

FY2023/2024 Local Government Funding Request

Final Beach Project Assessment

Project Name	Bathtub Beach/Sailfish Point Beach Nourishment
Local Sponsor	Martin County Board of County Commissioners

Initial Assessment	8/17/2022
Group Assessment	9/2/2022
Draft Assessment	9/15/2022
Final Review	10/20/2022

Project Description
The Bathtub Beach/Sailfish Point Beach Nourishment Project includes 5,102 ft of shoreline between DEP monuments R34.3 and R40 in Martin County. The Bathtub Beach segment of the project was restored in 2012. The Sailfish Point segment of the project was designated as critically eroded in 2015. A 2016 construction project included nourishment of Bathtub Beach and restoration of Sailfish Point. In October 2016, Hurricane Matthew impacted Florida. In September 2017, Hurricane Irma made landfall on Florida's west coast and spread tropical storm/hurricane winds across the state. Storm repair projects were constructed in 2017 and 2018. In 2021, 181,852 cubic yards of material from the Sailfish Point Navigation Channel, Federal Channel and Impoundment Basin were placed on the beach between R34.3 and R40. The requested funds are for construction of the remaining yardage over the 102,000 cy that will be cost shared under the St. Lucie IMP, and first year monitoring. Staff have determined that 73.98% of the project is eligible for state cost sharing.

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

State cost share %	36.99%
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Project Budget Table					
	State %	Federal	State	Local	Total
Feasibility	0.00%	\$0	\$0	\$0	\$0
Design	0.00%	\$0	\$0	\$0	\$0
Construction	36.99%	\$0	\$1,294,650	\$2,205,350	\$3,500,000
Year 1 Monitoring	36.99%	\$0	\$110,970	\$189,030	\$300,000
Year 2+ Monitoring	0.00%	\$0	\$0	\$0	\$0
Total Project Costs		\$0	\$1,405,620	\$2,394,380	\$3,800,000

Federal cost share %	0.00%
Federal agency and description	N/A

TOTAL PROJECT SCORE (100 points)	21.1
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Tier 1

Tourism-related impacts

Return on investment (10 points)	Score	1.1
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Local Sponsor: Project is requesting construction funds.

Department: Verified - This project is requesting funds for construction.

Construction + Year 1 Monitoring Cost: \$1,405,620.00

Value: 8.3

Economic impact (10 points)	Score	1.4
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Local Sponsor: N/A

Department: Martin County, 2021 data. Tourism-related sales tax data = \$11,693,901.53. County sales tax collections = \$264,322,758.67

Value: 4.42

Tier 2

Federal involvement

Federal authorization (5 points)	Score	0
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Local Sponsor: N/A

Department: Verified - no federal funding for this project.

Federal cost share (5 points)	Score	0
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Local Sponsor: N/A

Department: Verified - no federal funding for this project.

Federal funds available (5 points)	Score	0
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Local Sponsor: N/A

Department: Verified - no federal funding for this project.

Storm damage reduction benefits

Current conditions (8 points)	Score	0
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Local Sponsor: Erosion rate = 95,700 cy/yr. 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 -28.7 ft/yr.

Department: An updated survey is not available to determine advance nourishment loss and the project is therefore not eligible for the award of points.

CEG calculated value: 0

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

Department: The most recent beach nourishment was completed in 2021. The design profile remains intact and provides storm damage protection to the upland property from the impacts of a 25 year storm event. Therefore, the project is not eligible for the award of points.

CEG calculated value: 0

Value of upland property (5 points)	Score	1
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Local Sponsor: N/A

Department: The upland property value for the Bathtub Beach and Sailfish Point Beach Nourishment Project MI R-034.3 – MI R-040 is \$172,415,350.

Total value: \$172,415,350

Cost-effectiveness

Cost/volume/mile/year (10 points)	Score	2.2
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Local Sponsor: Total volume of proposed sand placement = 175,000 cy. The nourishment interval = 3 years

Department: Construction = \$1,294,650, Volume = 175,000 cy, length = 5,102 ft, nourishment interval = 3 yrs

Value: 2.55 \$/cy/mi/yr

Enhanced longevity, dune addition, innovative technology, and regionalization (5 points)	Score	3
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Local Sponsor: N/A

Department: Dune construction and revegetation occurred in 2010. Therefore, the project is eligible for points.

Tier 3

Previous state commitment

Previously funded phases (1 point)	Score	1
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Local Sponsor: Yes

Department: Verified

Total amount of previous funding (3 points)	Score	1
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Local Sponsor: N/A

Department: Fiscal year 2013/2014 through 2022/2023
Total funds: \$4,127,175

Previous partial appropriation (1 point)	Score	0
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Local Sponsor: No

Department: Verified

Recreational benefits

Accessible beach area (2 points)	Score	0.6
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Local Sponsor: 684,140 sf. of accessible beach between R-34.5 and R-40

Department: The 1982 MHWL was utilized as the seaward design edge and bounded on the landward side by the ECL (Bathtub Beach / Sailfish Point Monitoring Report, Olsen August 2016, page 16). As Calculated by GIS - 543,035 ft²

Total area: 543,035 ft²

Recreational benefits (3 points)	Score	0.6
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Local Sponsor: 20.72% of the total linear footage within the project boundaries is zoned recreational or open space; for commercial use; or to allow for public lodging establishment.

Department: Calculated 20% of the total linear footage within the project boundaries is zoned recreational or open space; for commercial use; or to allow for public lodging establishment.

Percentage: 20.00%

Mitigation of inlet effects (5 points)	Score	0
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Local Sponsor: 102,000 cy to address management of the St. Lucie Inlet for 2020, 2021, and 2022

Department: St. Lucie Inlet sand bypassing activities are meeting the bypassing objective. Therefore, this project is not eligible for the award of points.

CEG calculated value: 0

Volume/mile/year (5 points)	Score	4.2
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Local Sponsor: N/A

Department: Volume = 175,000 cy, Length = 5,102 ft, Nourishment Interval = 3 yrs

CEG calculated value: 60,137.5 cy/ft/yr

Tier 4

Successive unfunded requests (5 points)	Score	0
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Local Sponsor: No

Department: Verified

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

Department: Project intersects critical habitat area. 28.9% of the project shoreline is armored which does not exceed the 30% threshold, thus not eligible for the award of points.

Overall readiness to proceed

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

Department: Eligible for the award of the readiness to construct point.

Active permits (1 point)	Score	1
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Local Sponsor: Yes, an active state permit (0326938-001-JC), and an active federal permit (SAJ-2008-1107(IP-DW))

Department: Verified

Easements acquired (1 point)	Score	1
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Local Sponsor: Yes, all easements have been acquired.

Department: Verified

Local funds secured (1 point)	Score	1
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Local Sponsor: A signed resolution has been submitted.

Department: Signed Resolution was submitted by the application deadline.

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

Department: Verified