

# BUILDING RESILIENCE: FEDERAL SHORE PROTECTION PROJECTS IN ST. JOHNS COUNTY

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U.S. Army Corps of Engineers  
Jacksonville District





# OUTLINE



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- Coastal Resilience
- Existing Federal Shore Protection Projects in St. Johns County:
  - St. Augustine Beach
  - South Ponte Vedra and Vilano Beach
  - Ponte Vedra Beach (Study)
- Federal Commitment
- Questions





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# DEFINING COASTAL RESILIENCE



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- Coastal resilience: ability of a community to "bounce back" after hazardous events such as hurricanes, coastal storms, and flooding.
  - Improving coastal resilience is a key objective of the United States Army Corps of Engineers. The mission of the Coastal Storm Risk Management (CSRMR)\* program is to reduce risk to coastal communities while preserving and protecting the natural habitat.
- \* includes projects formally designated as Beach Erosion Control, Shore Protection and Hurricane Storm Damage Reduction

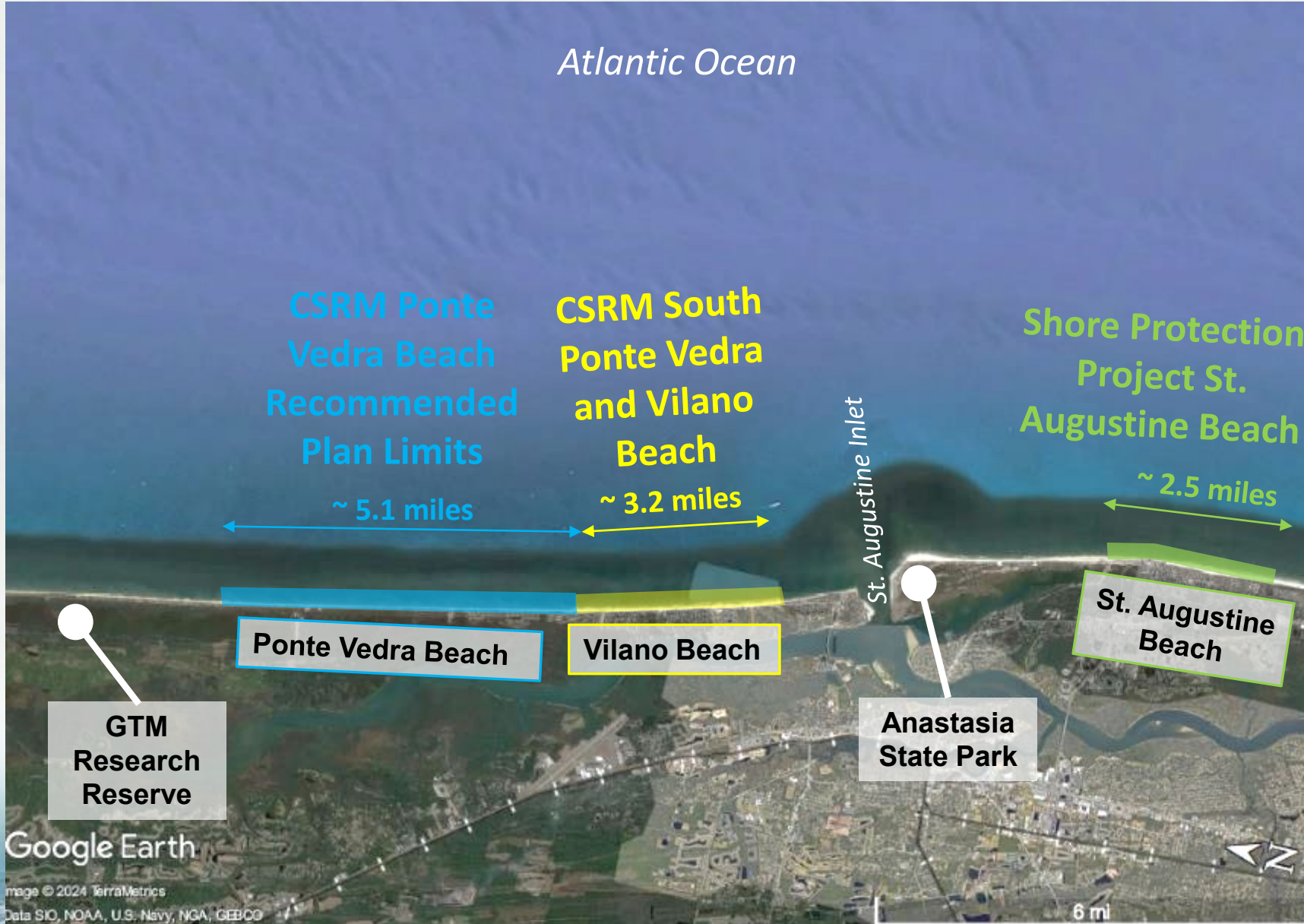


# BEACH RENOURISHMENT IN ST. JOHNS COUNTY



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# Shore Protection Project St. Augustine Beach



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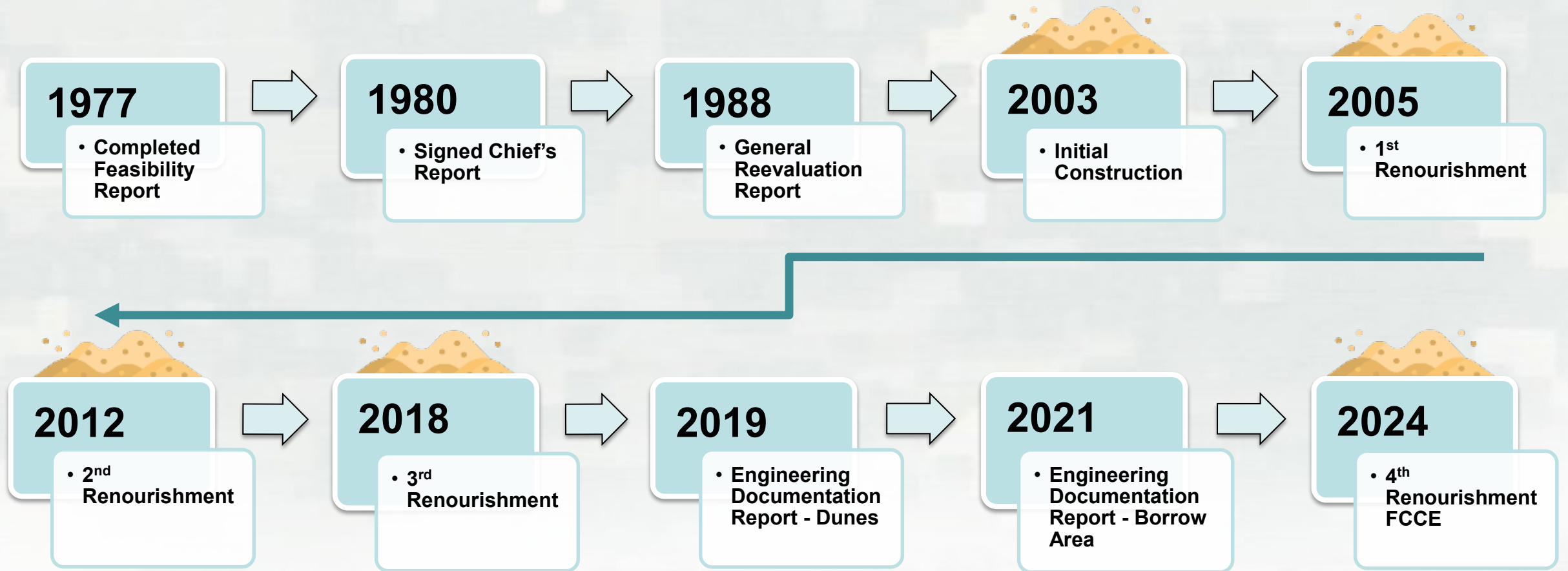


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# HISTORY



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Renourishment interval from study approximately 5-year average.





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# 2018 CONSTRUCTION



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# 2018 CONSTRUCTION



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07-13-2018



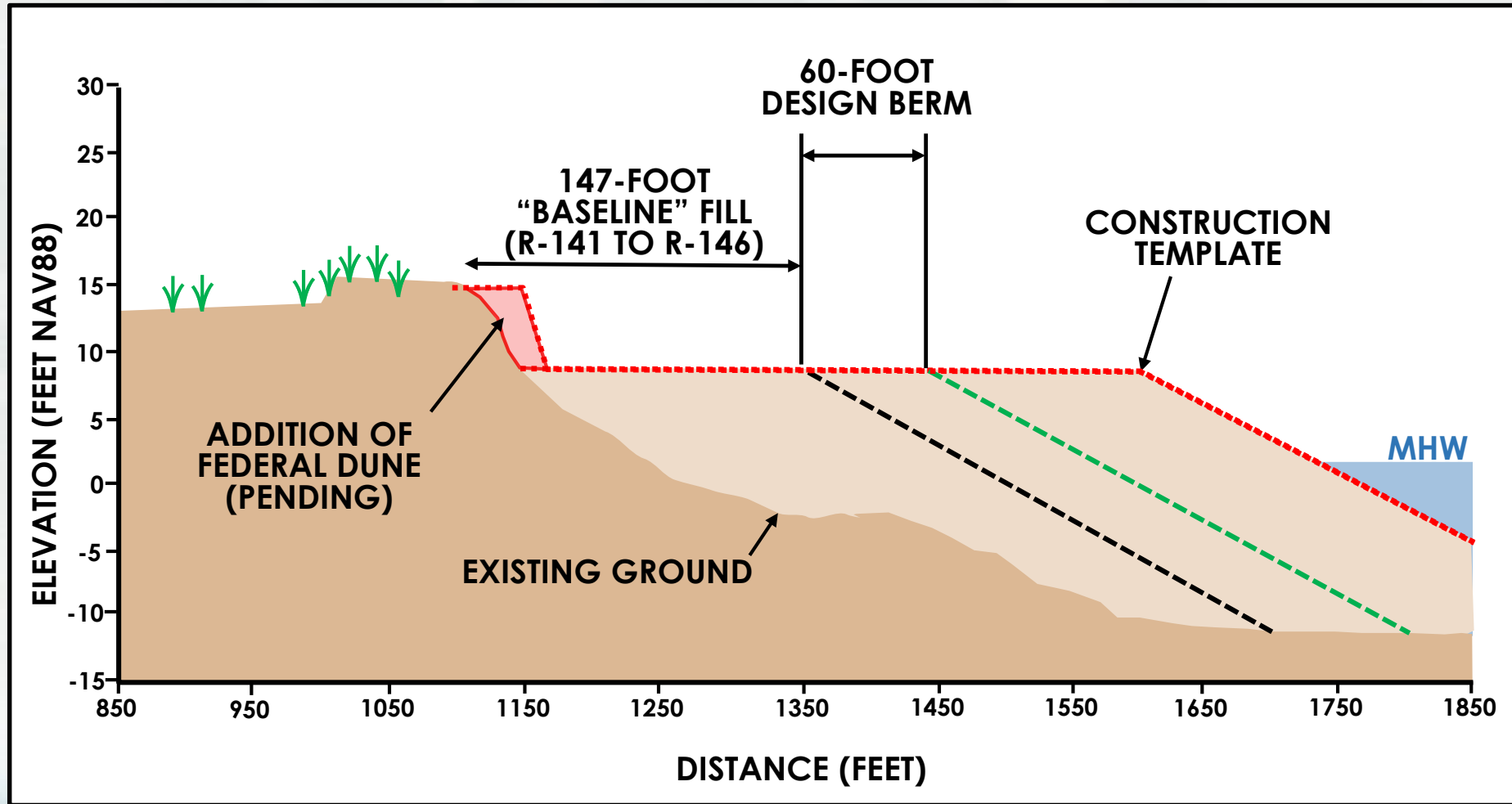


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# DESIGN FEATURES



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TYPICAL DESIGN PROFILE

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# 2024 FCCE CONSTRUCTION



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**Construction Start: February 2024**  
**Great Lakes Dredge & Dock Co. LLC**  
**Awarded Amount \$33,573,125**  
**2.5 million cubic yards**

*Atlantic Ocean*



**Construction End: September 2024**





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# Coastal Storm Risk Management (CSRM) Project South Ponte Vedra and Vilano Beach



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Renourishment interval from study approximately 12-year average.



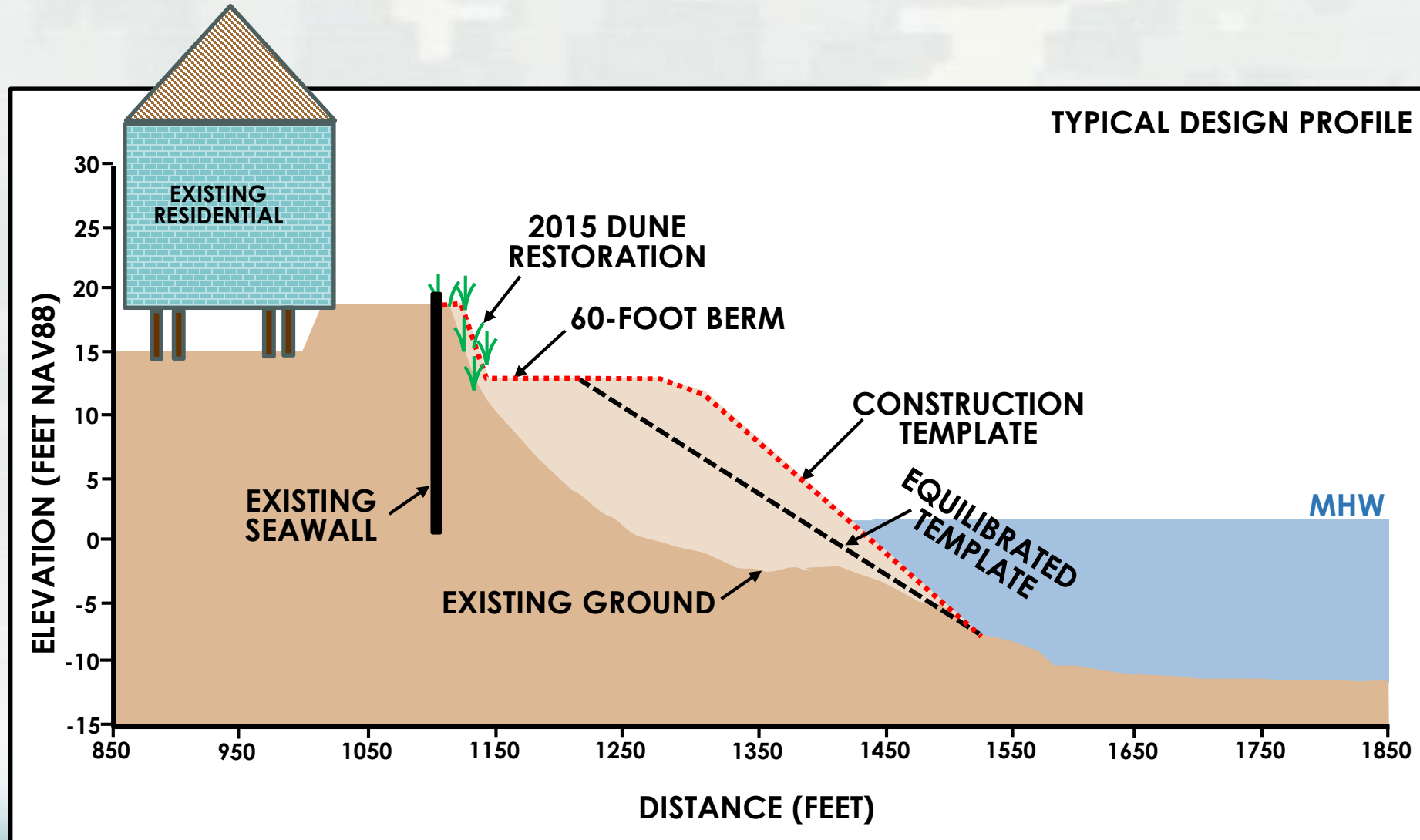


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# DESIGN FEATURES



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# 2021 INITIAL CONSTRUCTION



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# 2024 1<sup>ST</sup> RENOURISHMENT



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**Weeks Marine  
Awarded Amount \$20,262,250  
1.1 million cubic yards**



**Ongoing Dune Planting through March 2024**





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# 2024 1<sup>ST</sup> RENOURISHMENT



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# Coastal Storm Risk Management (CSRM) Project Feasibility Study Ponte Vedra Beach



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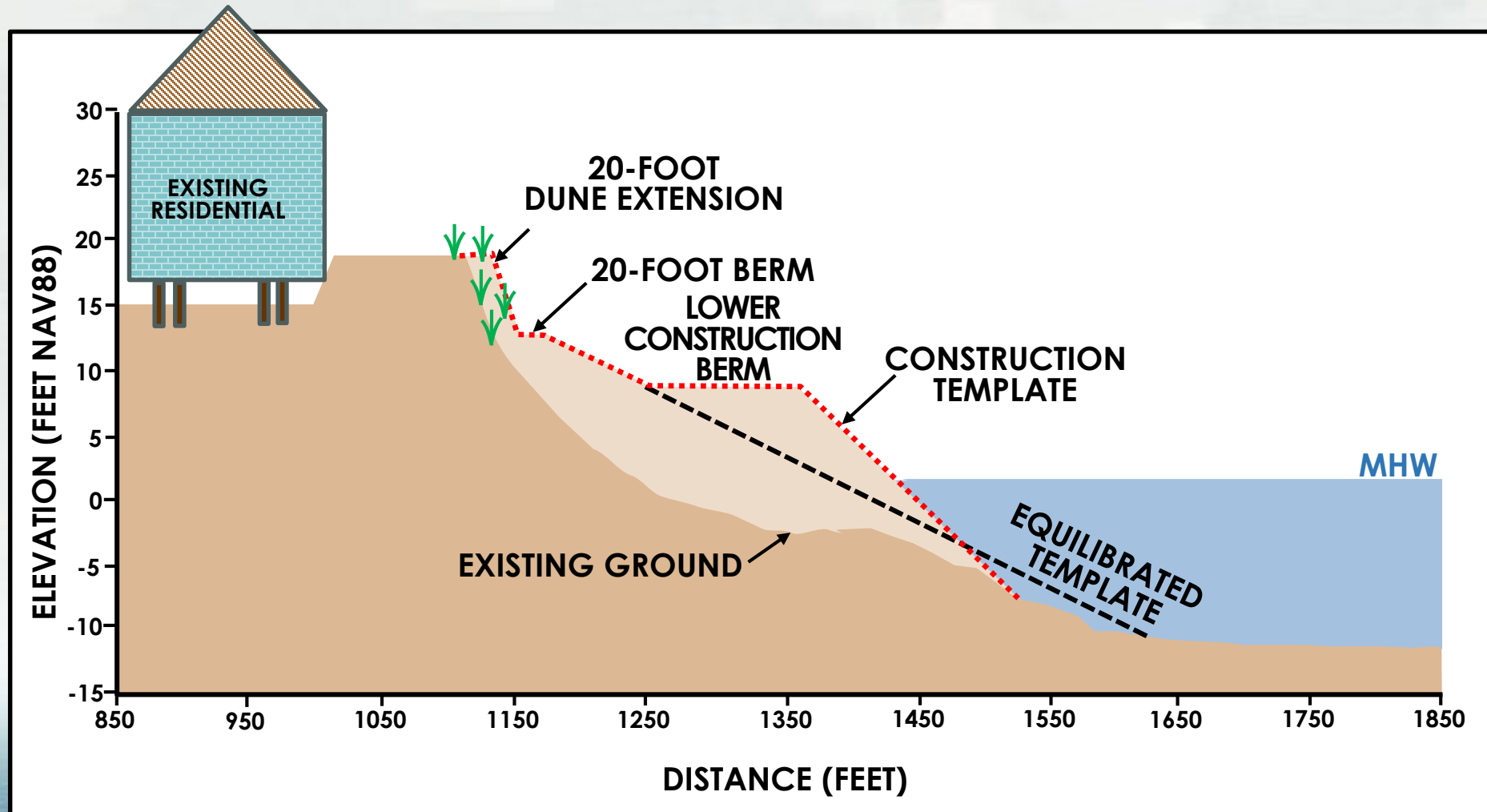
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# DESIGN FEATURES



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## RECOMMENDED PLAN







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# IMPROVING RESILIENCE DURING FEASIBILITY



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- Addressing sea-level rise:
  - ▶ Included in modeling
    - Assess low, intermediate, and high sea level rise curves
  - ▶ Increasing elevations of the design
- Incorporating dunes into the authorized templates
- Dune vegetation
- Storm Suite incorporates recent storm impacts



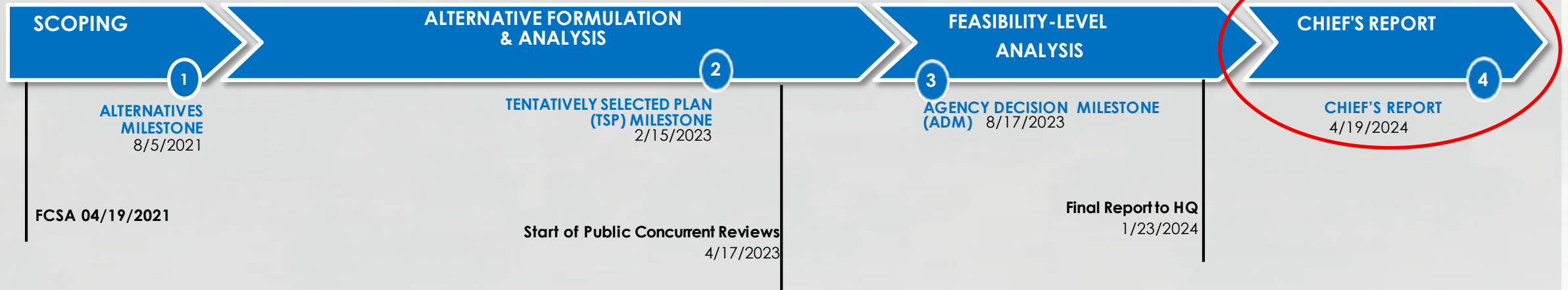
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# WHERE ARE WE AT?



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## 3-YEAR STUDY SCHEDULE







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# FEDERAL COMMITMENT TO COASTAL RESILIENCE



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- Ponte Vedra Beach CSRM + South Ponte Vedra and Vilano Beach CSRM + St. Augustine SPP = A more resilient St. Johns County shoreline
- The two CSRM projects make up 8+ miles of Federally managed beach.
- Other Ongoing Studies: St. Augustine Back Bay
- Future Studies: St. Johns County CSRM South and St. Johns County CSRM Summer Haven
- Programs such as Flood Control and Coastal Emergencies (FCCE) allow for emergency response beach renourishment under the *Stafford Disaster Relief and Emergency Assistance Act*.



# QUESTIONS



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Thank you!

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