



Beach Management Funding Assistance Program
Local Government Funding Request
Fiscal Year 2022/2023
Beach Projects Application

PART I: GENERAL INFORMATION

Local Sponsor Brevard County Board of County Commissioners

Federal ID Number (FEID) 59-6000523

Primary Contact Name Mike McGarry

Title Program Manager, Beaches

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City Viera

Zip Code 32940

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Additional Contact Information

Please Cc: Paula Berntson Paula.Berntson@brevardfl.gov on email communications.

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

Mike McGarry

Date 7/28/2021



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PART III: EVALUATION CRITERIA

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

Brevard County Shore Protection Project North and South Reaches

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

The project consists of beach restoration along two segments of a single federal project totaling 13.6 miles of the Atlantic Ocean shoreline in Brevard County. The project is authorized by Congress as the Brevard County Federal Shore Protection Project. These segments, the North Reach, and South Reach, have already been constructed under the federal process. The North Reach commences immediately south of the Port Canaveral entrance at DNR Monument R-1 and extends 9.8 miles through the cities of Cape Canaveral and Cocoa Beach to R-54.5, located 1,500 feet south of the northern boundary of Patrick Air Force Base. The South Reach commences near Flug Avenue in the Town of Indialantic at DNR Monument R-118.3 and extends 3.9 miles through the Town of Melbourne Beach to R-141 within Spessard Holland Park.

Initial restoration of the North Reach commenced on November 13, 2000 and was completed a year ahead of schedule in April 2001. Initial restoration of the South Reach commenced on March 12, 2002, with 3 miles completed during the first construction season. A second construction season in March and April 2003 completed initial restoration of the South Reach.

Emergency interim renourishment of the Brevard County Federal Shore Protection Project North and South Reaches occurred in 2005 to replace losses from the devastating 2004 hurricane season.

The South Reach was renourished again in 2010 to take advantage of supplemental federal funding.

Renourishment of the North and South Reaches was completed between November 2013 and April 2014. In the South Reach this work was wholly to replace losses from Hurricane Sandy. In the North Reach work restored damage from Hurricane Sandy as well as background erosion. Construction of the 2013-14 work was 100% federally funded, but permitting, monitoring and maintenance costs fell on the local sponsor.

Renourishment of the North and South Reaches was completed between November 2017 and April 2018. In the South Reach this work was wholly to replace losses from Hurricane Matthew. In the North Reach work restored damage from Hurricane Matthew as well as background erosion. Sand placement for the 2017-18 work was 100% federally funded (approximately \$17M federal funding appropriated), but permitting, quality assurance, monitoring and maintenance costs fell on the local sponsor (permit holder).

Another North and South Reach renourishment was completed in April 2021. Initially the work was designed to replace losses from Hurricane Irma at 100% federal expense. As the project moved forward the USACE determined additional advance fill should be added to South Reach with cost shared funds to maximize benefits of the dredge mobilization. In total approximately \$25m of sand was placed in the two reaches with a non-federal contribution of \$1.67m. After the fact reimbursement is being sought for this non-federal share.

Long term renourishments are scheduled at approximately 6-year intervals, as needed, for the next 30 years. Three borrow sources have been identified and permitted for the Brevard County Federal Shore Protection Project. Canaveral Shoals Borrow Area I is located about 1.6 miles east-southeast of Cape Canaveral. Canaveral Shoals Borrow Area II is located about 4.5 miles east-southeast of Cape Canaveral. Space Coast Shoals is located between 1.1 and 3 miles offshore of Patrick Air Force Base. These borrow areas have sufficient material available for the life of the federal project.



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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.

Construction funds requested with this submittal are for after the fact reimbursement for the modest non-federal share required to complete the \$14m South Reach renourishment between November 2020 and April 2021. Initially the project was expected to be 100% federal using FCCE funds, but the USACE determined placement of additional sand with cost shared funds was in the best interest of the project. The Corps requested approximately \$1.67m in non-federal funds for construction. Brevard County provided funds and is now seeking reimbursement from the Department.

Additional construction funds are being sought for year 0 and year 1 construction related monitoring of North and South Reaches.

Monitoring funds are being requested to cover the second year required post construction monitoring of the North and South Reaches after their 2021 renourishment.

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 2020) that are enclosed or intersected by the buffer. The 2020 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).

51,737' + 19,958' = 71,695' project all within critically eroded shoreline.



- **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]



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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 19/20, 20/21, and 21/22). 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
19/20						
19/20						
19/20						
20/21	Construction	Non-federal contribution to USACE	12,731,197	834,402	834,402	14,400,000
20/21	Construction	Year 0 and Year 1 monitoring		150,000	150,000	300,000
20/21						
21/22						
21/22						
21/22						
22/23	Monitoring	N&S Reach Year 2 monitoring		195,000	195,000	390,000
22/23						
22/23						
23/24	Monitoring	N&S Reach Year 3 monitoring		195,000	195,000	390,000
23/24						
23/24						



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Fiscal Year	Project Phase	Description	Federal Cost	State Cost	Local Cost	Total Cost
24/25	Monitoring	N&S Reach required monitoring		100,000	100,000	200,000
24/25						
24/25						
25/26	Construction	Renourishment South Reach	9,000,000	3,500,000	3,500,000	16,000,000
25/26	Design	Preconstruction engineering and design		60,000	60,000	120,000
25/26	Monitoring	N&S Reach required monitoring		100,000	100,000	200,000
26/27	Monitoring	N&S Reach Year 1 monitoring		250,000	250,000	500,000
26/27						
26/27						

8. Tourism-related impacts: Criteria is calculated by the Department using 2020 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

Note: Brevard Tourism Tax reporting data is not as up to date as some counties. Please assure calculation does not include any "zero" (yet to be reported) months.

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?

Authorization Year:

Expiration Year:

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

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



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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:

Project has already been constructed, this is clear documentation of authority and funding. NOTE answer to #9 is approximated average based

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.

Because after the fact reimbursement is being sought for renourishment Nov 2019-

For restoration projects, what is the historical erosion rate?

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)?

This is after fact funding request so volume is known. Dec 2019

What is the nourishment interval (years)?

6

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

Dune was added to the project at request of Brevard County in 2002 and has been maintained since that time. Brevard was the first federal project in Florida to incorporate a dune and it has served well to provide cost effective storm damage reduction.



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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

ECL and Design Profile MHWL

Provide the project boundaries (R-monuments)

NR R-1 to R-54
SR R-118 to R-141

Provide citations of reference sources

Olsen Jan. 2021 South Reach monitoring indicated South Reach value is 41.42 acres

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.

GIS calculations
South Reach 40.4%
North Reach 37.5%
Combined Full Project 38.3%

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

Additional comments

The Independent Coast Expert Study, and associated lawsuit verdict, indicates the North Reach Project is required to mitigate the down-drift impact of Canaveral Harbor. The 2014 Canaveral Inlet Management Plan approved by FDEP has a sediment budget (Figure 3) which shows inlet erosion impact of 201,000cy/yr versus the current bypass volume of 156,000cy/yr for a bypassing shortfall of 45,000cy per year. The North Reach projects mitigates this bypassing shortfall.

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?



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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?

Yes

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

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?

Yes

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

The Brevard County is considered critical habitat for Loggerhead (threatened) and Green (endangered) sea turtles. The county hosts world renowned numbers of sea turtle nests. In 2002 Brevard County modified the template of the federal shore protection project to increase berm slope and improve marine turtle nesting. This was the first turtle friendly template design constructed by the USACE in Florida. Prior to construction of the project Olsen Associates (1989) documented 10,900 feet of armor within the North Reach and 1225 feet of armor in the South Reach. Only the success of the federal shore protection project has kept further armor from being constructed in the North and South Reach since project inception.

18. Readiness to construct

Does the project have an active state permit?

Yes

Does the project have an active federal permit?

N/A

Permit number

North and South reach have two active p

Permit number

federal project so no federal permit requ

Authorization date

Authorization date

Expiration date

Expiration date

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 September 21, 2021.

Yes

Is an Erosion Control Line established along the project length?

Yes

Additional comments for readiness to construct

The Brevard Federal Shore Protection Project North and South Reaches have been constructed many times. The most recent nourishment was completed April 2021 for which after the fact state reimbursement is being sought. The shows everything was "ready" for the project to proceed, including Brevard County funding. Only last minute request by the USACE for additional matching funds forced this after the fact funding request.



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Provide additional information and comments below or attach supporting documents.

Additional attachments include: North Reach Map set, North Reach Public Access and Eligibility Table, North Reach Assessed Value Tab