TOWN OF JUPITER ISLAND

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July 26, 2021

Ms. Hanna Tillotson, Program Administrator
Beach Management Funding Assistance Program
Florida Department of Environmental Protection
2600 Blair Stone Road, MS#3601
Tallahassee, FL 32399-2400

RE: FY2022/23 Local Government Funding Request Application

Ms. Tillotson:

Please find enclosed the Town's Local Government Funding Request application for Fiscal Year 22/23. In addition to the enclosed form we are providing additional information with this letter in support of the application. The Town's application requests cost share for monitoring efforts related to the beach restoration project completed in April 2021. The Town's permitted beach project length is ~7 miles, extending between R-73 and R-117, which is designated by the Department as Critically Eroded, is included in the Strategic Beach Management Plan, and has been designated by the Department as an area eligible to receive inlet bypass.

Under the FY22/23 application the Town is requesting contracted monitoring services (biological and physical), as well as, approval of force labor (Town employees) to conduct permit-required turtle monitoring. Specifically, the Town will utilize its own staff to perform sea turtle monitoring following the conditions set in the Town's Joint Coastal Permit (0186991-008-JC). In order to reduce the overall monitoring program cost the Town actively engaged and hired the permitted turtle monitor (Peter Quincy) and support staff (Ann McCaffrey, Kim Mohlenhoff, Matthew Rowan, Misti Scaggs, Wendy Mathisen, and Jean Pessolano) as part-time Town employees. Whereas previously the Town contracted turtle monitoring services through an outside consultant (Gahagan & Bryant Associates), paying an average of $65,000 annually prior to 2013 (equivalent to nearly $76,000 in today's dollars), bringing the program in-house has significantly reduced the cost of the monitoring program. It should be noted that the annual contract cost does not reflect any additional monitoring required during construction.

The following information is provided in support of the force labor request, including a projection of the time and cost to be incurred by the Town for monitoring of marine sea turtles as required by beach nourishment permit conditions. As shown in the table below, the cost of the program (based on total salaries and benefits) is projected to be approximately $70,361, which is a significant cost savings when compared to the average annual contract price being paid previously. By completing this work in-house, in lieu of contracting to outside firms, a significant cost savings is achieved both for the Town and the State as the grantor.

Position Title	*Hourly Rate*	*Fringe Rate (%)**	*Est. Hours*	*Projected Salary/Benefits to be Paid*
Quincy, Sr. Biologist	$39.50	5%	1,000	$41,475.00
McCaffrey, Biologist	$29.64	5%	300	$9,336.60
Mohlenhoff, Biologist	$27.37	0%	150	$4,105.50
Rowan, Biologist	$25.01	0%	100	$2,501.00
Scaggs, Biologist	$26.40	0%	100	$2,640.00
Pessolano, Biologist	$26.01	0%	300	$7,803.00
Mathisen, Biologist	$25.00	0%	100	$2,500.00

*Fringe rate reflective of part-time employment status with Quincy and McCaffrey participated in retirement plan with Town contribution match at 5%.

The following supplemental information is offered in support of the Town's FY22/23 application.

Recreational and Economic Benefit:

The Town's property zoning designations have been incorporated into the beach access maps provided with this application. Additionally, a table summarizing the lengths of recreational, open space, commercial and equivalent frontage is provided. The Town's restoration project helps maintain three public beaches available to the Hobe Sound Community (Nathaniel P. Reed Hobe Sound National Wildlife Refuge, Hobe Sound Public Beach, and Blowing Rocks Preserve). They are heavily used by the public and local fishermen. Thus, the restoration project is essential to long-term public access and beach utilization for the Refuge.

The Town's beach nourishment program has led to the stability of the beaches south of R-111 with the exception of a section of beach south of the Blowing Rocks headland feature (critically eroded beach designated between R-126 and R-127.4). The Blowing Rocks Preserve is publicly accessible providing beach access along 5,053 feet of preserve property which overlaps and abuts the critically eroded section south of R-126. Due to the presence of exposed hardbottom the Town conducts dune only projects in this segment to protect residences and the primary evacuation route south off the island.

Mitigation of Inlet Effects:

As a result of the establishment of the St. Lucie Inlet and subsequent extreme shoreline losses along the north end of Jupiter Island, the Town was forced to establish its own beach nourishment program to address longshore sediment supply interruption and shortfalls in inlet bypassing. The nourishment activities conducted by the Town since the 1970's meet the goals and objectives established in the Strategic Beach Management Plan, partially mitigating for those shortfalls. Additionally, the Town established a special tax district for the purposes of funding beach nourishment in 1982, taxing all properties located within the Town's corporate limits (passed by the State under HB 709).

The St. Lucie Inlet is managed by the local sponsor (Martin County) under an inlet management plan originally adopted in 1995, then updated in 2016. Pursuant to Specific Condition No. 2 of the Joint Coastal Permit (No. 0269814-014-JM) the start date for determining the quantity of sand to be bypassed is September 24, 2014. Based on the Department's determination of September 24, 2014 as the start date for assessing bypass achievements, the following table represents the current bypass record for the St. Lucie Inlet.

St. Lucie Inlet Bypass Record (September 2014 to August 2021)

South on Jupiter Island (R53-R111)				North (R-34-R-40)			
Date Completed	**Volume (cy) [1]**	**Location**	**Placement**	**Date Completed**	**Volume (cy) [1]**	**Location**	**Placement**
2014 [2]	0			2014 [2]	0		
2015 [2]	0			2015 [2]	0		
2016 [2]	500,000	R-75 to R-111	Beach	2016 [2]	335,252	R34.3 to R40	Bathtub Beach/ Sailfish Point [4]
2017	0			2017	75,460	R34.3 to R40	Bathtub Beach/ Sailfish Point [4]
2018	483,000		offshore	2018	147,102	R34.3 to R40	Bathtub Beach/ Sailfish Point [4]
2019	531,592	R-73 to R-115	Beach [3]	2019		R-36 to R-40	Bathtub Beach/ Sailfish Point
2020	0			2020		R-36 to R-38	Bathtub Beach/ Sailfish Point [4]
2021	0			2021	180,975	R-36 to R-38	Bathtub Beach/ Sailfish Point [4]
Total Bypass volume	1,031,592			Total Bypass volume	738,789		
Years of IMP Bypass	8			Years of IMP Bypass	6		
Annual average bypass	128,949			Annual average bypass	123,132		
Bypass objective	161,000			Bypass objective	34,000		
Percentage of bypass objective	80.09%			Percentage of bypass objective	362.15%		
Budget Balance	-164,408	Volume South		Budget Balance	534,789	Volume North	

[1] Beach placement volumes confirmed by pre-post placement surveys. Offshore placement volumes based on contractor pay quantities.

[2] Start date of bypass record is September 2014 (refer to SC#2 JCP 0269814-014-JM). IMP objective for 2014 is pro-rated at 184,000 cy/yr for 3 months to be 46,000 cy south. IMP objective for 2015 is 184,000 cy south. No northerly bypass required 2014/2015. IMP update adopted January 2016 with updated bypass objective of 161,000 cy/yr south and 34,000 cy/yr north for 2016 and future years.

[3] 100,000 cy of inlet sand transferred from offshore borrow site to beach. Contractor issues with rock halted further transfer.

[4] Actual volume of sand bypassed from inlet north. Refer to FAC 62B-41 for definition of sand bypassing.

The Town greatly appreciates the support that has been provided by the State as a regulatory agency and a grant partner. We look forward to working alongside all local and regional stakeholders to advance and improve beach and inlet management programs with projects that best meet the needs of all and produce the most cost-effective solutions moving forward. I am available at your convenience to review the Town's requests and to offer further details if needed. As always, thank you for your time and consideration.

Regards,

John Duchock, PE (FL#60457)
Beach District Director

Attachments: Draft Funding Resolution FY21/22; Summer 2020 Physical Monitoring Report; Public Access/Public Lands Maps; Department of Revenue Just Values Spreadsheet

cc: Patricia Wagner, FDEP
Michael Ventura, Town Manager

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

PART I: GENERAL INFORMATION

Local Sponsor	Town of Jupiter Island
Federal ID Number (FEID)	59-6011135
Primary Contact Name	John Duchock
Title	Beach District Director
Mailing Address Line 1	2 Bridge Road
Mailing Address Line 2	
City	Hobe Sound
Zip Code	33455
Telephone Number	772 545-0187
Email Address	jduchock@tji.martin.fl.us

Additional Contact Information

Michael Ventura, Town Manager
2 Bridge Road
Hobe Sound, FL 33455
(772) 545-0100

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 John Duchock

Date 7/22/21

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

PART III: EVALUATION CRITERIA

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

Jupiter Island, Martin County, R45-R111 & Blowing Rocks Beach, Martin County, R126-R127.4

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

The Jupiter Island beach nourishment project consists of permitted restoration and maintenance of 7+/- miles of critically eroding beachfront within the Town of Jupiter Island, Martin County, FL (R-73 – R-111). Since 1973, the Town has placed over 19,130,000 cubic yards of sand for nourishment. The project area is downdrift of and within the area of influence of the St. Lucie Inlet. An adopted Inlet Management Plan has been in place since 1995 and bypass achievements accomplished under that plan have been documented to be insufficient over time. Combined with background erosion effects, the erosion wave downdrift of the inlet requires that the Town conduct large-scale renourishment projects every 4-6 years. In this regard, the Town will always have to supplement the sand supply to its beaches through beach restoration.

The most recent project was performed during the 2020-21 season in response to the impacts of Hurricane Dorian, renourishing 5 miles of the Town's permitted fill area through placement of 663,000 cubic yards of sand from the Town's offshore borrow site. Offshore borrow site material consists of a tan/gray sand and pulverized shell fragments and projects are typically performed utilizing hopper dredges. Additionally, the Town maintains a dune-only project extending 1,100 feet between R-126 and R-127.4. The dune-only project serves to protect the primary evacuation route (CR707) along a low elevation and narrow section of the barrier island (400-500 feet wide). Historically, the Town has maintained the dune system through periodic sand placement via truck haul, using upland sand sources and restricting placement to above the season mean high water line. Restoration efforts have been conducted in response to storm impacts with projects completed in 2012, 2014, 2017, and 2020.

In 2013, the Town created a new staff position whose sole responsibility is the management of the beach district program. As such, the roles and responsibilities of the Beach District Director are focused on executing all aspects of the program, using consultants but also conducting work efforts directly. By conducting work efforts such as construction inspections, permit applications, construction contracting, etc. the Beach District Director saves the taxpayers money which equates to cost share savings to the State as a grantor.

The proposed activities to be covered under this application are for permit-required biological/physical monitoring and tilling by contractors and for staff time conducting permit-required turtle monitoring.

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

Monitoring - Requested FY22/23 funds will be used to reimburse the following permit-required monitoring costs: 2022 post-construction (Year 2) biological monitoring, 2022 physical monitoring (Year 2), 2022 beach tilling, and 2022 sea turtle monitoring performed by Town staff.

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).

34,152 feet (R73-R111)

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

6. Eligibility: Required for all beach projects pursuant to Chapter 62B-36.007, F.A.C. Provide as a separate attachment, if needed.

- 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.

Location/ Access Name	DEP Reference Monument	Type of Access	Width of Access/ Frontage (ft)	Number of Eligible Units	Additional Width from Eligible Units (ft)	Total Eligible Shoreline (ft)	Website Link for DBPR License
HSNWR	R-76A	Primary	3,850'	100	2,640'	6,490'	N/A
HSNWR	R-81.5	Secondary	900'	0	0	900'	N/A
Hobe Sound Public Beach	R-86	Primary	313'	100	5,280'	5,593'	N/A
		Secondary					

Beach Management Funding Assistance Program
Local Government Funding Request
Fiscal Year 2022/2023
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 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	C	2018/19 Beach Project Plantings	0	11,206	47,774	58,980
19/20	M	2019 Biological Monitoring, 2019 Physical Monitoring, 2019 Post-Dorian Survey	0	17,371	74,057	91,428
19/20	F	ECL Extension, Side Scan Survey	0	8,785	37,452	46,237
20/21	M	2020 Tilling, 2020 Biological Monitoring, 2020 Physical Monitoring	0	42,585	181,549	224,134
20/21	M	2020 Turtle Monitoring (staff time)	0	10,236	43,636	53,872
20/21	F	Borrow Site Expansion, FDEP Permit Renewal, USACE Permit Modification	0	27,053	115,329	142,382
21/22	C	2021 Beach Project (R-73 to R-105) and Blowing Rocks Dune Project (R-126 to R-127.4)	11,988,732	295,121	858,147	13,542,000
21/22	M	2021 Biological Monitoring, 2021 Physical Monitoring, 2021Turtle Monitoring (staff time)	0	68,400	291,600	360,000
21/22	F	Engineering design, plans, specifications, bid support	0	2,555	10,895	13,450
22/23	M	2022 Biological Monitoring, 2022 Physical Monitoring, 2022 Turtle Monitoring (staff	0	50,350	214,650	265,000
22/23						
22/23						
23/24	M	2023 Biological Monitoring, Physical Monitoring, Turtle Monitoring (staff time),	0	50,350	214,650	265,000
23/24	C	Blowing Rocks Dune Restoration	0	66,500	283,500	350,000
23/24	F	USACE Permit Renewal	0	38,000	162,000	200,000

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

Fiscal Year	Project Phase	Description	Federal Cost	State Cost	Local Cost	Total Cost
24/25	M	2024 Biological Monitoring, Physical Monitoring, Turtle Monitoring (staff time),	0	50,350	214,650	265,000
24/25						
24/25						
25/26	M	2025 Physical Monitoring, Turtle Monitoring (staff time)	0	23,750	101,250	125,000
25/26	C	Blowing Rocks Dune Restoration	0	66,500	283,500	350,000
25/26						
26/27	M	2026 Physical Monitoring, Turtle Monitoring (staff time), pre-con Biological Monitoring,	0	95,000	405,000	500,000
26/27	F	Engineering design, plans, specifications, bid support	0	6,650	28,350	35,000
26/27	C	Beach Nourishment Project	0	3,800,000	16,200,000	20,000,000

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

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?

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