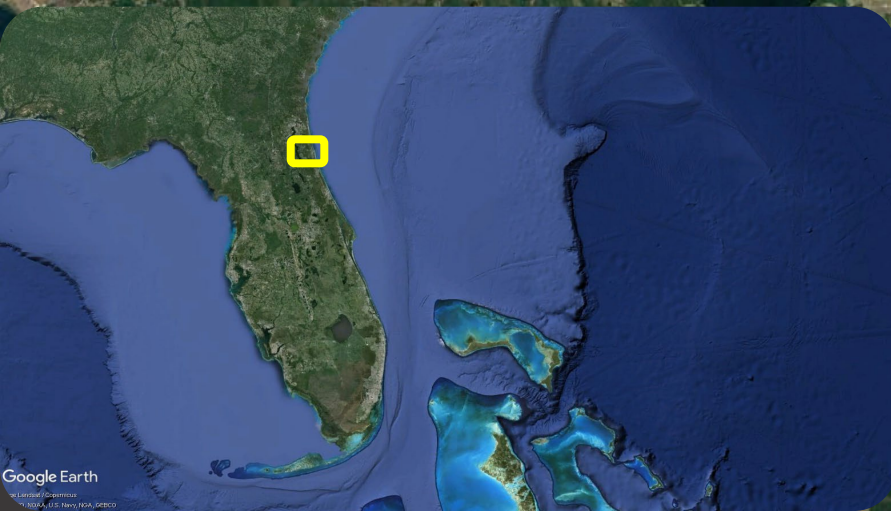


# Coastal Management Projects St. Johns County



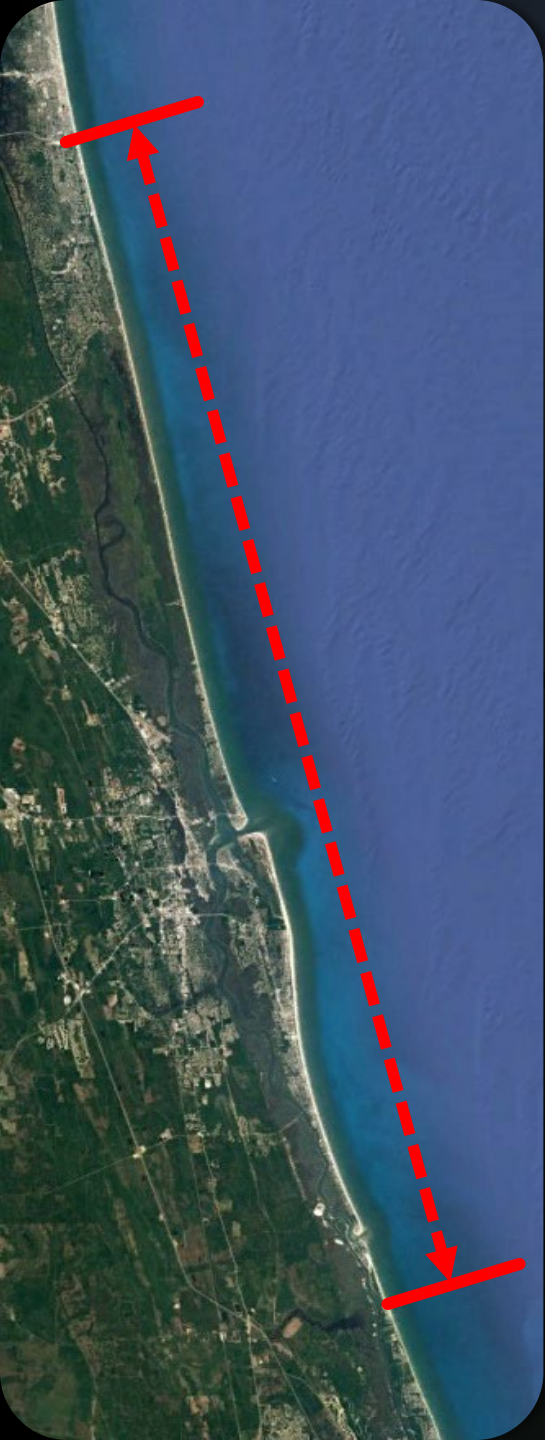
Presented by: Stephen Hammond

Florida Shore & Beach Preservation Association  
37<sup>th</sup> Annual National Conference on Beach Preservation Technology  
February 7-9, 2024



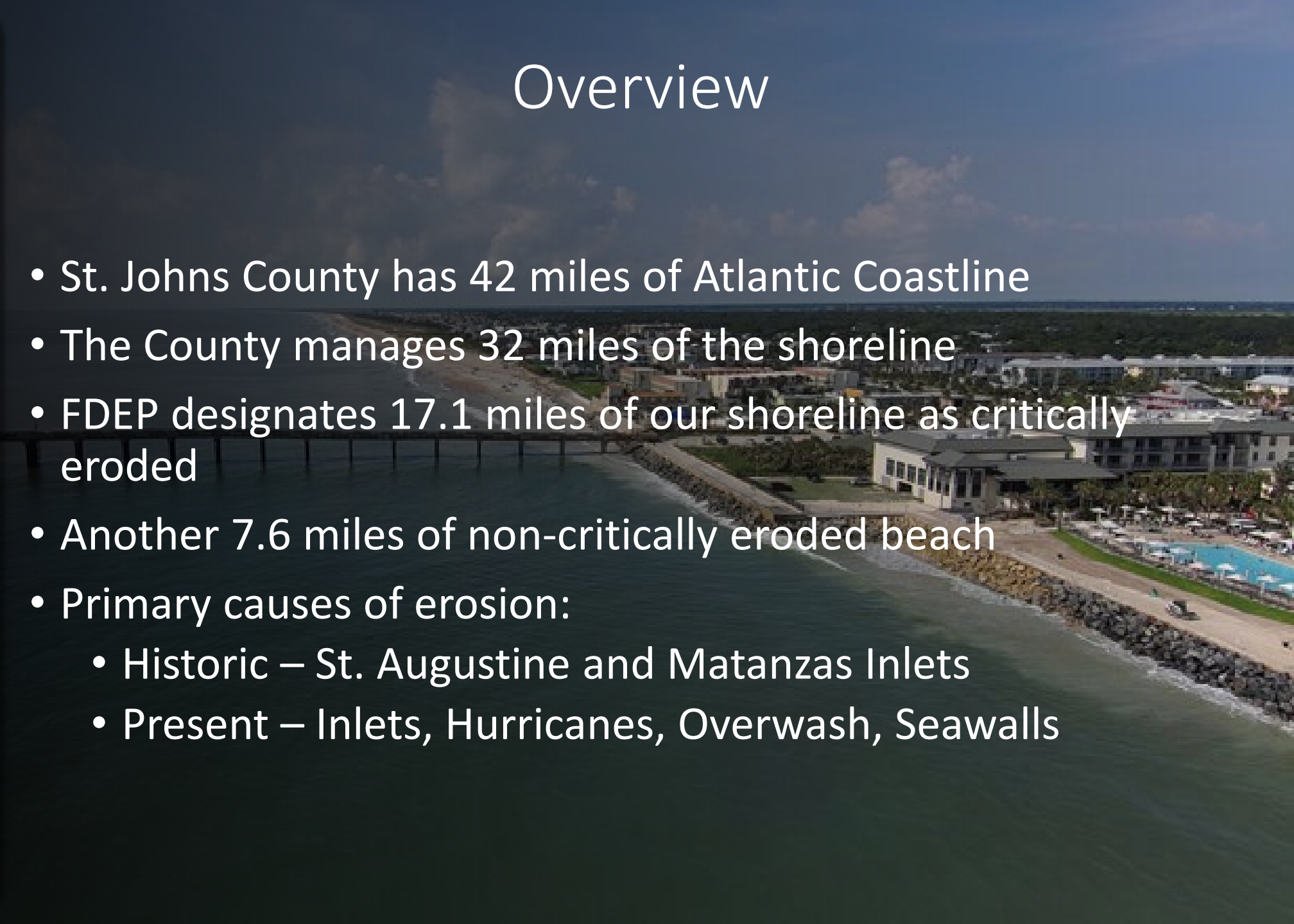
# Overview

- St. Johns County has 42 miles of Atlantic Coastline
- The County manages 32 miles of the shoreline
- FDEP designates 17.1 miles of our shoreline as critically eroded
- Another 7.6 miles of non-critically eroded beach
- Primary causes of erosion:
  - Historic – St. Augustine and Matanzas Inlets
  - Present – Inlets, Hurricanes, Overwash, Seawalls



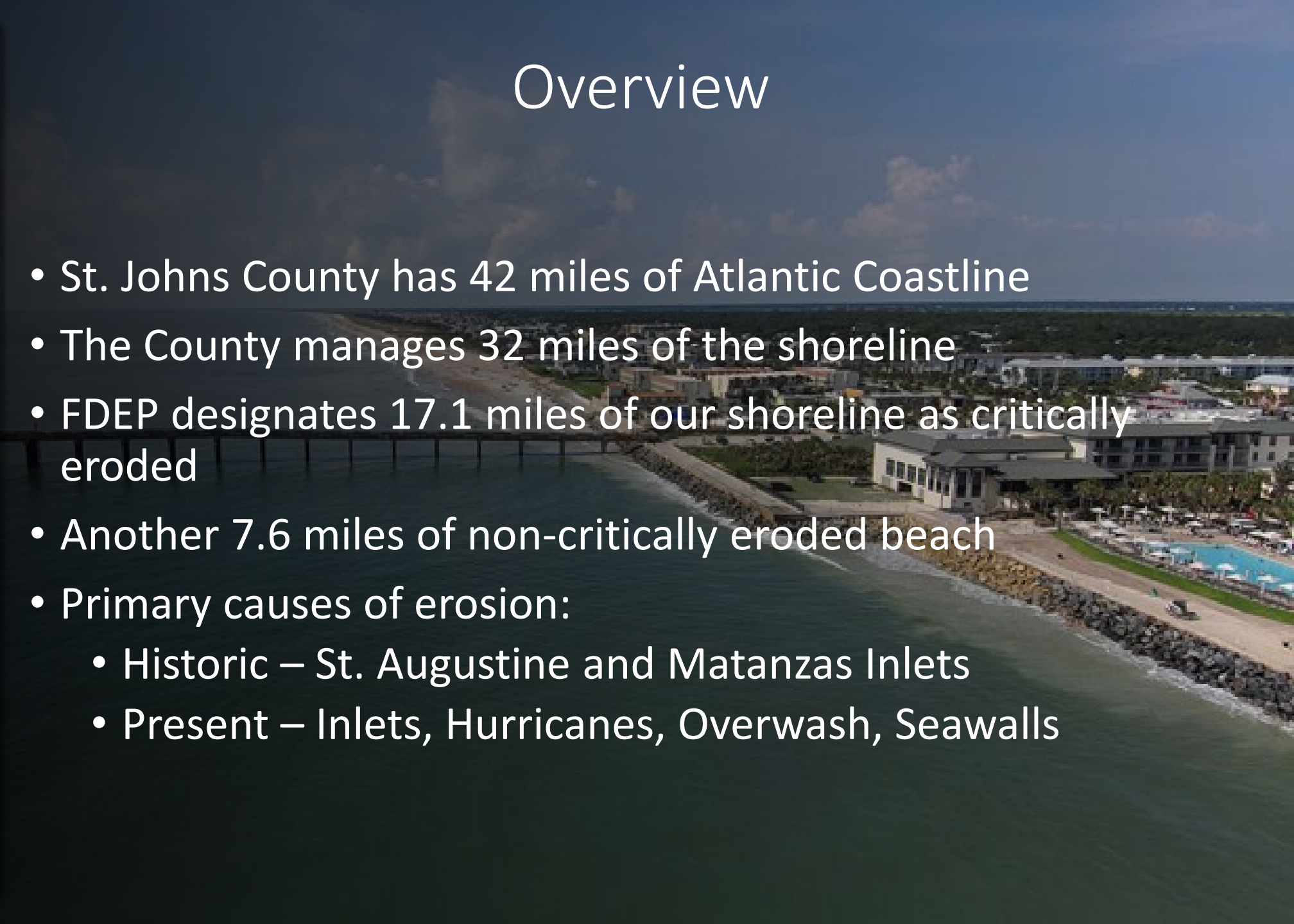
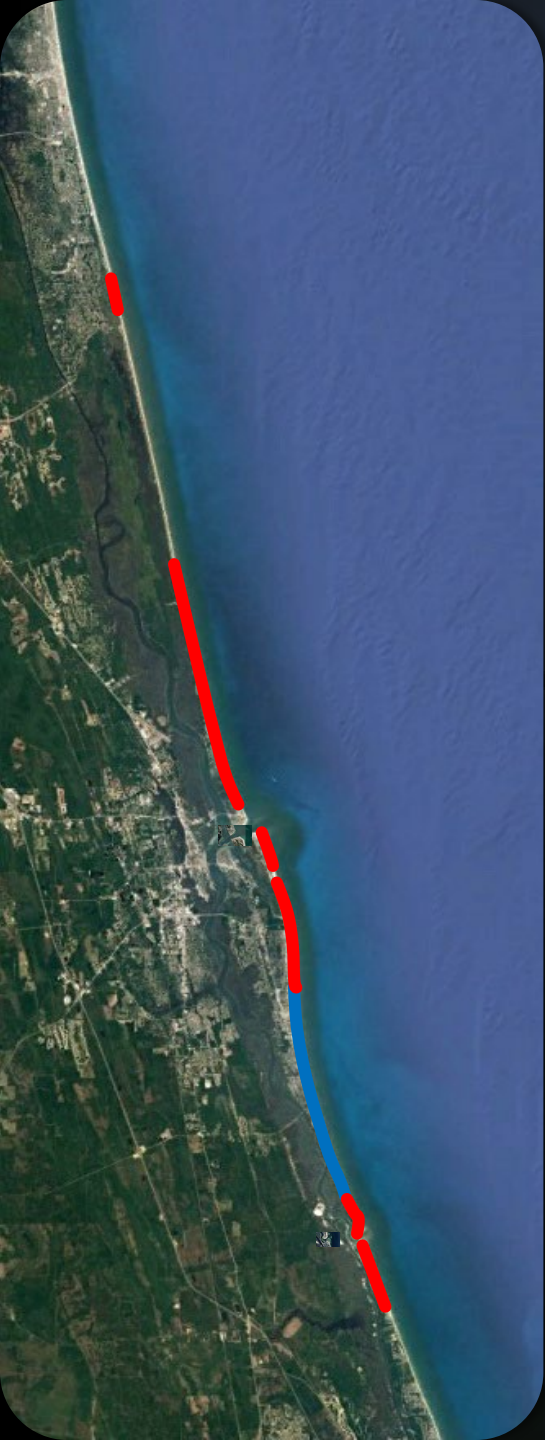
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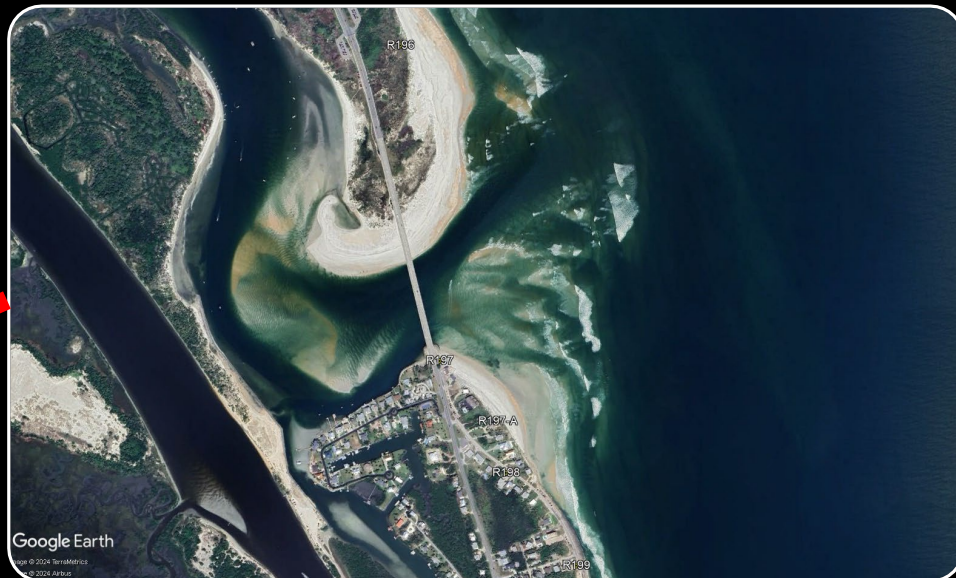
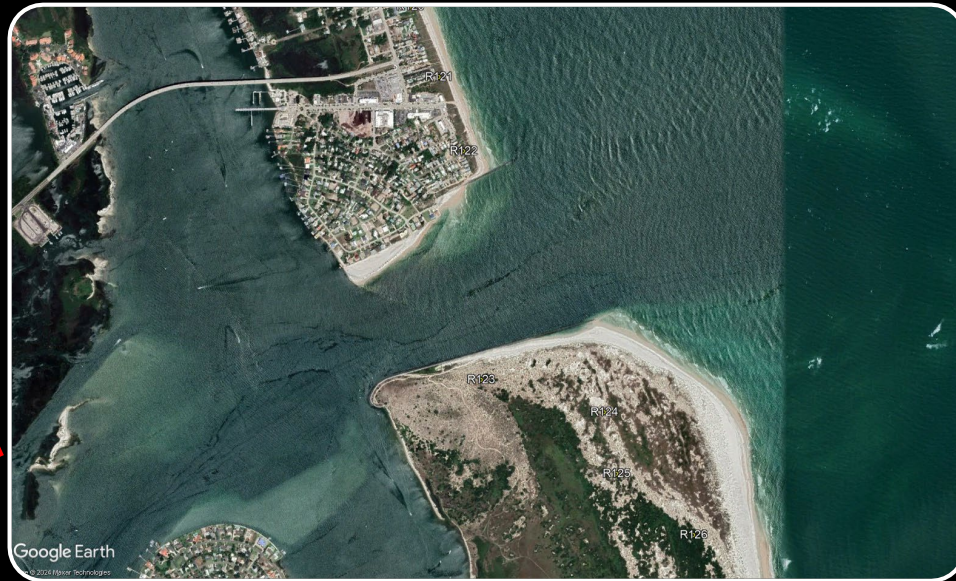


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An aerial photograph of a coastal area. On the left, there is a large body of blue water. A narrow strip of land separates the water from a larger body of water on the right. The land is green and appears to be a mix of natural vegetation and some structures. In the foreground, there is a large, modern building with a flat roof, surrounded by a paved area and some landscaping. A swimming pool is visible in the lower right corner. The sky is clear and blue.

# Overview

- In 2023 work started on 6 coastal management projects
  - 4 have been completed and 2 are ongoing
- There is an ongoing USACE feasibility study moving towards a chief's report
- In 2024/2025 we plan to kick off 4 projects

# Projects in 2023



FEMA Cat B



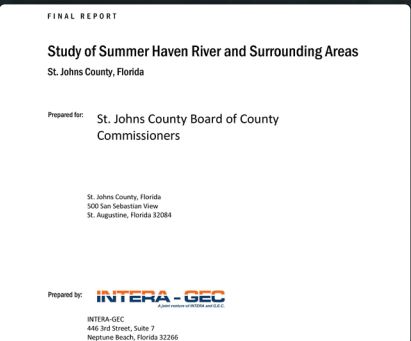
SPV Park Cat G



Porpoise Point



Vilano CSR



Summer Haven Feasibility



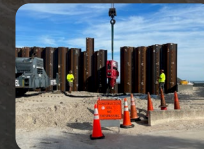
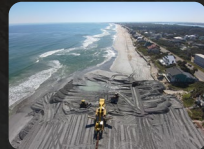
Summer Haven ICWW



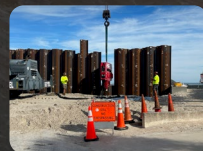
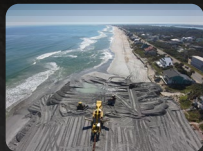
Environmental Monitoring

# FEMA Dune Enhancement – Ian/Nicole

- **Construction:** July 14, 2023 – December 13, 2023
- **Borrow Area:** Upland Mines, Keuka & Goldhead (Vulcan)
- **Length:** 6.7 miles
- **Volume Placed:** 150,900 CY
- **Sea Oats Planted:** 470,000 (Earth Balance & Terra Crafters)
- **Engineer:** Olsen Associates
- **Contractor:** Phillips & Jordan
- **Cost:** \$12 M
- **Funding:** FEMA & State



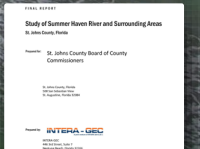
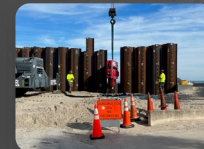






# S. Ponte Vedra & Vilano Beach CSR

- **Construction:**  
August 2024 – December 2023
- **Length:** 3 miles (R102.5 – R117.5)
- **Borrow Area:** N3
- **Volume Placed:** 1.1M CY
- **Sea Oats to be planted:** 390,000  
(Earth Balance)
- **Engineer:** USACE
- **Contractor:** Weeks Marine
- **Cost:** \$20 M
- **Funding:** FCCE 100%





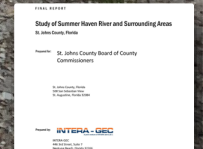






# S. Ponte Vedra Park – Cat G Repairs

- **Construction:** Sept 18, 2023 – Sept 26, 2023
- **Length:** 450 ft (R-95)
- **Borrow Area:** Upland Mines, Keuka & Goldhead (Vulcan)
- **Volume Placed:** 2,300 CY
- **Sea Oats Planted:** 3,365 (Cross Creek Environmental)
- **Engineer:** INTERA-GEC
- **Contractor:** Southeastern Marine Group
- **Cost:** \$300,000
- **Funding:** FEMA & County







**CAUTION**  
HARD HAT  
SAFETY GLASSES  
WORK GLOVES  
WORK BOOTS  
MUST BE WORN ON THIS JOB SITE

**SOUTHEASTERN MARINE GROUP, INC.**  
772-321-0652

# Porpoise Point Drive Armoring

- Construction of a seawall with a riprap connection to the Federal Structure
- **Construction:** October 2023 – February 2024
- **Length of Seawall:** 125 ft
- **Length of riprap:** 50 ft
- **Engineer:** AtkinsRéalis
- **Contractor:** Construct Co.
- **Cost:** \$1 M
- **Funding:** County



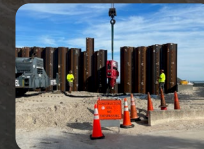
# Summer Haven Dredge Disposal - USACE

- **Construction**  
October 2023 – April 2024
- **Length:** 1.3 miles (R202 – R206.5)
- **Borrow Area:** ICWW
- **Volume Placing:** 500,000 CY
- **Engineer:** USACE
- **Contractor:** Southwinds Construction
- **Funding:** Federal and FIND



# Environmental/Physical Monitoring

- Completed permit required tilling of eligible project areas
- Completed permit required physical monitoring
- Completed sea turtle monitoring for the 2023 season
  - 1,205 nests laid
  - 133 were green sea turtles
  - 79,811 hatchlings



# Summer Haven Feasibility Study

- County-funded study of the Summer Haven River and the surrounding areas
- Goal to determine the effects of having the Summer Haven River opened or closed
- Develop alternatives to keep the river open
- Phase two of the study will go into the economic value of having the river open in the surrounding area and the County

FINAL REPORT

## Study of Summer Haven River and Surrounding Areas

St. Johns County, Florida

Prepared for: St. Johns County Board of County Commissioners

St. Johns County, Florida  
500 San Sebastian View  
St. Augustine, Florida 32084

Prepared by: **INTERA - GEC**  
A joint venture of INTERA and G.E.C.

INTERA-GEC  
446 3rd Street, Suite 7  
Neptune Beach, Florida 32266



# Projects in 2024



SPV Cat G



Porpoise Point  
SSP



Coastal Management  
Plan



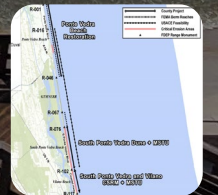
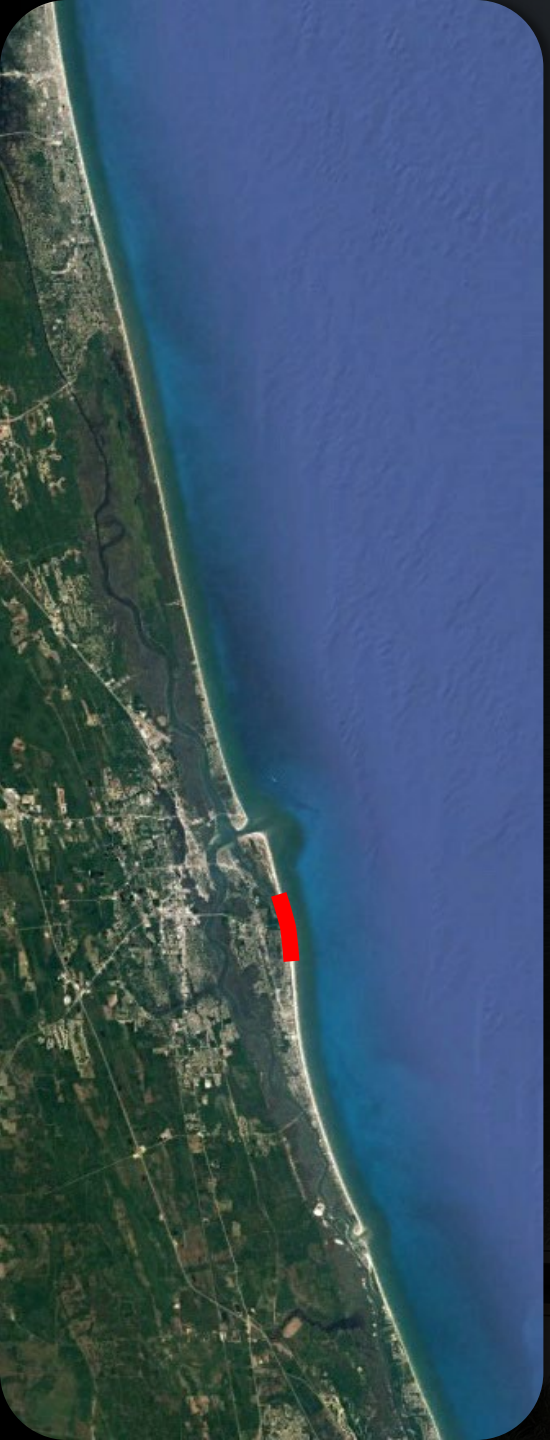
PVB Project

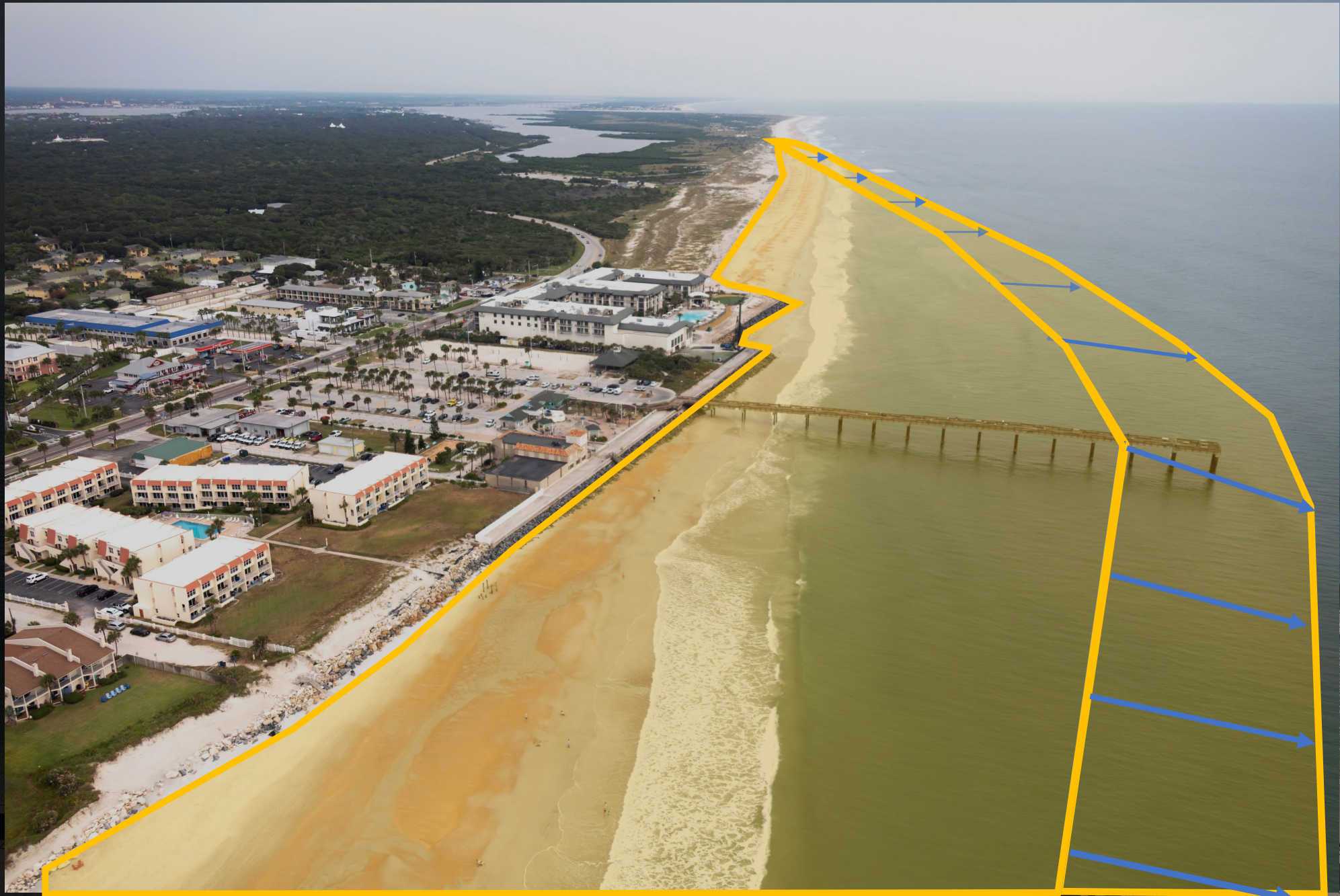
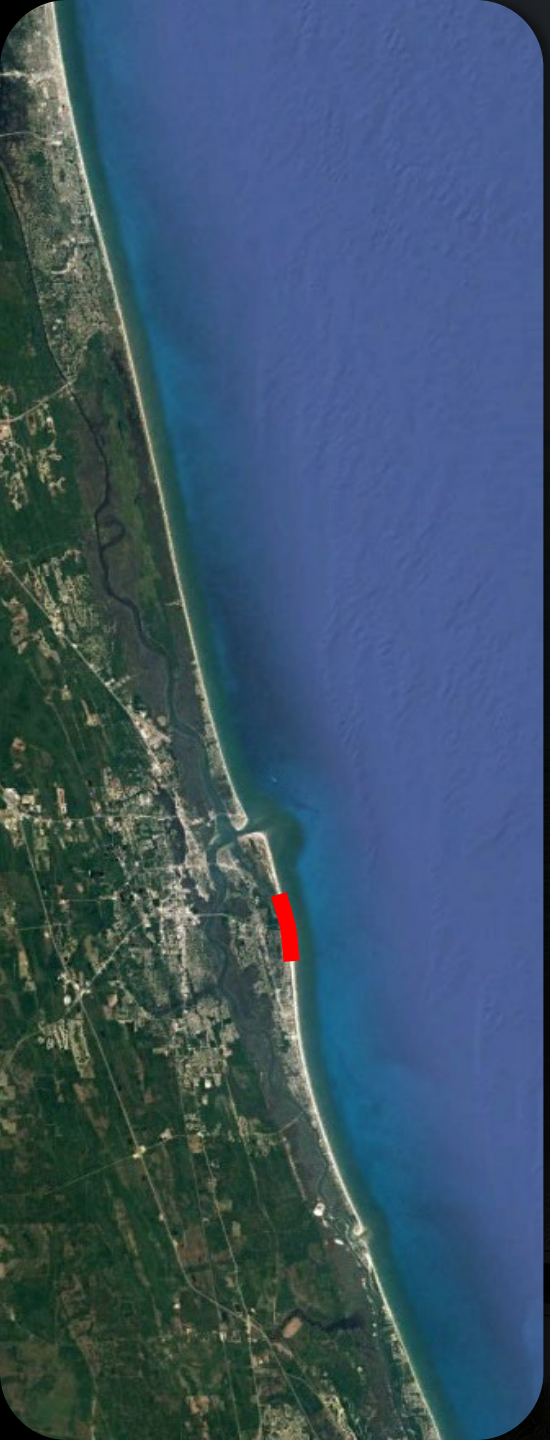


St Aug SPP

# USACE St. Augustine Beach SPP

- **Construction:**  
February 2024 – September 2024
- **Duration:** 7 months
- **Length:** 3 miles (R136.4 – R146.6)
- **Borrow Area:** S1
- **Volume Placed:** 2.5M CY
- **Engineer:** USACE
- **Contractor:** Great Lakes Dredge and Dock Company
- **Cost:** \$33.5 M
- **Funding:** FCCE 100%

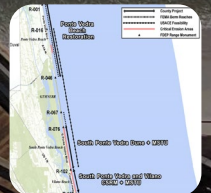






# Ponte Vedra Beach Nourishment

- **Construction:** As early as May 1, 2024 – October 2024/March 2025
- **Duration:** ~130 days
- **Length:** 8.9 Miles (R1 – R46.2)
- **Borrow Area:** N1
- **Volume to place:** 2,000,000 CY
- **Sea Oats to plant:** 1,225,000
- **Engineer:** Olsen Associates
- **Contractor:** Currently out to bid
- **Cost:** Currently out to bid
- **Funding:** State and local



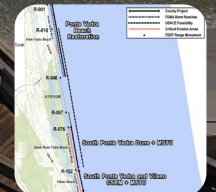
# S Ponte Vedra Dune - Cat G Repair

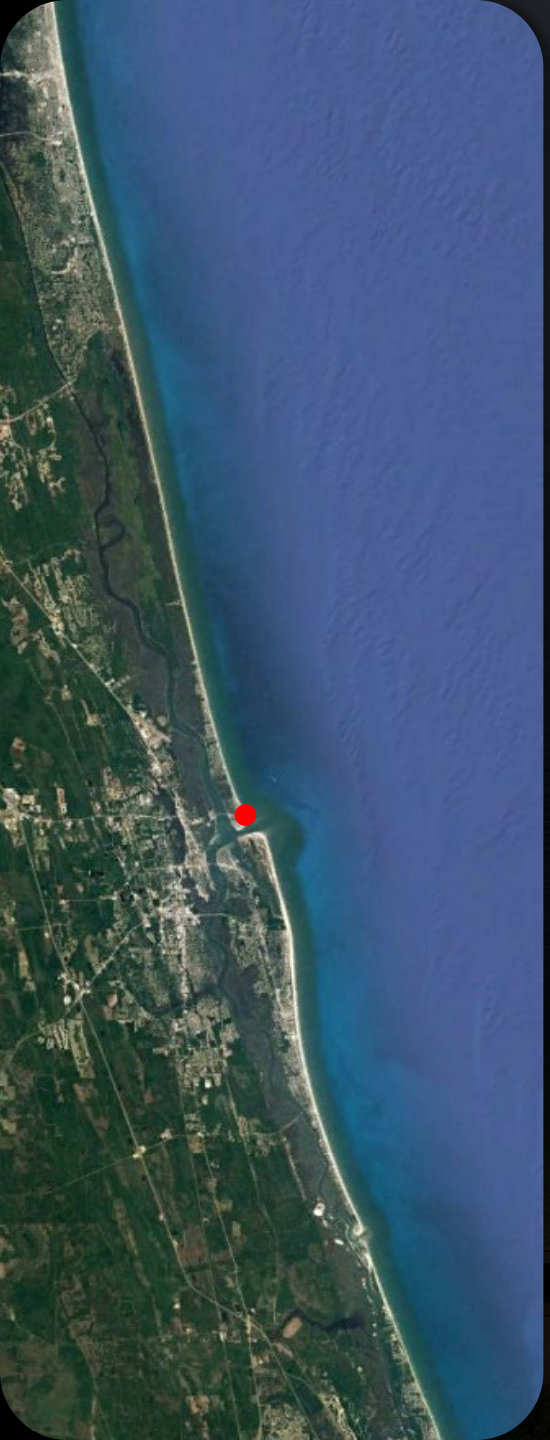
- **Initial Construction:** Summer 2022
- **Construction:** ~2025
- **Length:** 5 Miles (R76 – R102.5)
- **Borrow Area:** N1
- **Volume to place:** 700,000 CY
- **Sea Oats to plant:** 1,225,000
- **Engineer:** RFQ out right now
- **Funding:** FEMA & State



# Porpoise Point Shore Stabilization

- Project to pick up where the USACE CAP study finished off
- Construct a structure or structures to help reduce the wave impact and trap sand on the shoreline
- Design, Permitting, and Engineering will be solicited later this month
- The county received \$2 M from the Florida Division of Emergency Management to complete the PED

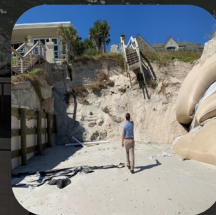




-  - Breakwater
-  - Dune
-  - Beach Fill

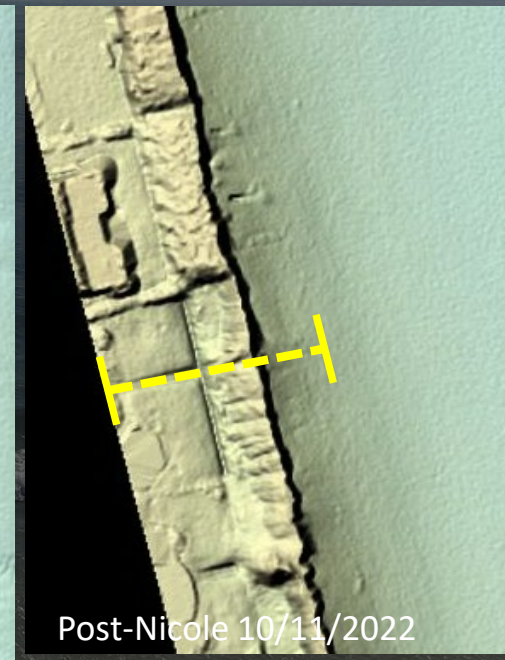
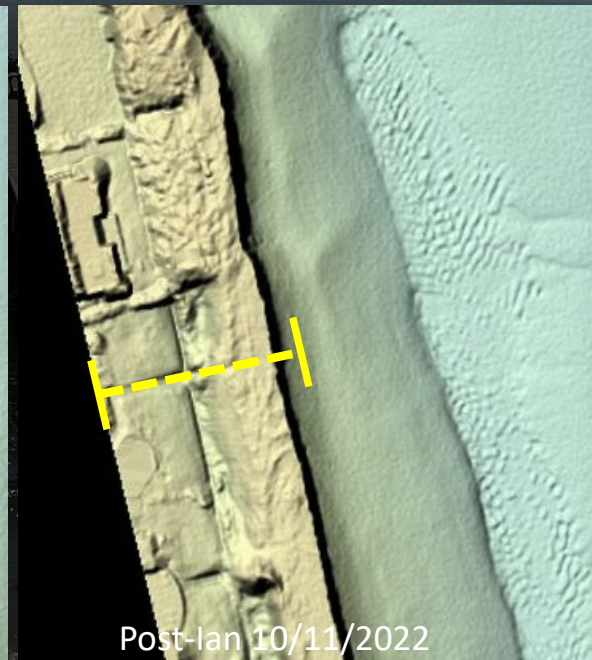
# Coastal Management Plan

- The County is in the final stages of the procurement process
- The goal of the plan is to perform an intensive review of the County's coastline
- Analyzing the physical, environmental, and economic benefits of the coastal environment
- Develop an array of coastal management practices
- Deliverables will include a report of the findings and a plan for Board adoption



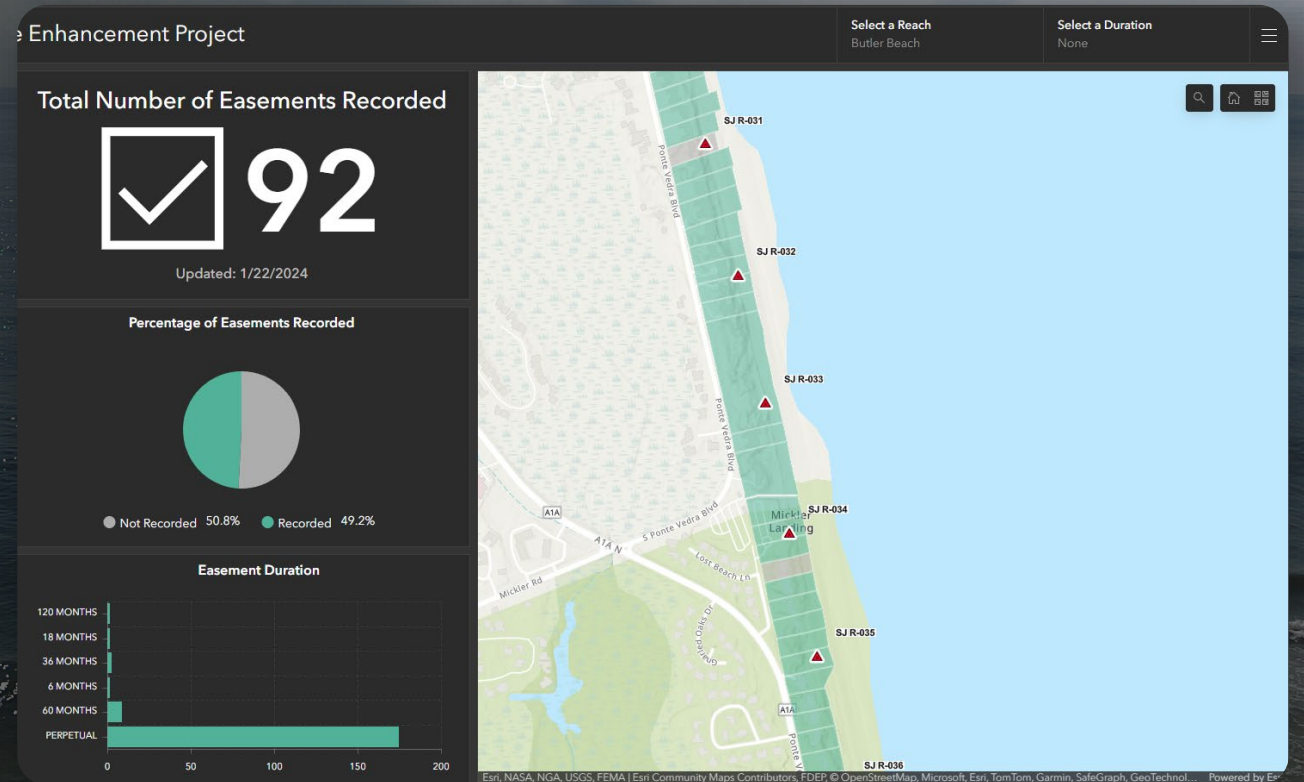
# Coastal Management Tools

- LiDAR survey flights pre- and post- hurricane season
- Online easement dashboard
- The County utilizes the Skydio X2E Drone
  - Project Progress updates
  - Pre- and post- project photos
  - Pre- and post- storm analysis
- Free “Stay off the Dune” signs for residents
- Project template KMZ files



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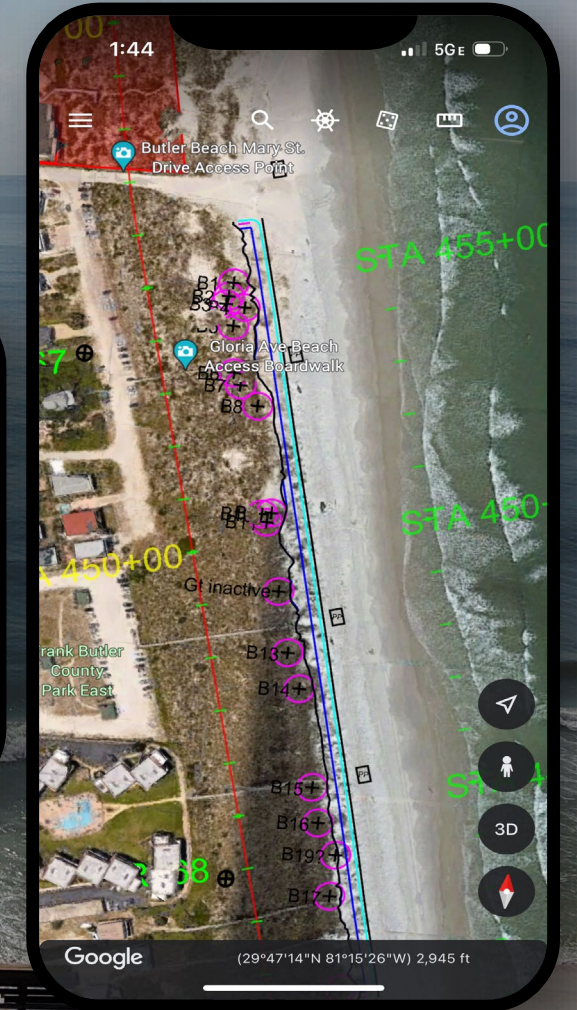
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**DUNE  
PROJECT  
PLEASE STAY  
OUT OF  
THIS AREA**

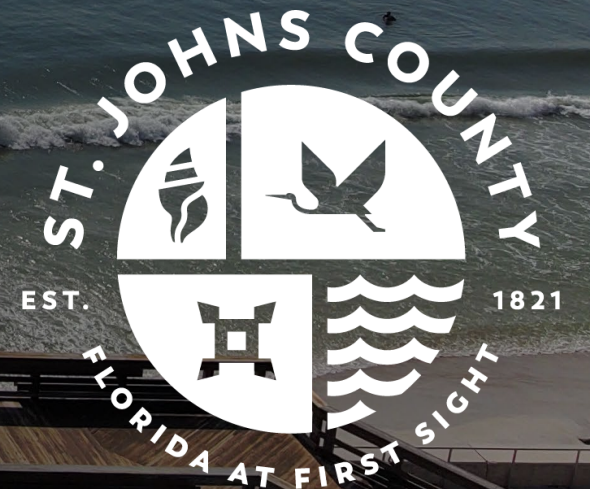
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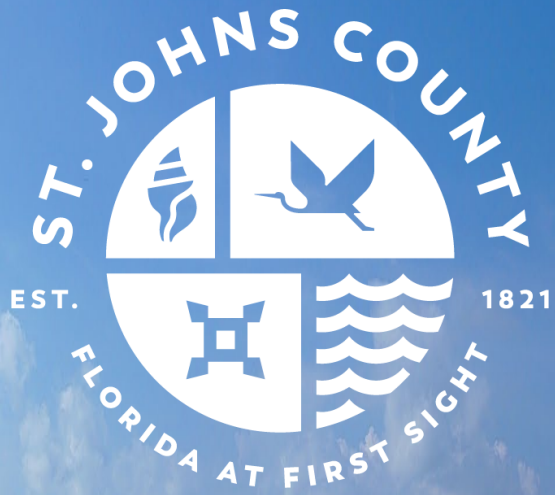
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# Acknowledgements

- St. Johns County Board of County Commissioners
- St. Johns County leadership and the Coastal Management team
- Various government agencies and our consultants





**Thank You!**

Contact Information

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St. Johns County Disaster Recovery

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