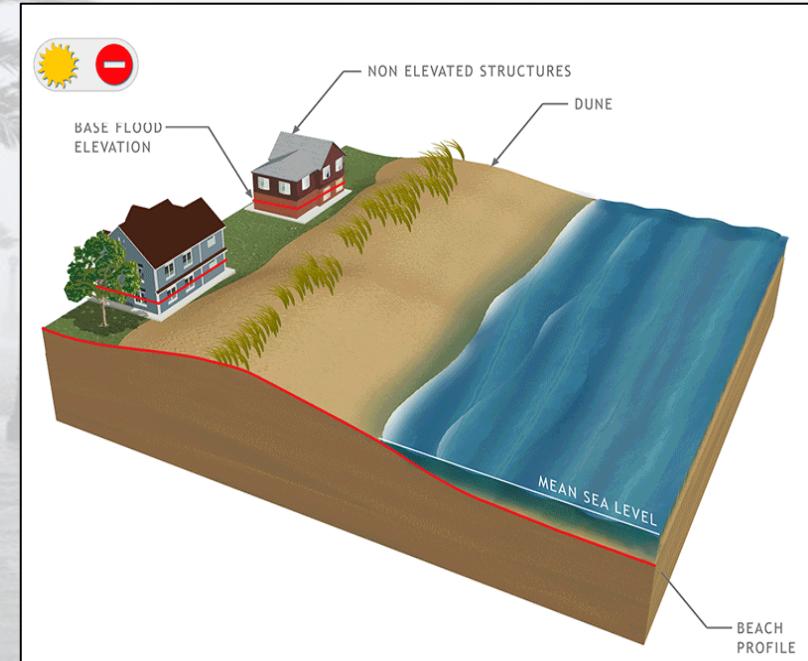


# ALTERNATIVES EVALUATION



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## Alternative Example: Non-Structural (Elevating Structures, Floodproofing, Ring Walls, Acquisition/Relocation)



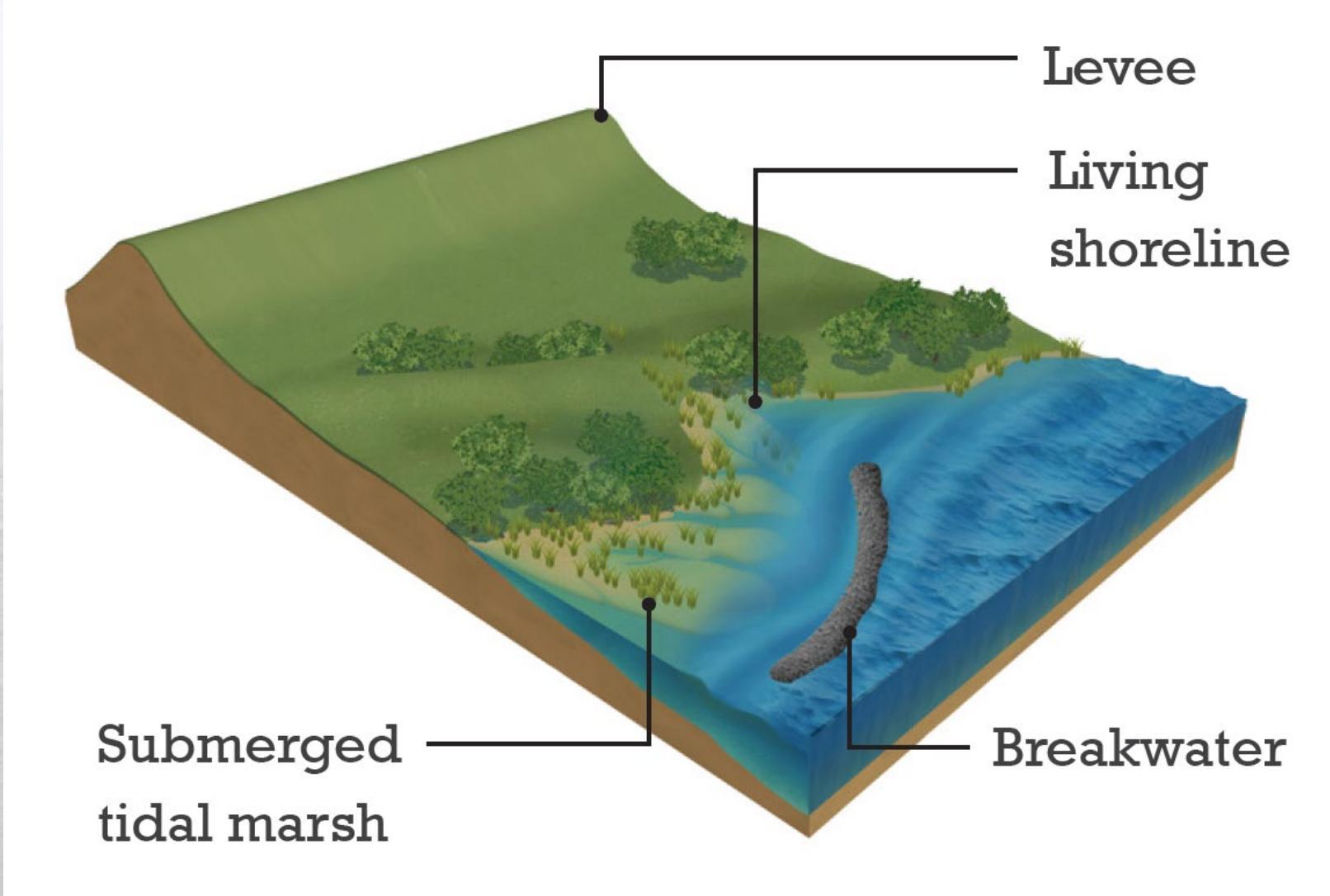


# ALTERNATIVES EVALUATION



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## Alternative Example: Natural & Nature-Based Features





# PATH FORWARD

## KEY SCHEDULE ACTIVITIES - LOOK AHEAD



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Key Activities	Finish Date
FCSA Executed	1/9/2023
AMM Milestone Meeting	5/1/2023
Initial Flood Driver Screening (Scope Decision Point)	5/17/2023
<b>End of FY23</b>	9/30/2023
G2CRM FWOP Production Runs	2/21/2024
Establish Initial Array of Alternatives	8/21/2024
<b>End of FY24</b>	9/30/2024
G2CRM FWP Initial Alternatives Production Runs & Post Processing	5/15/2025
Establish Final Array of Alternatives (Scope Decision Point)	6/4/2025
G2CRM FWP Final Alternatives Production Runs & Post Processing	9/22/2025
<b>End of FY25</b>	9/30/2025
Identify National Economic Development (NED) Plan	12/22/2025
Identify Comprehensive Benefits Plan/Locally Preferred Plan (LPP)	3/17/2026
Identify the TSP	5/18/2026
<b>End of FY26</b>	9/30/2026
Exceptions/Waivers Approved by Assistant Secretary to the Army (ASA)	11/20/2026
TSP Milestone Meeting	2/2/2027
Release Draft Report for Concurrent Reviews	4/2/2027
<b>End of FY27</b>	9/30/2027
ADM Meeting	11/3/2027
Final Report Submittal Package to HQ	5/22/2028
Chief's Report Signature	9/15/2028

Complete

Ongoing



# DISCIPLINE SPECIFIC UPDATES/ACTIONS



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- **Planning Technical Lead:** Marty Durkin
- **Engineering Technical Lead:** Patrick Snyder
- **Economics Lead:** Vongmony Var
- **Environmental Lead:** Darren Pecora
- **Cultural Resources Lead:** Zuzana Chovanec
- **Real Estate Lead:** Chris Bukolt
- **Office of Counsel:** Katie Gwin
- **Landscape Architecture Lead:** Sabrina Collins



# VISUAL RESOURCE ASSESSMENT PROCEDURE



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## ■ **What is the VRAP?**

- ▶ The VRAP or the Visual Resource Assessment Procedure is a way to help the Corps of Engineers evaluate the visual and aesthetic qualities of a place and understand how our recommendations could affect how the place looks

## ■ **Team**

- ▶ Interdisciplinary team consisting of Corps of Engineers members and City of St. Augustine representatives

## ■ **How do we do this?**

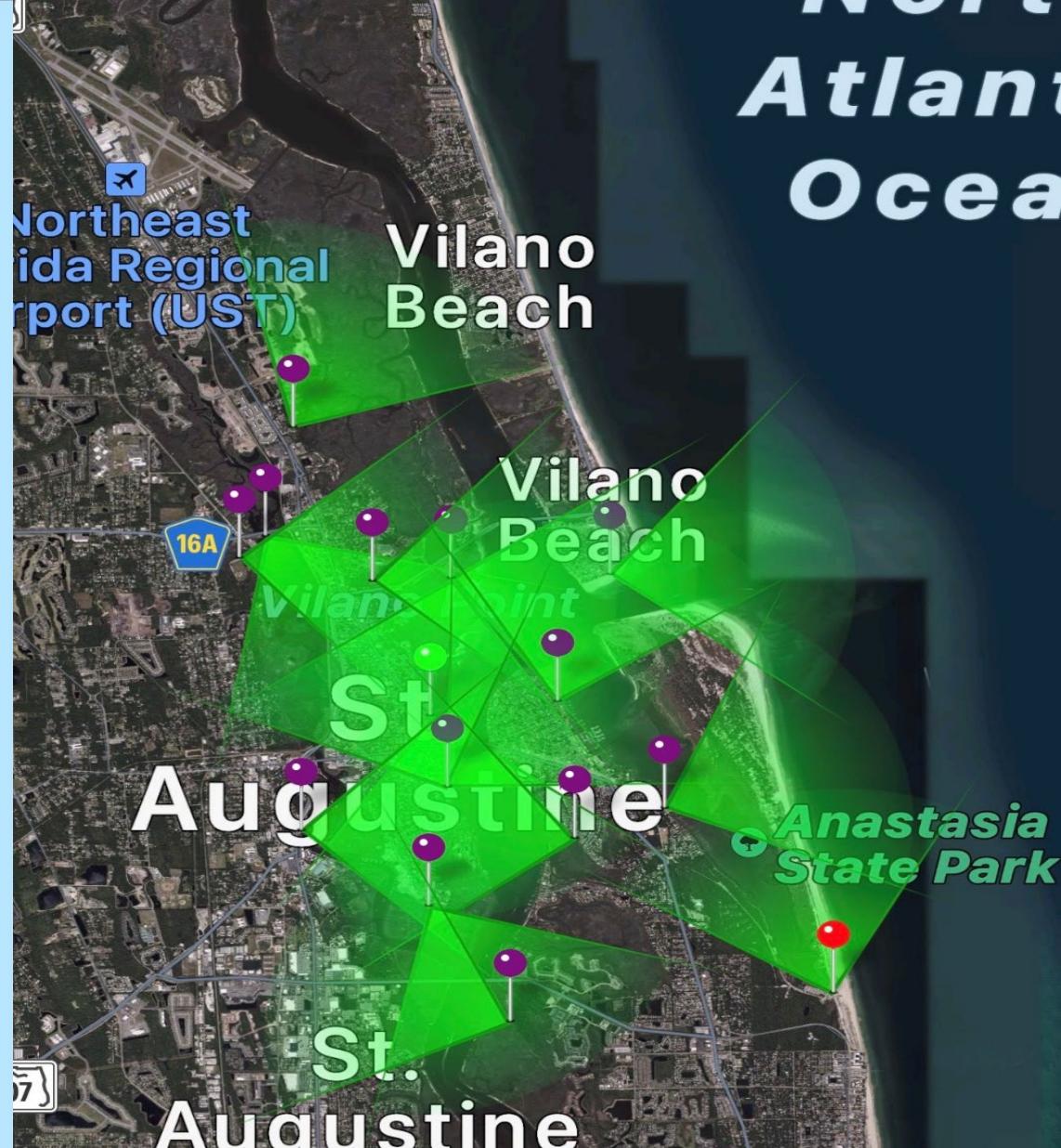
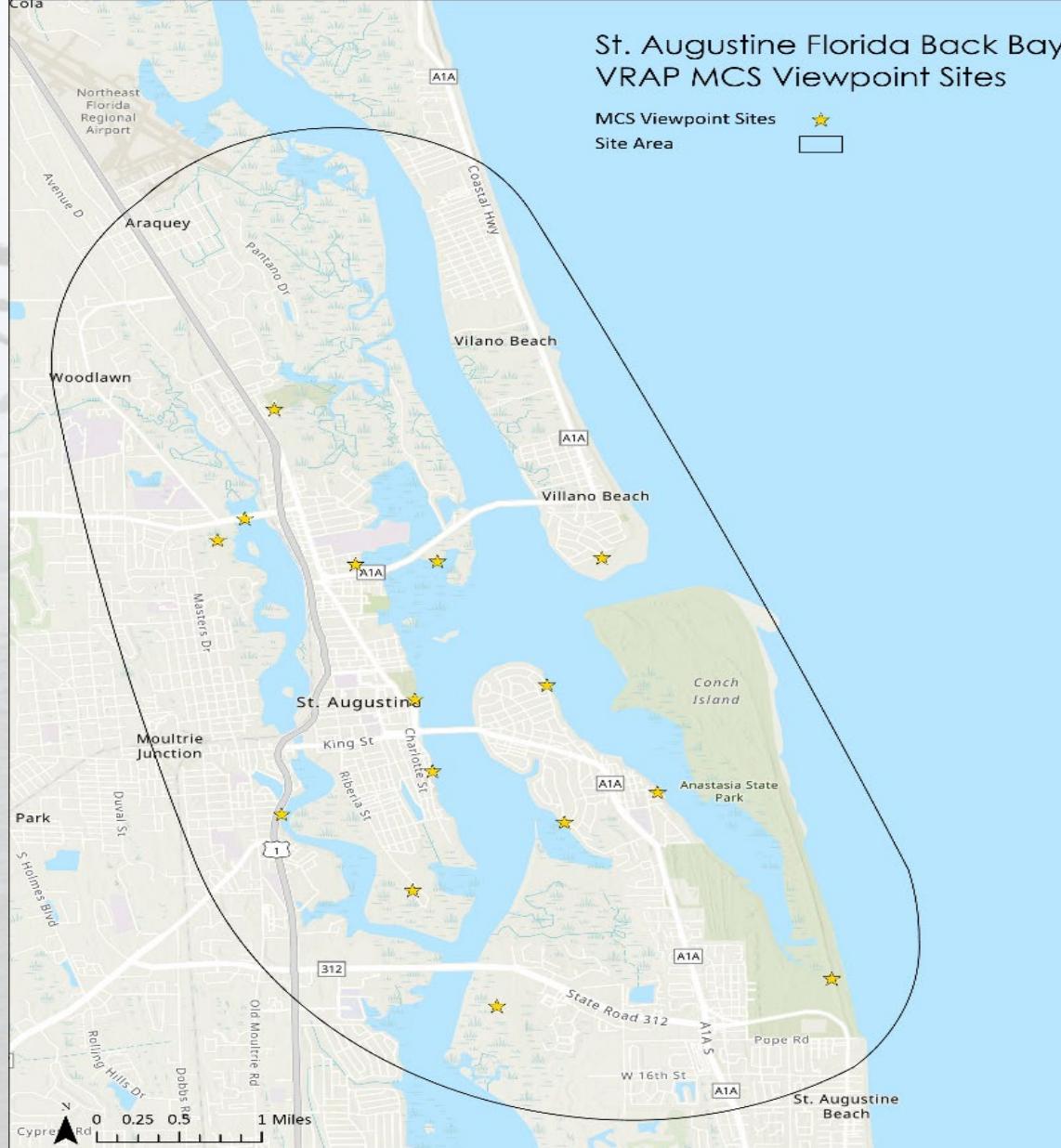
- ▶ Site Evaluations
- ▶ Site Inventory
- ▶ Multidisciplinary Team
- ▶ Following VRAP Manual
- ▶ Forecasting Methods
- ▶ Public input



# VISUAL RESOURCE ASSESSMENT PROCEDURE



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- **Why do we need your input?**

- ▶ We need your input to see how you engage with the St. Augustine area?
- ▶ To see what areas of the St. Augustine area you spend time in to recreate or other activities?
- ▶ To understand the importance of the rivers and waterways around the St. Augustine area to your day-to-day life?

- **How will we be collecting your input?**

- ▶ Comment cards
- ▶ Forms
- ▶ Map Data

- **When will we be asking for your thoughts?**

- ▶ April 24<sup>th</sup> during the St. Augustine Back Bay Semi-Annual Public Workshop



# UPCOMING PUBLIC ENGAGEMENT



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Dates	Events
January 18 <sup>th</sup> , 2024	Monthly Planning Webinar
February 15 <sup>th</sup> , 2024	Monthly Planning Webinar
March 21 <sup>st</sup> , 2024	Monthly Planning Webinar
April 24 <sup>th</sup> , 2024 Starts at 6:00pm	<b>In Person Public Workshop @ Willie Galimore Recreation Center – 399 Riberia St, St. Augustine, FL 32084</b>

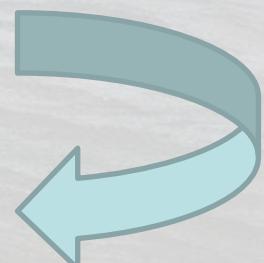


# PUBLIC OUTREACH (STUDY WEBSITE)



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<https://experience.arcgis.com/experience/06bb9c98d9184bd9a374a244f6d27474/>



**Trusted Partners Delivering Value Today for a Better Tomorrow**



# PUBLIC OUTREACH



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U.S. Army Corps of Engineers, Jacksonville District

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Join USACE Jacksonville and the City of St. Augustine Thursday, Sept. 21, from 1-2:30 p.m. for the monthly St. Augustine Back Bay Study planning meeting. Join online at <https://usace1.webex.com/meet/jason.s.harrah> or dial in at 1-844-800-2712; enter access code 199 927 9909 when prompted. @CityStAug

## St. Augustine, Florida, Back Bay CSRM Feasibility Study Monthly Planning Webinar Sept. 21, 2023, 1-2:30 p.m.

Presented by U.S. Army Corps of Engineers  
and the City of St. Augustine

[Join online](#)

<https://usace1.webex.com/meet/jason.s.harrah>

[Call in](#)

Dial **1-844-800-2712**

Enter access code **199 927 9909**





# PUBLIC OUTREACH (SPONSOR SITES)



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[Submit Public Comment](#)

US Army Corps of Engineers Jacksonville District: St. Augustine Florida Back Bay Feasibility Study

Scoping Meeting and Comment Period Notice Letter for USACE St. Augustine Back Bay Coastal Storm Risk Management (CSRM) Feasibility Study (PDF)

The objectives of the study include (1) reduce flooding caused by coastal storms, extreme high tides, and future projected sea level rise in the study area; (2) explore opportunities to increase community resiliency from future coastal storms. Issues that are anticipated include concern for aesthetics, cultural resources, recreation, socioeconomics, environmental justice, wetlands, fish and wildlife resources, threatened and endangered species, and water quality. CSRM measures to be evaluated may include a combination of structural (i.e., tidal gates, seawalls, revetments, levees, drainage improvements, building elevation, etc.), non-structural (i.e., relocation, buyouts, etc.), and natural and nature-based features (i.e., living shorelines, vegetated features, oyster reefs, and maritime forests). Public Comments will be accepted throughout the life of the study.

Back Bay Signing Ceremony January 9th, 2023

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## Back Bay Feasibility Study with the Army Corps of Engineers

Submit Public Comment

[Submit Public Comment](#)

Email: [BackBay@citystaug.com](mailto:BackBay@citystaug.com)

  
US Army Corps of Engineers®  
Jacksonville District  
[Jacksonville District Website](#)

[Monthly Project Delivery Team \(PDT\) Meetings](#)

**Social Media**

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<https://twitter.com/citystaug>



# CLOSING REMARKS/QUESTIONS



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- **Sponsor Remarks**
- **Federal Agency Questions/Comments**
- **State Agency Questions/Comments**
- **Local Agency Questions/Comments**
- **Public Comments**