FLAGLER COUNTY FLORIDA

June 16, 2025

Workshop

Beach Management and Funding Discussion

Agenda

- Introduction - How We Got Here
  - *Coastal Engineering Administrator, P. Ansley Wren-Key, Ph.D.*
- Beach Management Study & Plan
  - *Coastal Engineering Consultants*
- Funding Sources Typically Used
  - *Coastal Engineering Administrator, P. Ansley Wren-Key, Ph.D.*
- What is Need and What is Available?
- Discussion and Next Steps

FLAGLER COUNTY FLORIDA

How We Got Here

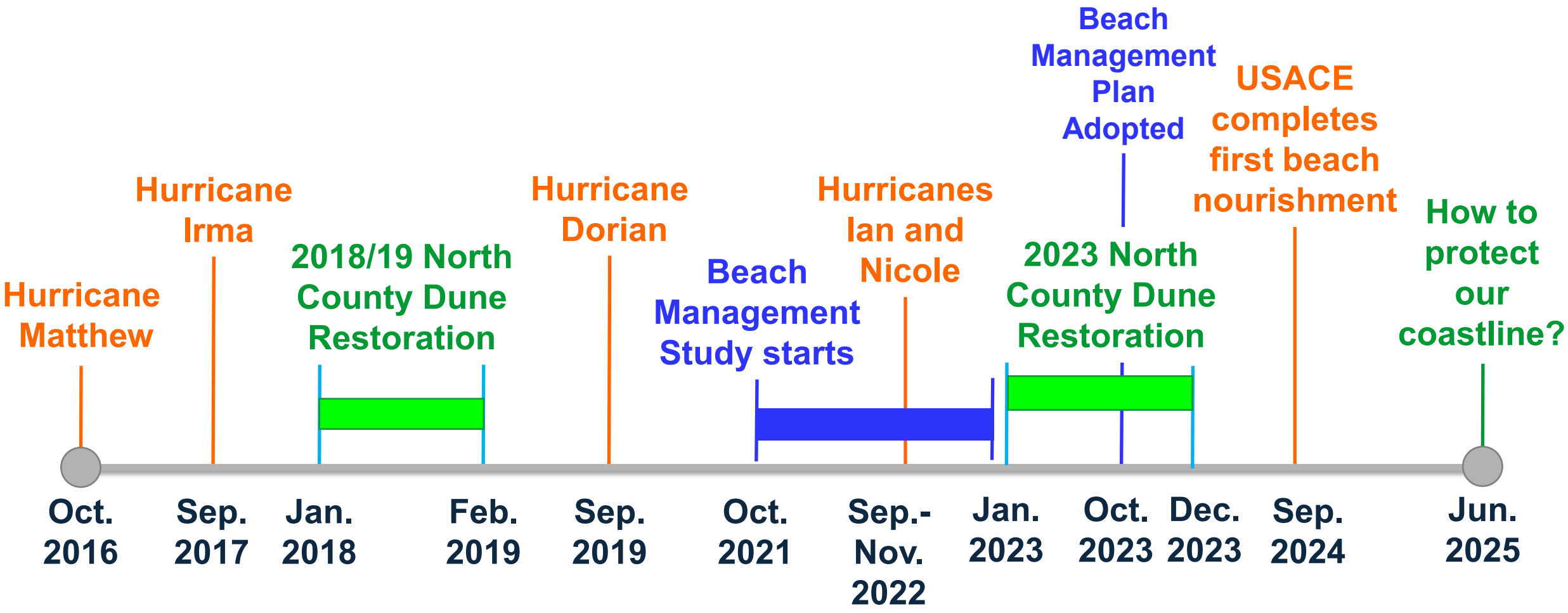
Prior to Hurricane Matthew

- Gradual Erosion Over Time
- Limited Immediate Threat

Post Hurricane Matthew

- Recognized the need and funded a Beach Management Study
- Adopted a Beach Management Plan
- Completed several emergency projects
- Completed Reach 1 Construction
- Several projects remain and are in various stages of permitting, design and implementation

Timeline of Events



FLAGLER COUNTY FLORIDA

FLAGLER COUNTY
BOARD OF COUNTY COMMISSIONERS

Beach Management Workshop

June 16, 2025

Beach Management Plan and Cost Development Overview

Chris Creed, P.E.
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Beach Management Planning

- Beach/Dune restoration and maintenance determined to be most feasible approach to beach management
  - Identify the problem scope (sediment deficit and long-term sand demand)
  - Develop scope of initial restoration
  - Develop scope and frequency of future maintenance events (50 yrs)
  - Identify sand source(s)
  - Develop probable cost to construct and maintain project
    - Dredge using sand from offshore
    - Truck Haul using sand from upland
  - Identify funding requirements and availability (grants, local, etc..)

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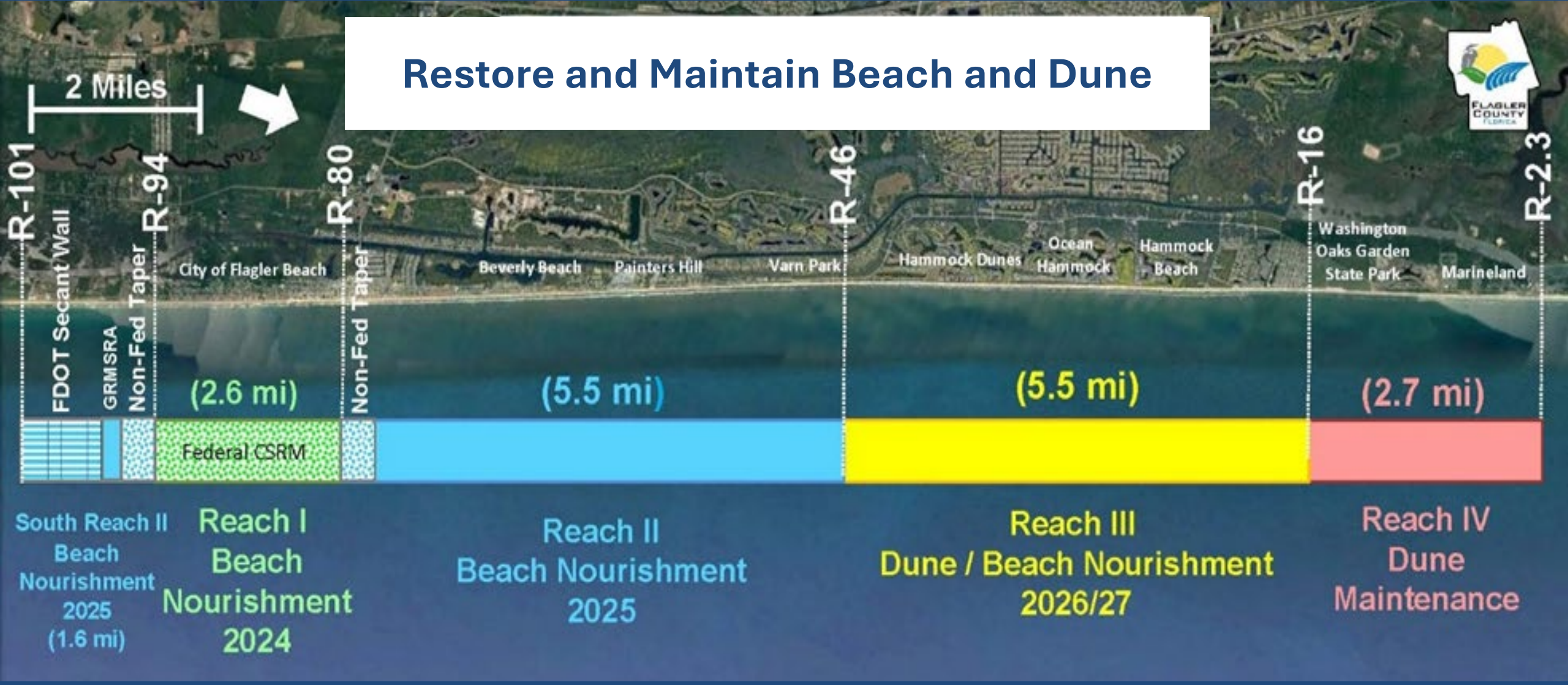
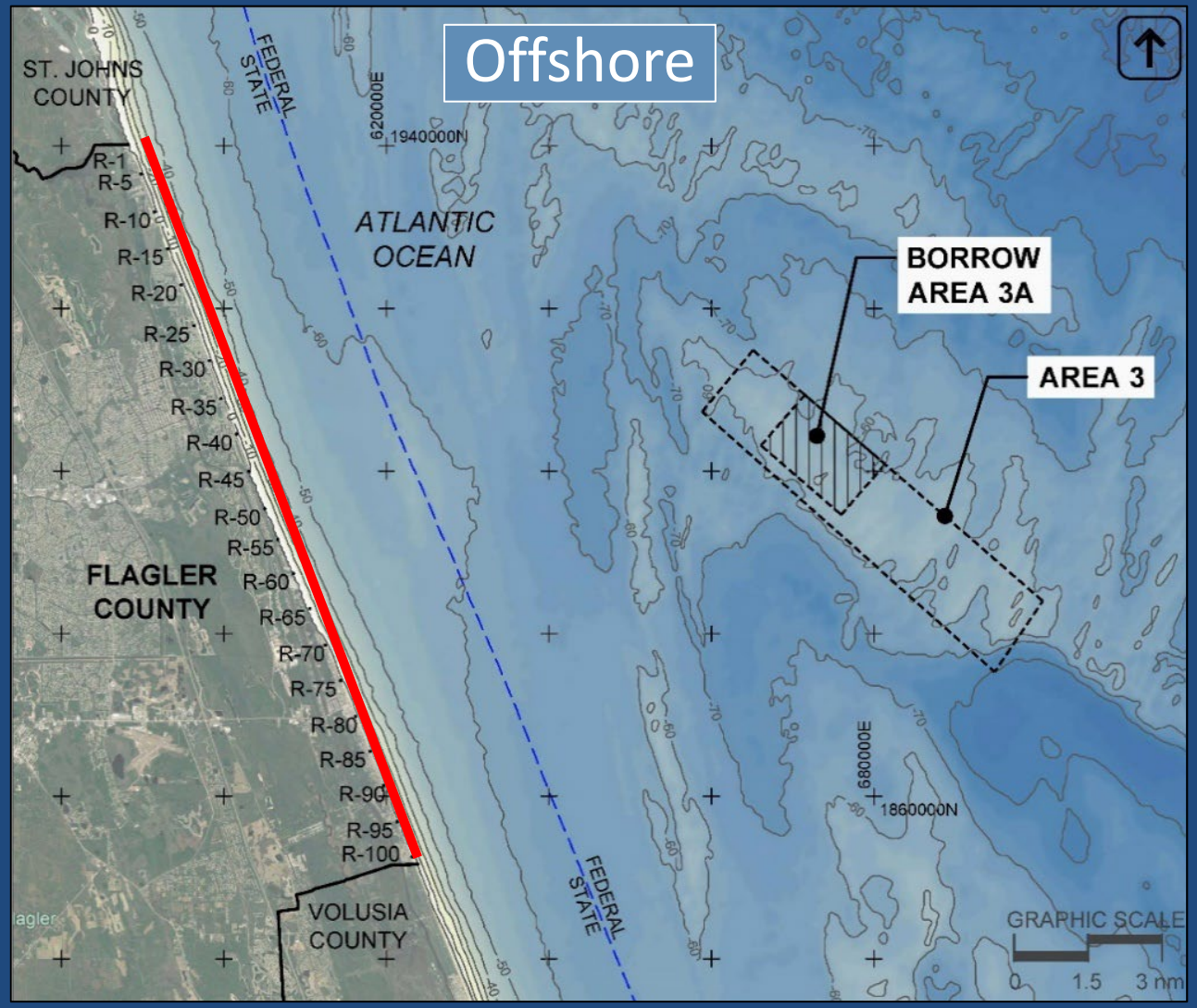
Restore and Maintain Beach and Dune

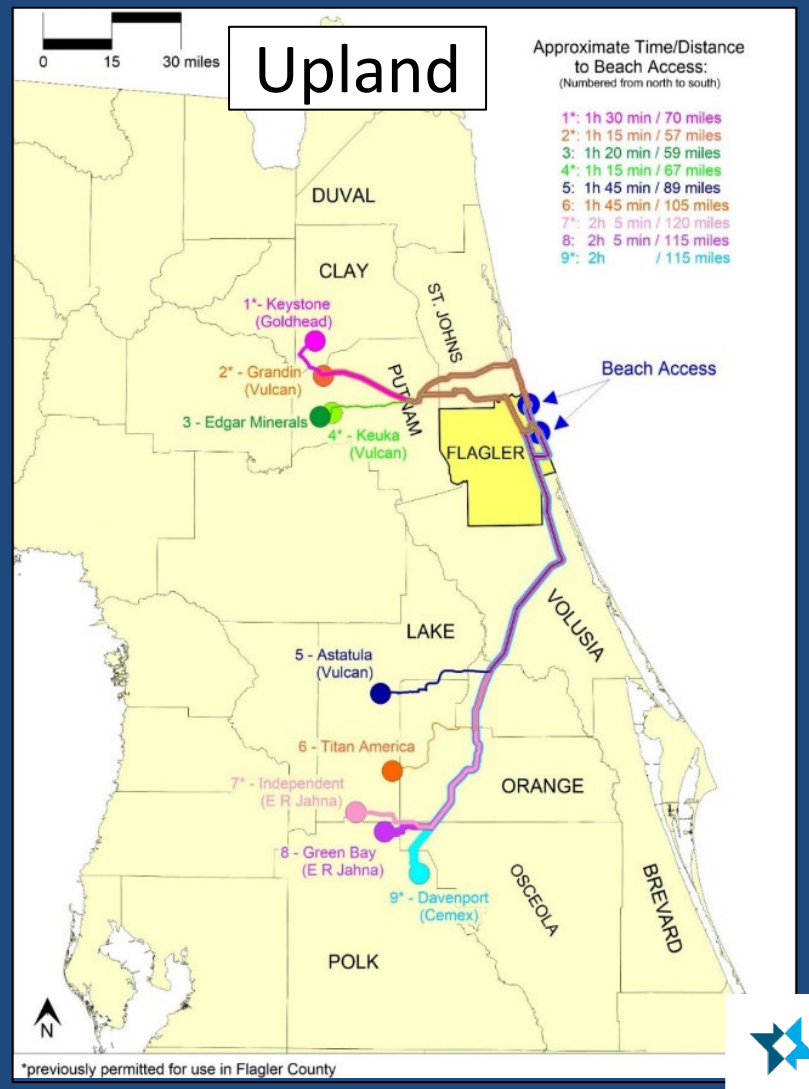


Beach Management Program Implementation

Restore and Maintain Beach and Dune

Sand Sources





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Cost Analysis Approach

- Equivalent Annual Cost (EAC) Analysis
  - Alternative Comparison
  - ***Budgeting for long-term funding needs***

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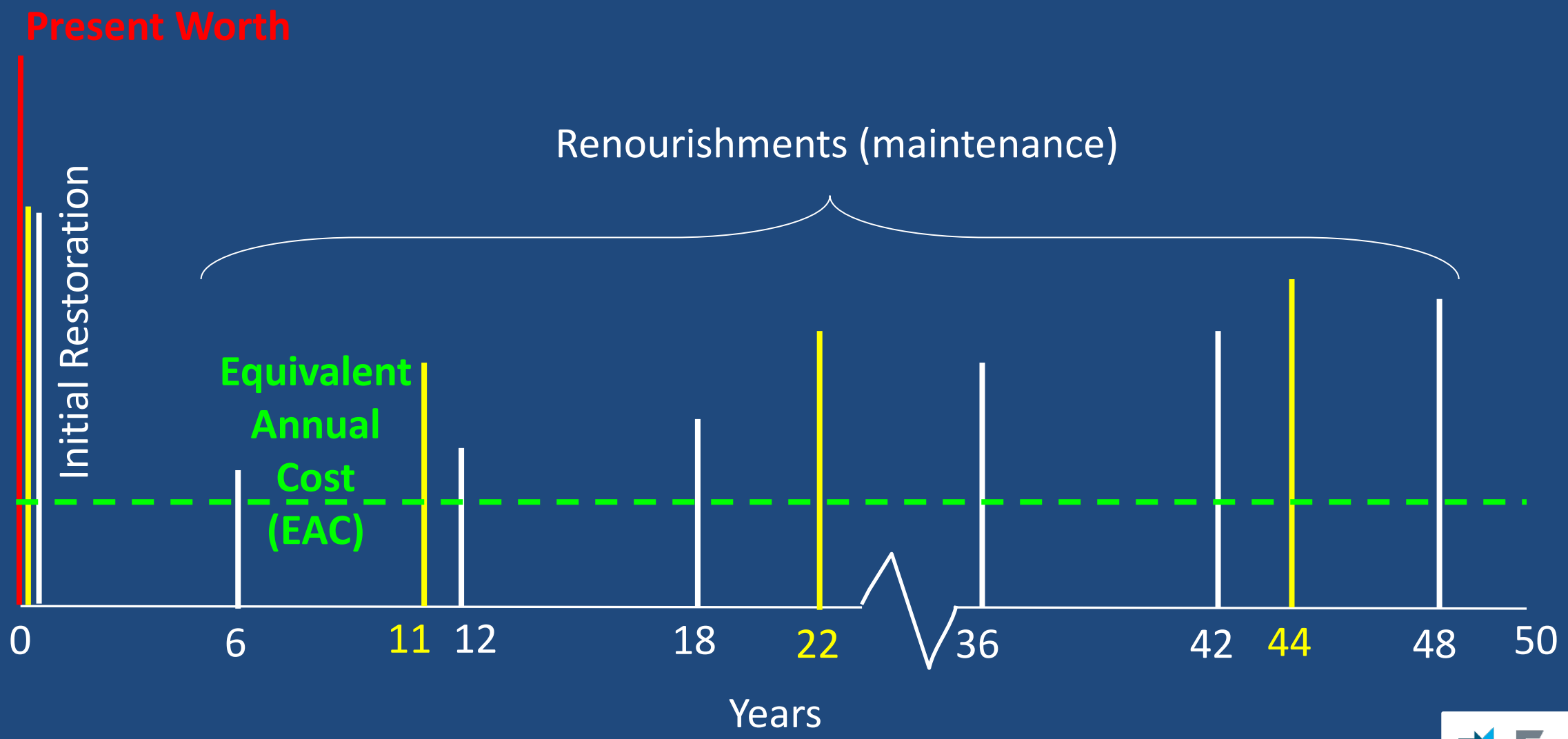
Cost Analysis Approach



Cost Analysis Notes and Assumptions (updated on Jan 24, 2025):

- Beach restoration and long-term maintenance is the selected beach management approach.
- Reaches 1 and 2 will be restored and maintained by dredge placement using offshore sand from Area 3A.
- Reaches 3 and 4 will be restored and maintained using upland sand and mechanical placement.
- Funds for Initial Construction of Reach 1 have been spent (2024) and are not included in this analysis.
- Funds for Initial Construction of Reach 2 are assumed to be in hand at Flagler County and are not included in this analysis.

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Cost Analysis Notes and Assumptions (updated on Jan 24, 2025):

- Reaches 3 and 4 will be "dune only" and constructed using upland sand and mechanical placement as currently permitted.
- Max. no rock impact fill along Reach 3 is assumed to be 20 cy/ft. It is not known at this time if rock mitigation will be required for a 20 cy/ft project in Reach 3.
- Cost for sand from upland mines and mechanical placement is assumed to be **$75/cy**.
- Cost for sand from offshore and direct placement to beach is assumed to be **$25/cy**.

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Cost Analysis Notes and Assumptions (updated on Jan 24, 2025):

- The renourishment (maintenance) interval for Reach 1 is assumed to be 11 years (consistent with USACE plan).
- Renourishment interval for Reaches 2, 3, and 4 is assumed to be 6 years.
- It was assumed that the area along Reach 2 between R-57 and R-65.2 is not designated at Critically Eroded by FDEP.
- A discount rate of 3.0% was applied.
- The cost escalation factors for future maintenance events were based upon USACE guidance dated 31-March-2024.

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Cost Analysis Notes and Assumptions (updated on Jan 24, 2025):

- Reach 1 cost-sharing for future maintenance is assumed be 50% USACE/25% FDEP/25% Local
- Reach 2 cost-sharing for future maintenance is assumed to be 45% FDEP /55% Local. (This will improve in favor of the Local share if shoreline between R57 and R65.2 is designated at Critically Eroded.)
- Reach 3 cost-sharing is assumed to be 100% local responsibility.
- Reach 4 cost-sharing for future maintenance is assumed to be 75% FEMA / 12.5% Florida DEM / 12.5% Local. It is assumed that maintenance along this Reach will only be required following declared disasters that are FEMA eligible.

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Equivalent Annual Cost (EAC) Summary

BMP Reach	Equivalent Annual Cost (EAC) ($/year)	Distribution of EAC by Reach and Cost-Share Partner		
		USACE/FEMA	State	Local
Reach 1	$ 1,606,400	$ 803,200	$ 401,600	$ 401,600
Reach 2	$ 5,175,100		$ 1,356,503	$ 3,818,597
Reach 3	$ 7,572,600			$ 7,572,600
Reach 4	$ 1,830,500	$ 1,372,875	$ 228,813	$ 228,813
Total	**$ 16,184,600**	**$ 2,176,075**	**$ 1,986,916**	**$ 12,021,610**

★ Value will be reduced if area of Reach 2 between R-57 and R-65.2 is designated as Critically Eroded by FDEP. Request to FDEP is under review.

Planning values only. All values subject to change following detailed engineering and permitting.

Permitting and Design of the Northern Flagler County Beach Nourishment Project

BOCC Workshop Update

June 16, 2025

moffatt & nichol

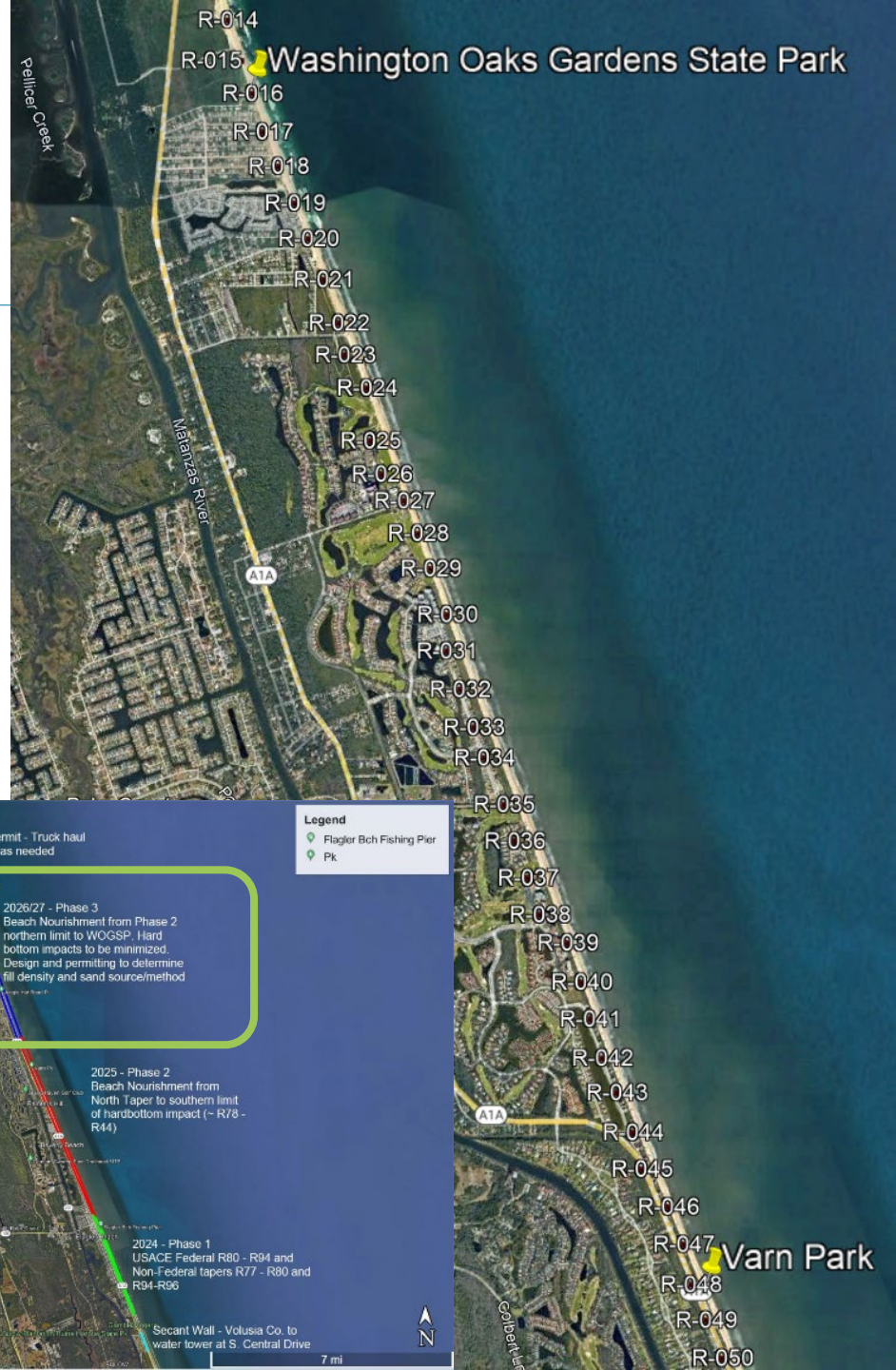
Agenda

- Project review
- Project tasks
- Project schedule
- Active work and next steps
- Funding

Project Review

Background

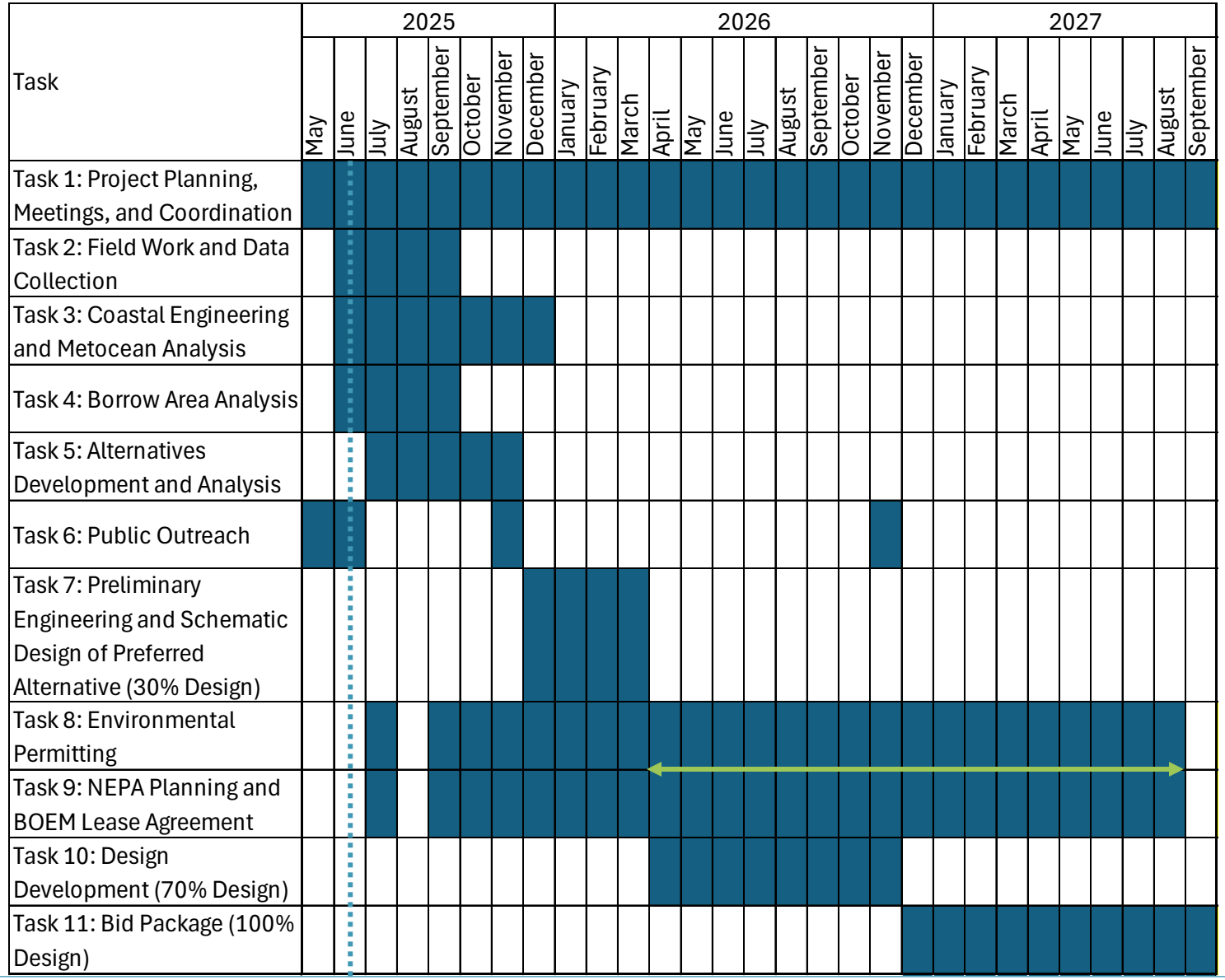
- Project spans from Washington Oaks Gardens State Park to Varn Park
  - R-15.9 to R-48 (approx. 6 miles)
- Unmapped natural rock spans most of site (through approx. R-43.5)
- Project Summary
  - Capture data to inform practical beach and dune alternatives
  - Evaluate alternatives for permit-ability and constructability
  - Coordinate with agencies to secure permits and lease agreeme
  - Finalize design for construction



Project Tasks

- Task 1 - Project Planning, Meetings, & Coordination
- Task 2 – Field Work and Data Collection
  - Upland and in-water surveys
  - Environmental (hardbottom)
- Task 3 – Coastal Engineering Analysis
  - Review and update winds, tides, storms, etc
  - Review background erosion rates
    - FDEP “critically eroded shoreline” designation
- Task 4 – Borrow Area Analysis
  - Upland and offshore borrow area
- Task 5 – Alternatives Analysis
  - Evaluate performance, protection, and impacts
- Task 6 – Public Outreach
- Task 7 – Preliminary Engineering (30% Design)
- Task 8 – Environmental Permitting
  - FDEP
  - USACE
- Task 9 – NEPA Planning & BOEM Lease Agreement
- Task 10 – Design Development (70% Design)
- Task 11 – Bid Package (100% Design)

Project schedule

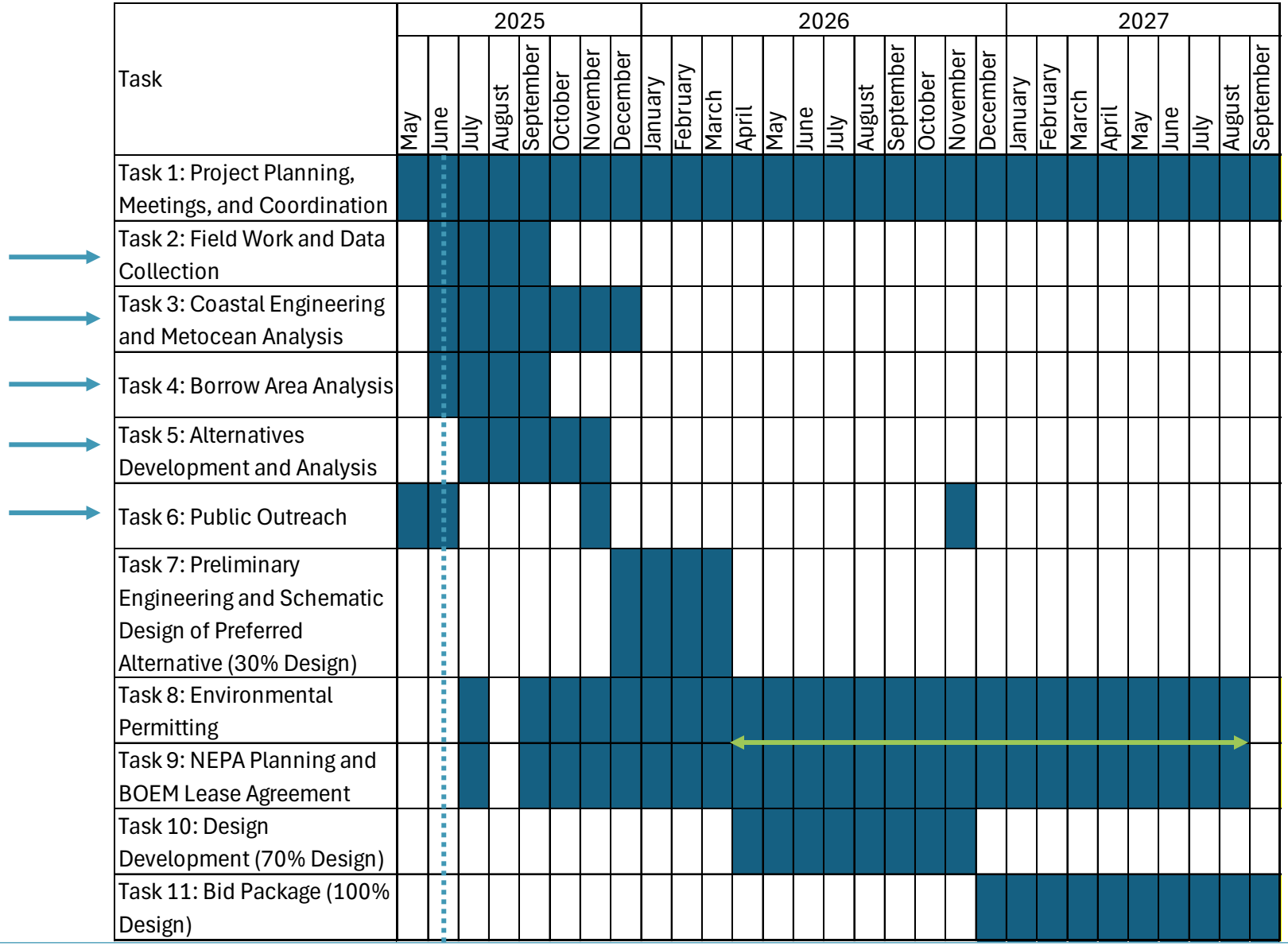


*18 month permitting timeline

Active work and next steps

- Task 2 – Data collection
  - Surveyor onsite performing topo and bathy surveys. Data anticipated in approx. 2 weeks.
  - Late June/Early July – review survey data and strategize for FDEP pre-dive meeting
  - Early July – FDEP meeting to confirm hardbottom dive plan
  - July – Hardbottom diving
- Task 3 – Coastal Engineering Analysis
  - Nearly complete with MetOcean Analysis Report
  - Starting background erosion data review
- Task 4 – Borrow Area Analysis
  - Started Upland Borrow Area Investigation
- Task 5 – Alternative Development and Analysis
  - Started model setup and early stages of shoreline evolution modeling
- Task 6 – Public Outreach
  - Started Public Involvement Plan

Project schedule



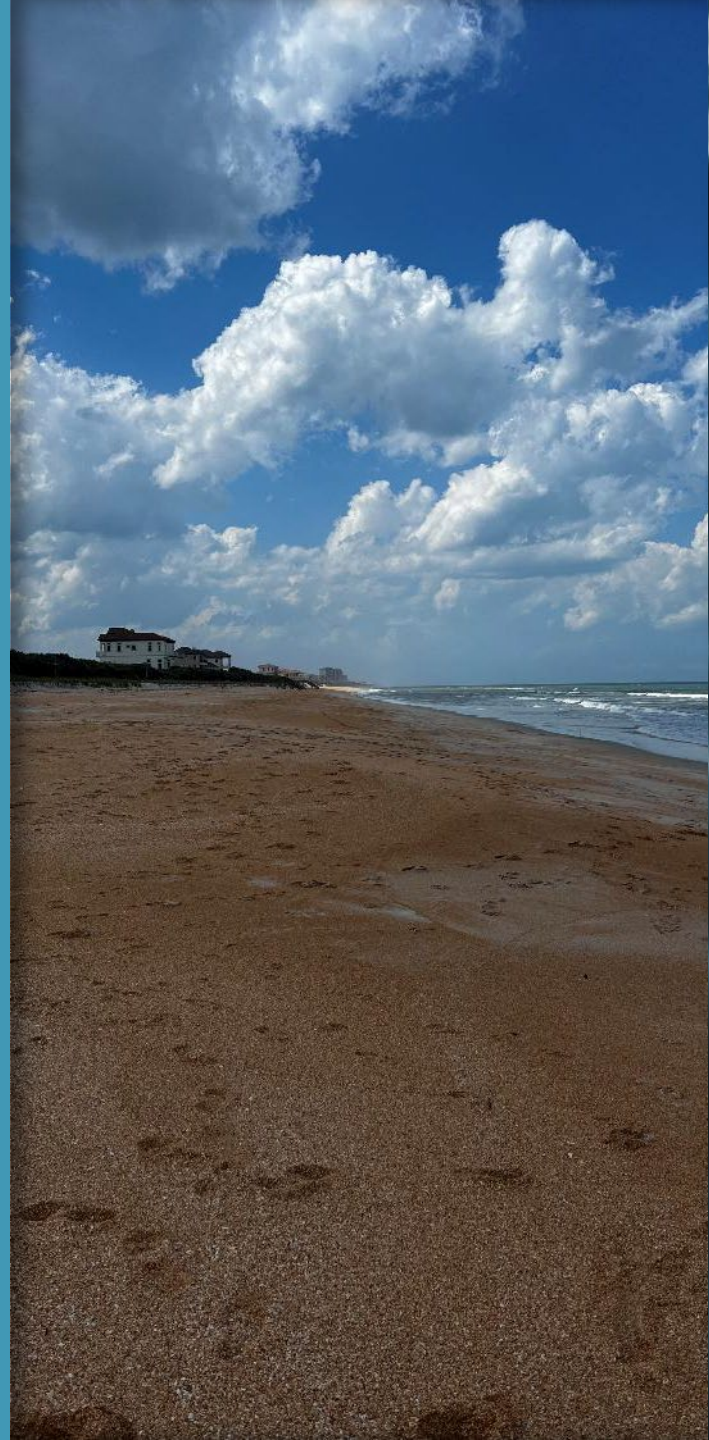
*18 month permitting timeline

Funding

- Beach Management Plan est $49M
  - Truck haul @ 20 CY/LF @ $75/CY
- 2022 Olsen Beach and Dune Management Study
  - 16 CY/LF -> 500k CY
    - Likely max permissible without hardbottom impacts
  - 25 CY/LF -> 800k CY
    - Some hardbottom impacts anticipated
- Too early to estimate costs for offshore dredging Reach 3
- Historical pricing
  - 2024 USACE Flagler Beach - $27M for 1.3M CY = $21/CY
  - 2024 USACE Jacksonville Beach - $32.4M for 1.3M CY = $25/CY
  - MN Recent Bid – Spring 2025 in NC $39M for 1M CY = $39/CY

Northern Flagler County Beach Nourishment Project

THANK YOU!



Funding Sources Typically Used

Federal Sources

- **U.S. Army Corps of Engineers (USACE):**
  - Cost-sharing partner for federally authorized beach projects.
  - Typically covers 50% of renourishment costs for eligible projects.
  - Requires federal authorization and appropriations tied to the Water Resources Development Act (WRDA).

State Sources

- **Florida Department of Environmental Protection (FDEP):**
  - ***Beach Management Funding Assistance Program*** offers cost-sharing grants.
  - Typically funds up to 50% of eligible project costs, depending on project ranking and available state budget.
  - Requires matching funds and timely grant application submissions.

Funding Sources Typically Used

Local Government Revenues

Tourist Development Tax (TDT):

- A key recurring funding source authorized by Florida statute.
- Counties may allocate a portion of bed tax revenues for beach nourishment, erosion control, and shoreline protection.
- Especially effective in coastal communities with strong tourism economies.

Local Option Sales Tax (e.g., Infrastructure Surtax):

- Can be used for coastal infrastructure and beach-related capital improvements.
- Requires either voter approval or supermajority of the County Commission (depending on type, e.g., bonded for debt).

General Fund Appropriations:

- Less common due to competing demands but may be used to match grant funding.
- Not a stable or preferred long-term solution due to its discretionary nature.

Municipal Service Benefit Units (MSBUs) or Taxing Districts:

- Special districts levying assessments on benefitting properties.
- Provides a dedicated, recurring revenue stream directly tied to beneficiaries.

Local Funding Sources Recommended

Source of Revenue	PFM Group Consulting (Stan Geberer)	American Shore & Beach Preservation Association (asbpa.org)
Taxing Districts (MSBUs and MSTUs)	✓	✓
Access Fees/Parking Fees		✓
Sales, Excise, and Use Taxes	✓	✓
Tourism Development Tax	✓	✓
Ad Valorem (Property Tax)	✓	✓
Bonds*	✓	✓

*Flagler County's Financial Advisor (Jay Glover, Managing Director - PFM) does not recommend the issuance of debt (e.g., bonds) due to the recurring need and shorter timeframe for repayment.

What is Needed

Initial Construction Cost = Approximately $120,125,000

- Federal Share = $25,743,750
- State Share = $51,940,625
- Local Share = Approximately $42.4M
- Flagler County Grant Application & Program Funding Request = $15M +/-
- Local Funding FY25 = $5M
- TDC Funding = $5.2M

- **Shortfall = $17.5M**
- Based on Permit Modification Timeline this will be needed in 2-3 years for Construction of Remaining Work

Planning assumptions only. Project scope and all values subject to change following detailed engineering and permitting.

What is Needed

Periodic Maintenance & Nourishment (every 6 years) **= $72.1M**

- Equivalent Annual Cost (EAC) = Approximately $12M
  - Average of $2M Annually paid by TDC and MSBU/MSTU

  - TDC Funds = $3.8M approximately
  - MSBU/MSTU = $8.4M approximately
  - Local Funding = $60M approximately

- **Shortfall = $10M Annually**
- Based on planning assumptions this will need to be collected annually for 6-years to have funding available to cover nourishment intervals

Planning assumptions only. Project scope and all values subject to change following detailed engineering and permitting.

What is Needed

Activity	2026	2027	2028	2029	2030	2031
Construction	$5.8M	$5.8M	$5.9M	-	-	-
Maintenance & Nourishment	$10M	$10M	$10M	$10M	$10M	$10M
Annual Amount	**$15.8M**	**$15.8M**	**$15.9M**	**$10M**	**$10M**	**$10M**

Planning assumptions only. Project scope and all values subject to change following detailed engineering and permitting.

What is Available

Existing Sources of Recurring Revenues

- Ad Valorem (Property Tax)
  - Used for Annual Operating Budgets (BoCC and All Constitutional Officers)
  - Currently have $2.9M Gap for FY2026 Budget Submittals
  - If absorbed by **ALL**, annual budgets would be reduced by 10%
  - If absorbed by BoCC Only, annual budget would be reduced by 20%
- Tourist Development Funds
  - As proposed, currently using between $0.01 and $0.02
  - Maximum allowed by law is $0.03
  - If maximum is used, would only contribute an additional $880,000/year
- Local Option Sales Tax
  - Currently used to support Beach Management, Roadways and Stormwater
  - If pledged to Beach Only, No Local Funding available for Roads & Stormwater

What is Available

Ad Valorem (Property Tax)

- 10% Reductions Applied to All Budgets (Years 1-3 shown below, Years 4-6 would be less)
  - $8,699,692 – Board of County Commissioners
  - $5,420,338 – Sheriff
  - $478,886 – Clerk of Court
  - $542,199 – Tax Collector
  - $408,807 – Property Appraiser
  - $283,411 – Supervisor of Elections
- 20% Reduction to BoCC Only
  - $15,833,333

Potential Consequences (from Using Existing Revenues)

Local Option Sales Tax (approximately $4.7M annually)

- Used to support Flagler County's Roadway System
- If used solely for Beach Management
  - You will abandon Flagler County's Strategic Plan
  - You will fail to establish a Pavement Management Plan
  - There is **NO** Local Match for FDOT Roadway Grants
  - Loss of SCRAP and SCOP Grants
  - Loss of Grants from River to Sea TPO
  - **NO** Funding for Stormwater

Potential Consequences (from Using Existing Revenues)

FDOT Roadway System Grants

Small County Road Assistance Program (SCRAP) - https://m.flsenate.gov/Statutes/339.2816

Excerpt from statute

(b) In determining a county's eligibility for assistance under this program, ***the department may consider whether the county has attempted to keep county roads in satisfactory condition***, including the **amount of local option fuel tax imposed by the county**. The department may also **consider the extent to which the county has offered to provide a match of local funds with state funds provided under the program**. **At a minimum, small counties shall be eligible only if the county has enacted the maximum rate of the local option fuel tax authorized by s. 336.025(1)(a).**

Small County Outreach Program (SCOP) - https://m.flsenate.gov/Statutes/339.2818

Excerpt from statute

(b) In determining a county's eligibility for assistance under this program, ***the department may consider whether the county has attempted to keep county roads in satisfactory condition***, **which may be evidenced through an established pavement management plan**.

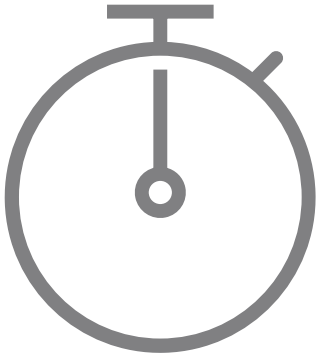
Also, for consideration, at some point Flagler County will no longer meet the "Small County" status and soon we will pass or have recently passed a census threshold where we no longer meet the criteria that allows us to forego match requirements, and our local contribution would be a minimum of 25% (per SCOP Statute).

Potential Options

- Reduce Operating Budgets (funded by Ad Valorem) and Fund the Beach Management Plan
  - Supplement with a mix of existing additional TDC or Sales Tax
- Increase Millage (Ad Valorem) and Fund the Beach Management Plan
- Increase Proposed MSBU Amount ($160)
  - Every $10 = Generates $104,450
- Establish ‘New’ Recurring Revenue Stream

Discussion & Next Steps

Discussion



Meet with Municipalities on ILAs

Consensus Moving Forward

June 16, 2025

Workshop

Beach Management and Funding Discussion