



# Flagler County Beach Renourishment

Updated 9/10/2024



FLAGLER  
COUNTY  
FLORIDA



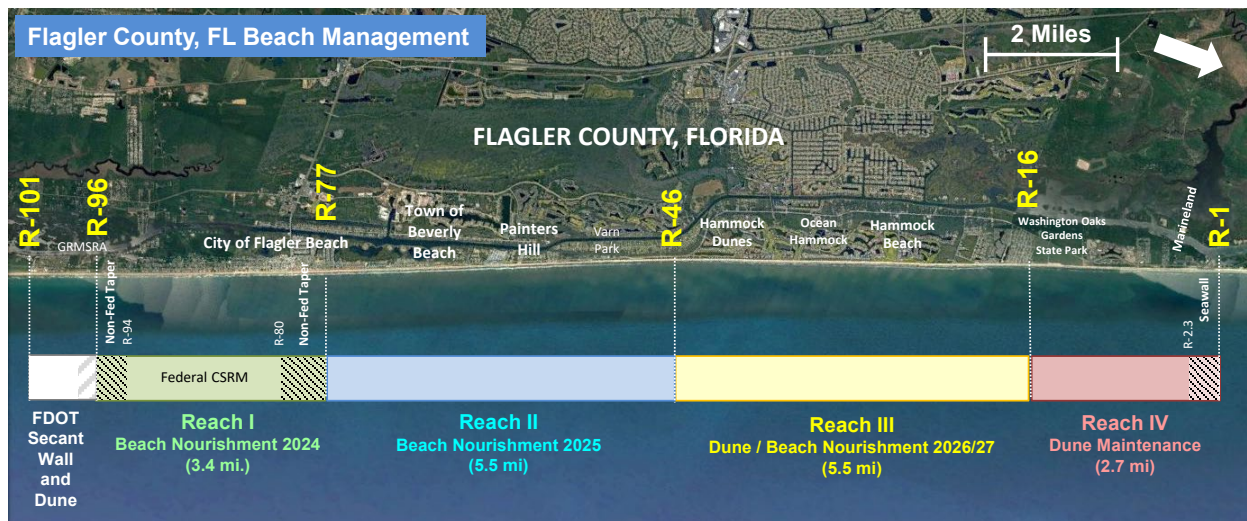
# Flagler County Beach Management Program Implementation

## Fact Sheet

In 2021, the Flagler County Board of County Commissioners approved a Beach Management Plan that is intended to guide the County through beach and dune restoration and management needs along the 18 miles of Flagler County Atlantic Ocean shoreline for the next 50 years. The Plan identified beach and dune restoration and maintenance as the preferred approach to meet the County’s long-term beach management objectives.

As part of the Plan, the County has identified four (4) beach and dune nourishment reaches along which restoration and management efforts will be pursued. The reaches were identified considering physical characteristics of the beach and dune, funding opportunities that vary between reaches and environmental conditions. The four beach management reaches are:

**Beach Management Areas.** The location and extent of the four Flagler County beach management reaches are depicted in the figure below.



The reaches were selected with consideration of existing and planned project needs, schedule, and regulatory constraints. The implementation plan for each reach is described below.

# Reach I

## **Project Description:**

Reach I is in the City of Flagler Beach coastline between Gamble Rogers Park (R-96) and North 7<sup>th</sup> Street (R-77) and consists of federal and non-federal segments. The US Army Corps of Engineers (USACE) federal segment between FDEP monuments R-80 (~6th Street South) and R-94 (~ 28th Street South) is a designated Federal Coastal Storm Risk Management (CSRМ) project eligible for a share of federal funds for initial construction costs, long term maintenance costs, and replacement in the case of a declared disaster. The non-federal segments are located on the south and north sides of the federal segment from Gamble Rogers Park to 28<sup>th</sup> Street South and from 6th Street South to North 7th Street, respectively, which augment the beach and dune nourishment improvements. The southern portion of the County from R-96 to R-101 (Volusia County line), the area along which FDOT is currently building the Secant wall, may be included in the next re-nourishment of Reach I or during Reach II construction, pending funding.

Reach I beach and dune nourishment implementation by offshore dredging to place with approximately 1.7 million cubic yards of sand along approximately 3.4 miles of the shoreline.

## **Project Funding and Costs:**

Federal Segment initial and long-term costs, funding shares and sources as follows,

- Initial Construction Costs: \$25 million at 65% USACE share and 35% FDOT/FDEP share
- Projected long-term Maintenance Costs for the entire Reach I: \$5,127,800 per year with the following cost sharing: 50% (\$2,563,900) USACE share, and 25% (\$1,281,950) FDEP share, and 25% (\$1,281,950) Local share
- The Federal Segment will be eligible for 100% FCCE Restoration Funding following a declared disaster.

Non-Federal Segments initial and long-term costs, funding shares and sources as follows,

- Permitting/Design Costs: \$1 million at 100% paid by FDOT
- Initial Construction Costs: \$3.9 million at 100% paid by FDOT/FDEP
- Projected long-term Maintenance Costs: see above long-term Maintenance Costs.

## **Project Construction Schedule:**

Beach/Dune construction completed August 30, 2024. Installation of dune vegetation, rope and posts, sand fencing, and signage to be completed by Fall 2024.

**Challenges:** Monitoring and protection of marine habitats during construction phase to avoid and minimize impacts.

## Reach II

### **Project Description:**

Reach II includes the northern coastline City of Flagler Beach, Town of Beverly Beach, Painters Hill, and Varn Park between North 7<sup>th</sup> Street (R-77) and a point about 1,900 feet north of Varn Park. Flagler County is currently seeking to modify existing FDEP and USACE permits to allow for comprehensive beach and dune restoration along the entirety of Reach II.

The initial beach and dune restoration construction project along Reach II will be by dredge from an offshore sand source and consist of 1,800,000 cy along 5.5 miles of shoreline.

Future maintenance of Reach II may include sand placement along sand tapers north and south of the USACE project and in front of the FDOT Secant Wall north of the Volusia County line.

### **Project Construction Schedule:**

The County intends to construct the Reach II in Spring 2025.

### **Project Funding and Cost:**

Initial and long-term costs, funding shares and sources as follows,

- Permitting/Design Costs: \$1 million at 100% FDEP (Post-Ian/Nicole Grant)
- Initial Construction Costs: \$32 million FDEP (Post-Ian/Nicole Grant) with anticipated funding share of \$5 million from FEMA.
- Projected long-term Maintenance Costs: \$5,047,300 per year at 50% FDEP and 50% Local share

Reach II will be eligible for 87.5 % FEMA/FDEM Public Assistance (Cat G) following a declared disaster. Additionally, funding for this beach nourishment project is being sought through the FEMA Hazard Mitigation Grant Program which would provide savings of the FDEP funds in Reach II that could be applied to Reach III.

### **Challenges:**

About 8,000 feet of Reach II shoreline currently is not classified by FDEP as Critically Eroded. This will impact FDEP funding eligibility for Reach II. Flagler County has requested re-review of eligibility by FDEP.

## Reach III

### **Project Description:**

Reach III is in north-central Flagler County along the Hammock Dunes, Ocean Hammock, Hammock Beach, and Sea Colony shorelines between point about 1,900 feet north of Varn Park (R-46) and the southern limit of Washington Oaks Gardens State Park (R-16). Flagler County is seeking FDEP and USACE permits to allow for comprehensive beach and dune restoration along the entirety of Reach III. Reach III is 5.5 miles in length.

The scope of the comprehensive beach and dune restoration will be determined through detail design engineering analyses and permitting planned for 2025 - 2026.

### **Project Construction Schedule:**

The County intends to construct the Reach III in 2026/2027 depending on permitting review.

### **Project Funding and Cost:**

Initial and long-term costs, funding shares and sources as follows,

- Permitting/Design Estimated Costs: \$1.5 million at 100% FDEP (Post-Ian/Nicole Grant)
- Initial Construction Costs: \$40 million – Funding of approximately \$15 Million in FDEP grants are pending.
- Projected long-term Maintenance Costs: \$5,659,700 year at 100% Flagler County

Reach III will be eligible for 87.5% FEMA/FDEM Public Assistance (Cat G) following a declared disaster.

### **Challenges:**

- There is widespread nearshore beach rock along this entire reach. The presence and extent of the beach rock is expected to limit the project scope and make permit acquisition difficult.
- The most likely sand sources for beach and dune restoration along Reach III will be upland commercial mines and/or offshore sand in Federal waters. The use of offshore sand will likely require construction of a sand stockpile and movement of the sand to Reach III by truck. Both sand sources will be more expensive than the offshore sand sources used for Reach I and II.
- There is no allowance for hardbottom mitigation costs in this projection.

## Reach IV

### **Project Description:**

Reach IV is in northern Flagler County along the Washington Oaks Gardens State Park, Matanzas Shore, and Marine Land shoreline between the southern limit of Washington Oaks Gardens State Park (R-16) and the St. Johns County line (R-1). Flagler County currently holds FDEP and USACE permits that allow restoration and maintenance of the dune from R-2.3, south of the revetment/seawall at Marineland along this reach of the County. Reach IV is 2.5 miles in length.

The dune along Reach IV was restored in 2023 following Hurricanes Ian and Nicole. Because of the widespread beach and nearshore coquina rock along Reach IV, only dune restoration and maintenance are feasible.

### **Project Construction Schedule:**

- The County intends to maintain the dune on an as needed basis.
- The most likely need for future dune maintenance will be following severe storm events.

### **Project Funding and Cost:**

- Projected long-term Maintenance Costs: \$1,293,600 would be needed for dune restoration after major storm events with funding provided by FDEP, FEMA, and Flagler County.
- Reach IV is eligible for 87.5% FEMA/FDEM Public Assistance (Cat B/Cat G) following declared disaster.

### **Challenges:**

- Maintenance of dune will continue to be difficult due to limited access and presence of beach rock.