



Beach Management Funding Assistance Program
Local Government Funding Request
Fiscal Year 2023/2024
Beach Projects Application

PART I: GENERAL INFORMATION

Local Sponsor	Martin County Board of County Commissioners		
Federal ID Number (FEID)	59-6000743		
Primary Contact Name	Jessica Garland	Title	Coastal Project Manager
Mailing Address Line 1	2401 SE Monterey RD		
Mailing Address Line 2			
City	Stuart	Zip Code	34996
Telephone Number	772-288-5795		
Email Address	jgarland@martin.fl.us		

Additional Contact Information

PART II: CERTIFICATION

I hereby certify that all information provided with this application is true and complete to the best of my knowledge.

Signature of Local Sponsor

Electronic or scanned signatures accepted.

Printed Name Jessica Garland Date



Beach Management Funding Assistance Program
Local Government Funding Request
Fiscal Year 2023/2024
Beach Projects Application

PART III: EVALUATION CRITERIA

1. Project Name: (as listed in the Strategic Beach Management Plan)

Bathtub Beach/Sailfish Point Beach Restoration.

2. Project Description: Include county, location with reference to DEP range monuments, brief project history, and description of proposed activities.

In each of the fall seasons from 2007 - 2012, the Bathtub Beach and Sailfish Point areas experienced extreme erosion events which resulted in the near total loss of the dune along the entire extent of the park, loss of a portion of the parking lot, compromised the structural integrity of the pavilion/bathroom area and threatened an evacuation route. Within Sailfish Point, dunes were lost and homes were undermined. The Bathtub Beach restoration project constructed in 2010 was designed to return the Park's beach front to pre - 2007 conditions by placing the requisite volume of beach quality sediment refilling it to the 2007 profile. The sand source for the project was a shoal on the western side of the barrier island, within the St. Lucie Inlet flood shoal complex. Sand was pumped from the borrow site to Bathtub Beach. The template was constructed and the dune area was immediately re-vegetated with sea oats and some sea grape trees. In the fall of 2010 a large portion of the project was lost, along with the new vegetation. Three emergency projects responded to subsequent storms, replacing sand lost from the project. Likewise in 2011 and 2012, emergency projects were required, and more beach and upland property was lost throughout the project area. In some areas, upland property loss was so great; seawalls were required to protect the remaining structures.

A more comprehensive beach nourishment project was constructed in 2016 to address the chronic erosion along Bathtub Beach (1350-ft) and the adjacent northern shoreline of Sailfish Point (3550-ft), funded in part through a project cost-share agreement between Martin County and Sailfish Point. This initial beach reconstruction project mimicked the healthy beach footprint seen in aerials from the 1990's. The 2016 project mined sand from the flood shoals, Sailfish Point Channel and St. Lucie Inlet Impoundment Basin and placed 325,401 cy of sand within the project limits.

In October, 2016 Hurricane Matthew, a Category 4 hurricane, skirted the Florida coast. Along the Martin County coast, the hurricane generated waves 16ft tall and greater for over 24 hours. Accelerated erosion was documented all along the Florida coast. 72,173 cubic yards were determined to have resulted from Hurricane Matthew. The 2017 project constructed 72,106 cubic yards of material from the Sailfish Point Navigation Channel and Inlet Borrow Area A.

In September of 2017, Hurricane Irma made landfall on Florida's west coast and spread tropical storm/hurricane winds across the state. Wind speeds of 100 MPH were measured at the St. Lucie Nuclear Power Plant, approximately 15 miles north of the Bathtub Beach project location. The wave gage at Jensen Beach measured wave heights of 17 ft. as the storm passed. Again, major erosion was experienced on Florida beaches. 91,000 cubic yards resulted from Hurricane Irma. The 2018 project constructed 142,843 cubic yards of material from the Sailfish Point Navigation Channel and Inlet Borrow Area A.

In September of 2019, Hurricane Dorian a Category 5 Hurricane skirted the Florida Coast. Analysis was performed on the pre-storm (June 2019) and post-storm (October 2019) beach profile surveys along Bathtub Beach Reef Park and Sailfish Point. Comparison of pre- and post-Dorian template deficits suggests that the template deficit increased by about 56,800 cy over the 0.38 year period between surveys. The 2021 project constructed 181,852 cubic yards of material from the Sailfish Point Navigation Channel, Federal Channel and Impoundment Basin and placed that material on the beach between R34.5 and R38.



Beach Management Funding Assistance Program
Local Government Funding Request
Fiscal Year 2023/2024
Beach Projects Application

3. Use of Requested Program Funds: Provide a brief description of tasks to be completed in each requested phase (Feasibility, Design, Construction, Monitoring, or USACE Multiphase). Indicate which tasks are cost reimbursement from previous fiscal years.

State grant funds are requested for construction of the remaining yardage over the 102,000cy that will be cost shared under the St. Lucie Inlet management. (2023, 2024, 2025 IMP)

4. Map: Provide as an attachment. The map(s) of the project area must be formatted at a minimum of 1" = 200' scale and include a compass rose and legend.

Map elements must include:

1. **Project boundary:** DEP reference monuments and shoreline designated as critically eroded
2. **Eligibility:** Indicate lengths of eligible shoreline based on criteria outlined in Chapter 62B-36.007, F.A.C.
 - a. Beach access locations: indicate primary or secondary access, and include the shoreline length, number and location of auto parking spaces, mass transit stops, bike parking spaces, and public restroom facilities within 1/4 mile walking distance of each access
 - b. Public lodging establishments: include the length fronting the project shoreline, and include the length of street-side frontage for lodging within 1/4 mile walking distance of a secondary beach access location
3. **Recreational benefits:** Comprehensive list of current land use designations of properties fronting the project shoreline
4. **Value of upland property:** Include one-quarter mile buffer and provide a comprehensive list of the values of properties (data from year 2021) that are enclosed or intersected by the buffer. The 2021 property value tax roll data and ArcGIS shapefiles can be obtained from the Department of Revenue website: https://floridarevenue.com/property/Pages/DataPortal_RequestAssessmentRollGISData.aspx. See Guidance Document for more information.

5. Project length: Total restored project length (in feet) of the critically eroded area (as listed in the Strategic Beach Management Plan).

4,900ft.



- **Location/Access Name:** Use the official name of the park or road that is associated with the public access.
- **DEP Reference Monument:** Use the DEP monument that is closest to the main public access location.
- **Type of Access:** Indicate Primary or Secondary beach access in accordance with the definitions in Chapter 62B-36, F.A.C.
- **Width of Access/Frontage:** The length of the legal boundary (in feet) of the public access or lodging along the beach project shoreline. For public lodging establishments that do not front the beach, indicate the street-side length of the legal property boundary (in feet) that is used as the main access to the establishment.
- **Number of Eligible Units:** A unit is defined as one automobile parking space, one rental unit in a public lodging establishment, one mass transit stop, or four bicycle parking spots.
- **Additional Width from Eligible Units:** Total distance (feet) added to the Width of Access/Frontage. If there are multiple types of eligibility units used for this calculation, show the calculation separately for each.
- **Total Eligible Shoreline:** Sum of the Width of Access/Frontage and Additional Width from Eligible Units columns. Eligible shorelines cannot overlap.
- **Website Link for DBPR License:** Provide the link to the Department of Business and Professional Regulation (DBPR) website for proof of licensure for any public lodging establishments used for eligibility or the Recreational Benefits ranking criteria.

[illegible]



Beach Management Funding Assistance Program
Local Government Funding Request
Fiscal Year 2023/2024
Beach Projects Application

- 7. Schedule and Budget:** Provide as a separate attachment, if needed. Clearly indicate project phase: Feasibility (F), Design (D), Construction (C), Monitoring (M), or USACE Multiphase (USACE). Include the year of post-construction monitoring in the description.
- **Cost Reimbursement:** Specify eligible costs incurred during the three years prior to the current application's fiscal year that are not in a current DEP agreement and have not been reimbursed (this includes fiscal years 20/21, 21/22, and 22/23). Eligible costs will be added to the current funding request.
 - **Current and Future Costs:** Specify eligible costs for the current application's fiscal year that are not in a current DEP agreement and have not been reimbursed as well as the estimated costs for the next 4 years. Note: If Construction costs are requested in the current fiscal year, then the Year 1 Post-Construction Monitoring costs will be added to the current funding request.

Fiscal Year	Project Phase	Description	Federal Cost	State Cost	Local Cost	Total Cost
20/21						
20/21						
20/21						
21/22						
21/22						
21/22						
22/23						
22/23						
22/23						
23/24	Construction	Sand placement between R-34 to R-42 and Post Construction Monitoring		1,294,650	2,205,350	3,500,000
23/24	Bypass North to BTB Additional					
23/24						
24/25						
24/25						
24/25						



Beach Management Funding Assistance Program
Local Government Funding Request
Fiscal Year 2023/2024
Beach Projects Application

Fiscal Year	Project Phase	Description	Federal Cost	State Cost	Local Cost	Total Cost
25/26						
25/26						
25/26						
26/27	Construction Bypass North to BTB Additional	Sand placement between R-34 to R-42 and Post Construction Monitoring		1,294,650	2,205,350	3,500,000
26/27						
26/27						
27/28						
27/28						
27/28						

8. Tourism-related impacts: Criteria is calculated by the Department using 2021 data. For reference, tax data can be obtained from the Department of Revenue website: https://floridarevenue.com/taxes/pages/colls_from_7_2003.aspx. See Guidance Document for more information.

- ☒ Current funding request includes construction and year one post-construction monitoring
☐ Project is managed by two or more counties

Additional comments

9. Federal involvement: The documentation to verify authorization, federal cost share percentage, and status of funding award must be provided with the application materials for the award of points.

Is the project Federally authorized by the USACE?

No

Authorization Year:

Expiration Year:

Does this project have a signed USACE Chief's report or Civil Works Congressional authorization for the requested phase?

No

USACE federal cost share percentage for this project (excluding FCCE):



Beach Management Funding Assistance Program
Local Government Funding Request
Fiscal Year 2023/2024
Beach Projects Application

Select all that apply for the requested project phase(s) and include documentation with application materials.

- ☐ Executed USACE project agreement
- ☐ Included in USACE work plan
- ☐ Approved FEMA Project Worksheet
- ☐ Included in Congressional Appropriations Act
- ☐ Other documentation:

10. Storm damage reduction benefits: Criteria is calculated by the Department.

What is the volume (cy) of advanced nourishment lost since the last sand placement event of a beach restoration or nourishment project as measured above the Mean High Water contour? Data should be consistent with the annual post-construction monitoring reports.

Based on observations made from 2016 to 2022, the project area (R34 to R40) continues to

For restoration projects, what is the historical erosion rate?

Using a Bruun Rule approach (4,863 ft-long shoreline reach and 18.5 ft active profile height) this erosion rate equates to an average shoreline retreat of about

11. Cost effectiveness: Criteria is calculated by the Department. A project design analysis and supporting documentation must be provided with the application materials for the award of points. See Guidance Document for more information.

What is the proposed sand placement volume (cy)?

175,000

What is the nourishment interval (years)?

3

Select all that apply for the current project funding request:

- ☐ Enhanced longevity: Propose structural or design components that could extend the beach nourishment interval
- ☐ Dune addition: Incorporate new or enhanced dune structures or new or existing dune restoration and revegetation projects
- ☐ Innovative technology: Propose innovative technologies designed to reduce project costs
- ☐ Regionalization: Two or more local sponsors manage projects together or projects propose regional sediment management strategies to conserve sand resources or reduce project costs

Additional comments
for storm damage
reduction benefits and
cost effectiveness



Beach Management Funding Assistance Program
Local Government Funding Request
Fiscal Year 2023/2024
Beach Projects Application

12. Previous state commitment

Has the Department previously reviewed, approved, and cost-shared on a feasibility or design phase for this project?

Has the current proposed project phase(s) received a partial state appropriation within 3 years of phase completion?

Additional comments

13. Accessible beach area: Criteria is calculated by the Department. Provide additional information for consideration.

Describe the landward and seaward edge of the accessible beach width

The recreational value of the bathtub Beach / Sailfish Point beach renourishment project as described in Statute-161.101(14)(c)(2)(a) is represented as the area of accessible beach added by the project. For the

Provide the project boundaries (R-monuments)

R-34.5 to R-40

Provide citations of reference sources

14. Recreational benefits: Provide the percentage of linear footage within the project boundaries which is zoned recreational or open space; for commercial use; or to allow for public lodging establishment, or the equivalent. Provide additional documentation and DBPR website link in a separate attachment, if needed.

20.72%

15. Mitigation of inlet effects: Criteria is calculated by the Department.

Additional comments 102,000 cy to address management of the St. Lucie Inlet for 2020, 2021, and 2022

16. Successive unfunded requests

Is the current proposed project phase(s) a successive, unfunded request? If so, how many years of successive request(s) is the current application?

Does the successive request add the construction phase?

No



Beach Management Funding Assistance Program
Local Government Funding Request
Fiscal Year 2023/2024
Beach Projects Application

17. Environmental habitat enhancement: Criteria is calculated by the Department. See Guidance Document for more information.

Is the project within a designated critical habitat area for threatened or endangered species that is subject to extensive shoreline armoring?

No

Is the project within a non-designated area where extensive shoreline armoring threatens the habitat of threatened or endangered species?

No

If yes to either of the above, does the project exceed best management practices to incorporate turtle-friendly designs and management strategies to protect resources or benefit critical habitat preservation?

No

Provide an explanation and supporting documentation for the strategies which exceed best management practices

18. Readiness to construct

Does the project have an active state permit?

Yes

Does the project have an active federal permit?

Yes

Permit number

0326938-001-JC

Permit number

SAJ-2008-1107(IP-DW)

Authorization date

Oct 28, 2015

Authorization date

Feb 12, 2010

Expiration date

10/28/2030

Expiration date

2/8/2031

Have all necessary easements been acquired for the upcoming or proposed construction phase?

Yes

Has the necessary local funding been secured for the proposed project? If so, provide a copy of the draft Resolution. The signed Resolution is due by October 5, 2022.

Yes

Is an Erosion Control Line established along the project length?

Yes

Additional comments for readiness to construct



Beach Management Funding Assistance Program
Local Government Funding Request
Fiscal Year 2023/2024
Beach Projects Application

Provide additional information and comments below or attach supporting documents.