

FY2022/2023 Local Government Funding Request

Final Beach Project Assessment

Project Name	Brevard County Shore Protection Project - Mid-Reach
Local Sponsor	Brevard County

Initial Assessment	8/2/2021
Group Assessment	8/20/2021
Draft Assessment	8/31/2021
Final Review	10/5/2021

Project Description
The Brevard County Shore Protection Project - Mid-Reach Segment consists of 7.6 miles of shoreline and is located between DEP monuments R75.4 and R118.3 in Brevard County. The Project was federally authorized in 2014 by Congress, with the Project Partnership Agreement signed in 2016. Construction of a mitigation reef was completed in 2019, with the initial federal restoration of the project being completed in 2019 and 2020. The requested funds are for the design and construction of the 2022/2023 nourishment event and post-construction monitoring from the 2019 nourishment. Staff have determined that 100% of the project is eligible for state cost sharing.

Funds will be used for (list project phase, specify which phase is reimbursement, if applicable)
Design, Construction and Monitoring

State cost share %	50.00%
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Project Budget Table					
	State %	Federal	State	Local	Total
Feasibility	0.00%	\$0	\$0	\$0	\$0
Design	50.00%	\$0	\$800,000	\$800,000	\$1,600,000
Construction	50.00%	\$7,936,000	\$4,032,000	\$4,032,000	\$16,000,000
Year 1 Monitoring	50.00%	\$0	\$300,000	\$300,000	\$600,000
Year 2+ Monitoring	50.00%	\$0	\$200,000	\$200,000	\$400,000
Total Project Costs		\$7,936,000	\$5,332,000	\$5,332,000	\$18,600,000

Federal cost share %	49.60%
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Federal agency and description	USACE
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TOTAL PROJECT SCORE (100 points)	36.7
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Tier 1

Tourism-related impacts

Return on investment (10 points)	Score	1.3
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Local Sponsor: Project is requesting construction funds.

Department: Verified

Construction + Year 1 Monitoring Cost: \$4,332,000.00

Value: 6.3

Economic impact (10 points)	Score	1.3
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Local Sponsor: N/A

Department: Brevard County, 2020 data. Tourism-related sales tax data = \$27,321,782.82. County sales tax collections = \$541,662,333.79.

Value: 5.04

Tier 2

Federal involvement

Federal authorization (5 points)	Score	5
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Local Sponsor: Yes - project federally authorized in 2014, through 2066.

Department: Verified

Federal cost share (5 points)	Score	3.1
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Local Sponsor: 49.60%

Department: Verified

Federal funds available (5 points)	Score	5
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Local Sponsor: Yes - funding in Congressional Work Plan.

Department: Verified

Storm damage reduction benefits

Current conditions (8 points)	Score	0
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Local Sponsor:

Recommend use of historical erosion rate: approx. 1 ft per year. Historical erosion rate (approx 1 foot per year bluff retreat) for Mid Reach should be calculated using data from prior to 2002 when nourishment of the adjacent South Reach and PAFB shorelines started causing feeder effect and Brevard emergency sand placement from 2005-2017 in Mid Reach mitigated erosion with placement of approximately 1 million CY of sand. FDEP has used the pre-2002 thus pre-sand placement data in previous LGFR evaluations of the Mid Reach.

Department: Beach restoration was completed in April 2020 with the latest survey received by the Department is the Post-construction survey of June 2020. No measurable advanced fill loss can be calculated and therefore no points are given.

CEG calculated value: 0

Threat to upland development (2 points)	Score	0
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Local Sponsor: N/A

Department: The initial beach restoration was recently completed in 2020 and is expected to provide protection to upland development from a 25-year return interval storm, therefore no threat to upland development.

CEG calculated value: 0%

Value of upland property (5 points)	Score	3.3
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Local Sponsor: \$1,477,948,680

Department: Calculated by GIS staff with 2020 data.

Total value: \$1,729,793,100

Cost-effectiveness

Cost/volume/mile/year (10 points)	Score	4.2
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Local Sponsor: Sand placement volume = 210,000 cy; nourishment interval = 3 years; project length = 40,656 ft or 7.7 miles

Department: Construction cost = \$16,000,000, volume = 210,000 cy, length = 7.65 mi, nourishment interval = 3 yrs

Value: \$3.32

Enhanced longevity, dune addition, innovative technology, and regionalization (5 points)	Score	3
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Local Sponsor: Dune addition to allow for maximum sand placement due to nearshore rock

Department: Verified and eligible for the award of points for dune addition as the proposed project will restore existing dunes.

Tier 3

Previous state commitment

Previously funded phases (1 point)	Score	1
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Local Sponsor: Yes - design, construction, and monitoring

Department: Verified

Total amount of previous funding (3 points)	Score	2.6
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Local Sponsor: N/A

Department: Fiscal year 2012/2013 through 2021/2022

Total funds: \$15,127,079.98

Previous partial appropriation (1 point)	Score	0
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Local Sponsor: N/A

Department: Verified

Recreational benefits

Accessible beach area (2 points)	Score	0.2
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Local Sponsor: Design profile MHWL to the edge of dune vegetation or 14' contour.
Project boundaries: R75.4 to R118.3.

Department: The design is outlined in the Initial Post-Construction Physical Monitoring Report – June 2020 (Olsen Associates, November 2020, page 12, Table 2). There is no shoreline advancement for R-75 to R-83, 10 feet for R-83 to R-99, 20 feet for R-99 to R-109, and 10 feet for R-109 to R-118.3.

Total area: 428,460

Recreational benefits (3 points)	Score	1.2
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Local Sponsor: 39.50%

Department: Verified

Percentage: 39.50%

Mitigation of inlet effects (5 points)	Score	0
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Local Sponsor: N/A

Department: The beach projects eligible for these points must be located within the area of inlet influence. The project area is not within an area of inlet influence and therefore not eligible for the award of points.

CEG calculated value: 0

Volume/mile/year (5 points)	Score	2.5
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Local Sponsor: N/A

Department:

The first nourishment of the project area restored in 2020 is scheduled for 2022/2023. The project nourishment interval as documented in the design document is 3 years. The project length is 40,372 feet or 7.65 miles. The planned sand placement volume as stated in the application is 210,000 cy.

CEG calculated value: 9,150

Tier 4

Successive unfunded requests (5 points)	Score	0
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Local Sponsor: N/A

Department: Verified

Environmental habitat enhancement (5 points)	Score	0
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Local Sponsor:

Yes, within critical habitat area for Loggerhead and Green sea turtles. Mid-Reach is constructed with a turtle-friendly berm slope. 4,550 feet of the project is armored and continued sand placement since 2005 has prevented additional armoring.

Department:

The project is within a designated critical habitat area. 0.76 miles, or 9.9% of the project shoreline is armored, which is not greater than 30% and therefore not eligible for the award of points.

Overall readiness to proceed

Readiness to construct (1 point)	Score	0
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Local Sponsor: N/A

Department: Easement acquisition is ongoing for the project.

Active permits (1 point)	Score	1
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Local Sponsor:

Active state permit and federally-authorized project, so no federal permit required.

Department: Verified

Easements acquired (1 point)	Score	0
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Local Sponsor: No, process is ongoing.

Department: Verified

Local funds secured (1 point)	Score	1
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Local Sponsor: Yes

Department: Signed Resolution was submitted by application deadline.

Erosion Control Line established (1 point)	Score	1
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Local Sponsor: Yes

Department: Verified