AGENDA
TOWN OF JUPITER ISLAND
BEACH PROTECTION DISTRICT MEETING
TUESDAY, DECEMBER 16, 2025
ISLAND ROOM – TOWN HALL – 2 BRIDGE ROAD

1. **Mayor/Commissioner Comments***
2. **Public Comment***
3. **Consent Agenda**
    a. Minutes of the November 19, 2025, Beach Protection District Meeting
    b. Monthly Finance Report
4. **Resolution No. 948 - FEMA Engineered Beaches and Dunes**
5. **Turtle & Shorebird Monitoring Spending Authorization - Ecological Associates**
6. **Beach Status***
7. **Other Items***

* *No advanced materials provided*

Town Commission
Penny Townsend, Mayor
Anne Scott, Vice Mayor
Marshall Field VI, Commissioner
Patricia Warner, Commissioner
Joseph Taddeo, Commissioner

Town Staff
Town Manager, Robert Garlo
Town Clerk, Kimberly Kogos

STATE MANDATED STATEMENT

If a person decides to appeal any decision made by the board, agency, or commission with respect to any matter considered at such meeting or hearing, he will need a record of the proceedings, and that, for such purpose, he may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based. Any person requiring a special accommodation at this meeting because of a disability or physical impairment should contact the Town prior to the meeting. Please contact the Town Hall, 2 Bridge Road, Hobe Sound, FL 33455, telephone (772) 545-0103.

MINUTES
TOWN OF JUPITER ISLAND
BEACH PROTECTION DISTRICT MEETING
WEDNESDAY, NOVEMBER 19, 2025

TIME: Wednesday, November 19, 2025 – 11:15 AM
PLACE: Town Hall Island Room – 2 Bridge Rd., Hobe Sound, FL
PRESENT: Present were Mayor Penny Townsend, Vice Mayor Anne Scott, and Commissioner Joseph Taddeo. Also present were Town Manager Robert Garlo, Town Clerk Kimberly Kogos, Town Attorney Brett Lashley and IT Director Bill Sutton.

1. Consent Agenda

MOTION: ***Commissioner Taddeo/Vice Mayor Scott moved to Approve Consent Agenda as presented.***
ACTION: ***Motion Passed 3-0***

a. Minutes of October 28, 2025 Beach Protection District Meeting
b. Monthly Finance Report

2. Resolution No. 947 - Adopting District Goals & Objectives

Director Duchock reminded the Commission that the Goals and Objectives were presented and approved during last month's meeting. He explained that the new state statute requires special districts to report on and post goals and objectives. Resolution No. 947 adopts the reported goals and objectives which will be posted to the Town website once approved.

MOTION: ***Vice Mayor Scott/Commissioner Taddeo moved to approve Resolution No. 947 as presented.***
ACTION: ***Motion Passed 3-0.***

3. FEMA Review Council

Director Duchock stated that staff is seeking authorization to draft a resolution emphasizing the protective benefits of an engineered beach, requesting that FEMA re-categorize engineered beaches as flood protection, dunes as infrastructure and urging FEMA to continue funding engineered beach projects.

Mayor Townsend suggested including infrastructure in the resolution.

Consensus was gained to direct staff to draft a resolution as discussed.

4. Beach Status*

Director Duchock reviewed the beach status indicating that there is minor erosion along most of the nourished beach with a rolling beach face and variable escarpment formations. He noted potential hotspots including:

- 33 NB to the public beach

- 65 SB to 185 SB
- 440 to 460 SB (new)
- 600 Block (dune)

Director Duchock provided aerial drone footage as well as ground photography to capture the current shoreline conditions.

5. Other Items*

No other items were discussed.

The meeting adjourned at 11:07am.

Respectfully Submitted,

Kimberly Kogos, Town Clerk

12/04/2025

TOWN OF JUPITER ISLAND
INTERIM BALANCE SHEET
Period Ending 11/30/2025

GL Number	Description	Balance
Fund 101 - BEACH PROTECTION DISTRICT		
*** Assets ***		
101-000-101.000	CASH IN BANK-SEACOAST NATIONA	1,605,492.99
101-000-101.001	MONEY MARKET-SEACOAST NATIONA	320,291.37
101-000-101.152	INVESTMENT POOL	6,523,757.01
101-000-101.154	INVESTMENT- FL PALM	5,010,678.80
101-000-101.155	INVESTMENT-SBA	106,610.97
101-000-131.001	DUE FROM GENERAL FUND	332,050.76
101-000-133.002	DUE FROM FEMA	12,588,947.98
101-000-155.000	PREPAID ITEMS	1,317.82
	Total Assets	26,489,147.70
*** Liabilities ***		
101-000-202.000	ACCOUNTS PAYABLE	24,787.58
101-000-207.001	DUE TO GENERAL FUND	33,754.81
	Total Liabilities	58,542.39
*** Fund Balance ***		
101-000-280.001	NONSPENDABLE PREPAID	2,723.00
101-000-284.000	FUND BALANCE	22,577,186.93
	Total Fund Balance	22,579,909.93
	Beginning Fund Balance - 24-25	22,579,909.93
	Net of Revenues VS Expenditures - 24-25	2,668,733.65
	*24-25 End FB/25-26 Beg FB	25,248,643.58
	Net of Revenues VS Expenditures - Current Year	1,181,961.73
	Ending Fund Balance	26,430,605.31
	Total Liabilities And Fund Balance	26,489,147.70

* Year Not Closed

BEACH EROSION DISTRICT
INTERIM REVENUE AND EXPENDITURE REPORT
PERIOD ENDING 11/30/2025

GL NUMBER	DESCRIPTION	2025-26 ORIGINAL BUDGET	2025-26 AMENDED BUDGET	YTD BALANCE 11/30/2025	AVAILABLE BALANCE	% BDGT USED
Fund 101 - BEACH PROTECTION DISTRICT						
Revenues						
Dept 000						
101-000-311.000	AD VALOREM TAXES	3,655,318.00	3,655,318.00	1,244,708.34	2,410,609.66	34.05
101-000-361.100	INTEREST	225,000.00	225,000.00	33,673.32	191,326.68	14.97
Total Dept 000		3,880,318.00	3,880,318.00	1,278,381.66	2,601,936.34	32.95
TOTAL REVENUES		3,880,318.00	3,880,318.00	1,278,381.66	2,601,936.34	32.95
Expenditures						
Dept 211 - BEACH PROTECTION ADMINISTRATION						
	PERSONNEL AND BENEFITS	284,870.00	284,870.00	37,052.04	247,817.96	13.01
	OPERATING	284,520.00	284,520.00	27,285.32	257,234.68	9.59
Total Dept 211 - BEACH PROTECTION ADMINISTRATION		569,390.00	569,390.00	64,337.36	505,052.64	11.30
Dept 221 - BEACH PROTECTION PROJECTS						
101-221-531.105	PROF SVCS-ENG CONSULTANTS	250,000.00	250,000.00	1,695.00	248,305.00	0.68
101-221-549.118	TURTLE MONITORING	250,000.00	250,000.00	14,664.64	235,335.36	5.87
101-221-549.119	REEF MONITORING	120,000.00	120,000.00	7,150.99	112,849.01	5.96
101-221-549.120	BEACH SURVEYS	150,000.00	150,000.00	8,571.94	141,428.06	5.71
101-221-549.121	BEACH MAINTENANCE	35,000.00	35,000.00	0.00	35,000.00	0.00
101-221-549.122	DUNE RESTORATION	500,000.00	500,000.00	0.00	500,000.00	0.00
101-221-591.272	TRANSFER TO RESERVES	1,905,928.00	1,905,928.00	0.00	1,905,928.00	0.00
101-221-599.900	CONTINGENCY	100,000.00	100,000.00	0.00	100,000.00	0.00
Total Dept 221 - BEACH PROTECTION PROJECTS		3,310,928.00	3,310,928.00	32,082.57	3,278,845.43	0.97
TOTAL EXPENDITURES		3,880,318.00	3,880,318.00	96,419.93	3,783,898.07	2.48
Fund 101 - BEACH PROTECTION DISTRICT:						
TOTAL REVENUES		3,880,318.00	3,880,318.00	1,278,381.66	2,601,936.34	32.95
TOTAL EXPENDITURES		3,880,318.00	3,880,318.00	96,419.93	3,783,898.07	2.48
NET OF REVENUES & EXPENDITURES		0.00	0.00	1,181,961.73	(1,181,961.73)	100.00

TOWN OF JUPITER ISLAND

MEMORANDUM

To: Mayor & Town Commission

Through: Robert Garlo, Town Manager

CC: Kimberly Kogos, Town Clerk

From: John Duchock, Asst. Town Manager

RE: Agenda Item No. 4 –Resolution No. 948 FEMA Engineered Beaches and Dunes

Date: 12/2/2025

Background:

As directed by the Town Commission, staff has prepared a resolution addressing concerns related to the reorganization of the Federal Emergency Management Agency (FEMA). Resolution No. 948 (attached) outlines positions of the Town as follows:

- Promotes the benefits of an engineered beach as critical infrastructure to protect against the impacts of natural disasters, including storm-related erosion and flooding.
- Supports the classification of natural and maintained dunes as infrastructure, extending the flood protective nature of the engineered beach higher in elevation and farther landward.
- Requests FEMA consider re-categorizing engineered beaches from Category G Parks, Recreation, Other facilities to Category D Water Control Facilities, better aligning the function of an engineered beach and dune system to that of flood protection infrastructure such as levees.
- Urges FEMA to continue funding of engineered beaches and dune through the Public Assistance Program.

Recommendation:

Resolution No. 948 is presented for Town Commission approval.

RESOLUTION NO. 948

A RESOLUTION OF THE TOWN COMMISSION OF THE TOWN OF JUPITER ISLAND, MARTIN COUNTY, FLORIDA, SUPPORTING THE PROTECTIVE BENEFITS OF AN ENGINEERED BEACH, REQUESTING THAT THE FEDERAL EMERGENCY MANAGEMENT AGENCY RE-CATEGORIZE ENGINEERED BEACHES AS FLOOD PROTECTION, SUPPORTING THE CLASSIFICATION OF NATURAL AND MAINTAINED DUNES AS INFRASTRUCTURE, AND URGING CONTINUE FUNDING OF ENGINEERED BEACHES AND DUNES THROUGH THE PUBLIC ASSISTANCE PROGRAM.

WHEREAS, the Town of Jupiter Island is located on a barrier island and is subject to intense impacts from storms, including those declared as disasters by the Federal Emergency Management Agency (FEMA); and,

WHEREAS, through the declaration of emergencies and disasters, FEMA and the State of Florida administer Public Assistance grants for disaster recovery; and,

WHEREAS, engineered beaches are considered permanent work projects under the Public Assistance Program, Category G Parks, Recreation, and Other Facilities; and,

WHEREAS, the Town of Jupiter Island has maintained its beaches in accordance with the requirements of an engineered beach to provide protection from storms and associated flooding since 1973; and,

WHEREAS, dunes are an integral component of a protective engineered beach system; and,

WHEREAS, the Town of Jupiter Island is committed to maintaining its beaches and dunes in accordance with FEMA's requirements for engineered beaches.

NOW, THEREFORE BE IT RESOLVED BY THE TOWN COMMISSION OF THE TOWN OF JUPITER ISLAND:

Section 1. The foregoing recitals are true and correct and are incorporated herein by reference.

Section 2. The Town of Jupiter Island promotes the benefits of an engineered beach as critical infrastructure to protect against the impacts of natural disasters, including storm-related erosion and flooding.

Section 3. The Town of Jupiter Island supports the classification of natural and maintained dunes as infrastructure, extending the flood protective nature of the engineered beach higher in elevation and farther landward.

Section 4. The Town of Jupiter Island requests FEMA consider re-categorizing engineered beaches from Category G Parks, Recreation, Other facilities to Category D Water Control Facilities, better aligning the function of an engineered beach and dune system to that of flood protection infrastructure such as levees.

Section 4. The Town of Jupiter Island urges FEMA to continue funding of engineered beaches and dune through the Public Assistance Program.

(continued on next page)

THIS RESOLUTION IS DULY PASSED AND ADOPTED THIS 16th DAY OF DECEMBER 2025.

TOWN OF JUPITER ISLAND

_____
Mayor

_____
Vice Mayor

_____
Commissioner

_____
Commissioner

ATTEST:

_____
Town Clerk

_____
Commissioner

TOWN OF JUPITER ISLAND

MEMORANDUM

To: Mayor & Town Commission

Through: Robert Garlo, Town Manager

CC: Kimberly Kogos, Town Clerk

From: John Duchock, Asst. Town Manager

RE: Agenda Item No. 4 –Resolution No. 948 FEMA Engineered Beaches and Dunes

Date: 12/12/2025

Background:

Attached to this memo is supplemental information taken from FEMA's Public Assistance Program and Policy Guide detailing various Categories of emergency work (Categories A & B) and permanent work (Categories C-G). This information is provided as reference material supporting a recommendation to request that FEMA consider reclassifying engineered beaches from Category G (Parks, Recreation, and Other) to Category D (Water Control Facilities), as this designation better reflects the intended function of an engineered beach and dune system to serve as infrastructure and protection from flooding due to storms – much like levees and other critical flood protection infrastructure in that category.

Recommendation:

For information purposes only.

and contract documents to validate). If damage existed prior to the incident, only the repair of damage caused by the incident is eligible.

II. General Work Eligibility

Through the PA Program, FEMA provides grant funding for:

- Debris removal (emergency work);
- Emergency protective measures (emergency work);
- Permanent restoration of damaged facilities, including cost-effective hazard mitigation to protect the facilities from future damage (permanent work); and,
- Building code and floodplain management administration and enforcement activities (permanent work).

If an entity does not comply with all applicable statutes, executive orders (EOs), regulations, and policies, FEMA may take one of several actions including disallowing all or part of the cost of the project not in compliance.[116]

A. Emergency Work vs. Permanent Work

Emergency work addresses an immediate threat. Permanent work includes the restoration of a damaged facility or building code and floodplain management administration and enforcement activities. To facilitate the processing of PA funding, FEMA further separates both emergency work and permanent work into categories. These categories are shown in Figure 7. Categories of Work.

Figure 7. Categories of Work

B. Minimum Work Eligibility Criteria

At a minimum, work must meet each of the following three general criteria to be eligible:

- Be required as a result of the declared incident;
- Be located within the declared area; and,
- Be the legal responsibility of an eligible applicant.[117]

Work eligibility is discussed in detail in Chapter 7: Emergency Work Eligibility and Chapter 8: Permanent Work Eligibility (Categories C-G).

[116] 2 C.F.R. § 200.339.
[117] 44 C.F.R. § 206.223(a).

CATEGORY B
EMERGENCY PROTECTIVE MEASURES

FEMA evaluates whether the facility had pre-existing water infiltration conditions when determining whether mold remediation is eligible. For this evaluation, FEMA considers whether there is evidence of pre-existing damage or deferred maintenance, such as:

- Improperly sealed windows or exterior vents;
- Standing water against an exterior wall;
- Poorly maintained drains or gutters with rust or vegetative growth; and,
- Leaking and or water-stained ceiling tiles.

4. EMERGENCY BERMS ON BEACHES

If a natural or engineered beach has eroded to a point where flooding from a storm that has a 20 percent chance of occurring in any given year (5-year storm) could damage improved property, cost-effective emergency protective measures on the beach that protect the improved property against damage from that 5-year storm are eligible.

Eligible measures typically include the construction of emergency sand berms to protect against additional damage from a storm that has a 20 percent chance of occurring in any given year. Emergency sand berms are not intended to permanently restore the beach; they are intended only to provide protection from immediate threats. Applicants may construct emergency berms with sand recovered from the beach or with imported sand. If an applicant constructs the berms with imported sand, FEMA will only provide PA funding if the sand is from a source that meets applicable environmental regulations and one of the following circumstances exists:

- Recoverable quantities are insufficient; or
- SLTT government regulations prohibit placement of the recovered sand.

To show that flooding from a storm that has a 20 percent chance of occurring in any given year could damage improved property, applicants must demonstrate that the still water level plus wave runup elevation for a 5-year storm exceeds the post-incident elevation of the primary dune.

The 5-year still water level (SWL) is equal to the average water surface elevation of the rise in seawater level (surge) resulting from a storm that has a 20 percent chance of occurring in any given year, plus wave setup and the astronomical tide. The 5-year total water level (TWL) is equal to the elevation of the wave runup predicted for a storm that has a 20 percent chance of occurring in any given year plus the SWL. Locations where the elevation of the post-incident profile is less than the TWL are eligible for placement of an emergency berm to protect improved property. See Figure 15. Determining Eligibility of Emergency Berms on Beaches below.

CATEGORY D
WATER CONTROL FACILITIES

5. DEMONSTRATING DISASTER-RELATED DAMAGE

Submerged roads should only be assessed for visible and quantifiable surface damage after flood waters have receded to avoid additional damage. Applicants must substantiate surface damage claims with supporting documentation as described below. FEMA will not accept a damage report simply based on a claim that a section of road has experienced inundation without demonstrating any resulting surface damage. Similarly, damage repair to an inundated or submerged road is not assumed to be eligible simply because estimated repair costs were included in a joint preliminary damage assessment.

B. Water Control Facilities (Category D)

Water control facilities are those facilities built for the following purposes:

- Channel alignment;
- Recreation;
- Navigation;
- Land reclamation;
- Irrigation;
- Maintenance of fish and wildlife habitat;
- Interior drainage;
- Erosion prevention;
- Flood control; or
- Storm water management.

They include:

- Dams and reservoirs;
- Levees and floodwalls;
- Lined and unlined engineered drainage channels;
- Canals;
- Aqueducts;
- Acequias
- Sediment and debris basins;
- Storm water retention and detention basins;
- Urban stormwater management infrastructure;
- Coastal shoreline protective devices;
- Irrigation facilities;
- Pumping facilities; and,
- Navigational waterways and shipping channels.

1. RESTORING THE CAPACITY OF CHANNELS, BASINS, AND RESERVOIRS

Restoring the pre-disaster carrying or storage capacity of engineered channels, debris and sediment basins, storm water detention and retention basins, and reservoirs is eligible, if the facilities were not constructed by a federal agency and if the applicant provides documentation to establish the following (see Table 28. Required Documentation and Information to Support Pre-Incident Capacity of Channels, Basins, and Reservoirs).

Table 28. Required Documentation and Information to Support Pre-Incident Capacity of Channels, Basins, and Reservoirs

For Small and Large Projects
▪ The pre-disaster capacity of the facility;[365] and, ▪ That the applicant maintains the facility on a regular schedule. ○ Documentation supporting regular maintenance would be a written maintenance plan and/or activity logs documenting regular intervals of activity. Applicant logs documenting clearance of blockages in response to resident complaints are not sufficient to substantiate a regular maintenance schedule.

If the applicant chooses to remove non-incident-related material along with that deposited as a result of the incident, the project is considered an improved project.

2. FLOOD CONTROL WORKS

Flood control works are those structures such as levees, flood walls, flood control channels, and water control structures designed and constructed to have appreciable effects in preventing damage by irregular and unusual rises in water levels.

Restoration of damaged flood control works that are under the authority of another federal agency are ineligible. Secondary levees riverward of a primary levee are ineligible unless the secondary levee protects human life. See Appendix I. Work Eligibility Considerations by Type of Facility. for more information.

C. Buildings and Equipment (Category E)

Facilities under category E include buildings, contents, equipment, and vehicles. Specific to category E, insurance is generally available for buildings, contents, equipment, and vehicles, for most perils such as flood, wind, and fire; therefore, insurance should be the primary source of recovery for PA applicants.

1. BUILDINGS

Buildings include all structural and non-structural components, including mechanical, electrical, and plumbing systems.

For buildings and building systems, distinguishing between damage caused by the incident and pre-existing damage may be difficult. Before making an eligibility determination, FEMA considers each of the following:

[365] Survey data that is either recent or covers a multi-year period to substantiate the amount of new material reasonably attributable to the incident can be used to support pre-disaster capacity claims.

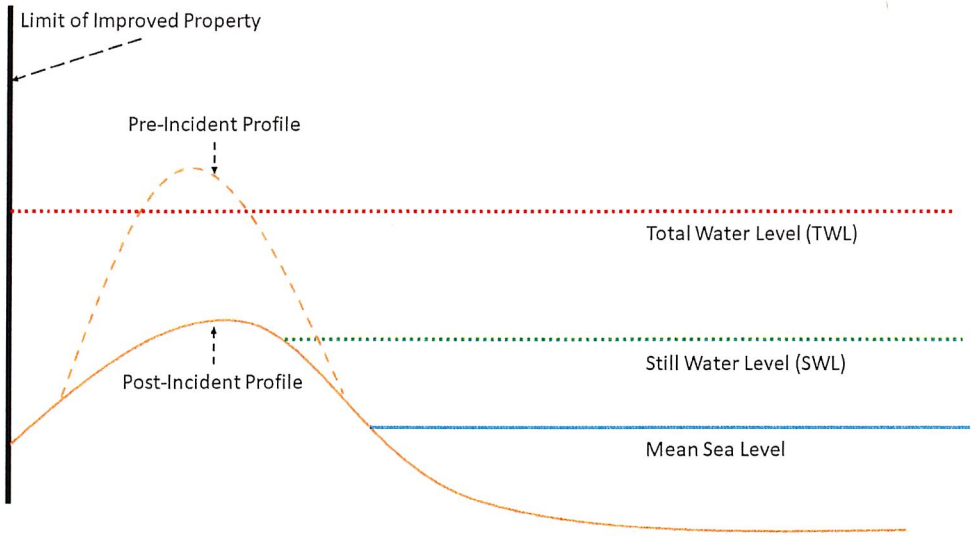

Figure 15. Determining Eligibility of Emergency Berms on Beaches

Based on the average expected erosion for a storm that has a 20 percent chance of occurring in any given year, FEMA only provides PA funding for emergency berms constructed with up to 6 cubic yards per linear foot of sand above the 5-year stillwater level or the berm's pre-incident profile, whichever is less. In some cases, placing sand below the 5-year stillwater level may be necessary to provide a base for berm. The placement of that sand is also eligible as part of the emergency protective measure.

Placement of dune grass on an emergency dune or berm is only eligible if it is required by permit and is an established, enforced, uniform practice that applies to the construction of all emergency berms within an applicant's jurisdiction, regardless of the circumstance. If dune grass is required, the applicant must include the grass placement cost in the dune or berm construction cost when evaluating cost-effectiveness. Any maintenance of the dune grass after the initial installation is ineligible.

For berms located on natural beaches, or improved beaches which do not qualify as category G-eligible facilities, the category B work will not result in a dune eligible under category G in future disasters. If an applicant chooses to construct engineered dunes, the eligible work and costs are limited to that necessary for addressing the immediate threat.

Applying eligible sand volumes to an aggregate total as the result of several disasters, to be used in a work-to-be-completed project, is not allowable for emergency berm sand since category B, by definition, addresses an immediate threat.

X. Elections and Polling Activities

Public Assistance may fund election-related work, as these services are essential to ensuring the continued function of communities. Disasters can damage or destroy the facilities that host these activities or render them unusable due to power outages. These facilities are often located in public buildings, such as schools or community centers, which may also be needed for disaster response and recovery efforts, like sheltering, potentially disrupting election activities.

CATEGORY G
PARKS, RECREATION, and OTHER

- Fish hatcheries;
- Ports and harbors;
- Piers; and,
- Other facilities that do not fit in categories C–F.

Unimproved natural features are ineligible. For more information and examples, see the Facility Eligibility section in Chapter 4.

Grass and sod replacement are eligible if it is an integral part of the restoration of an eligible recreational facility. Vegetation replacement is also eligible if necessary to restore the function of the eligible facility (e.g., if vegetation is a component of a sewage filtration system).

Plantings required to mitigate environmental impacts, such as those required to address impacts to wetlands or endangered species habitat, are eligible when required by a federal or SLTT codes, standards, or permit that meets the criteria described under the Permit Requirements section in this chapter.

Long-term monitoring to ensure vegetative growth is ineligible even if it meets the requirements above.

Replacement of damaged trees, shrubs and other vegetation during site restoration is ineligible. Replacement of damaged crops, agricultural land, or other vegetation not at the site of an eligible facility is ineligible.

1. BEACHES

Replacement of sand on beaches is only eligible under certain conditions.[372] A beach is considered an eligible facility when all the following conditions exist:

- The beach was not constructed under the specific authority of USACE;[373]
- The beach was constructed by the placement of imported sand—of proper grain size—to a designated elevation, width, and slope;[374] and,
- The applicant has established and adhered to a maintenance program involving periodic renourishment with imported sand to preserve the original design or a specific engineered design, which is clearly justified and outlined in the maintenance program.[375] Placement of sand under the following circumstances does not meet this requirement:
  - Emergency or "one-time" nourishment, even if to a design;
  - Emergency or "as-needed" renourishments when the beach has eroded to a critical condition where all original nourishment is gone;
  - Partial renourishments or "hot-spot" nourishments; or
  - Renourishment using material from a channel maintenance project when dredge spoils do not meet compatibility design criteria and the amount placed is dependent on the amount dredged, not the beach design.

[372] 44 C.F.R. §§ 206.226(j) and 206.201(c).
[373] 44 C.F.R. § 206.226(a).
[374] 44 C.F.R. § 206.226(j)(2)(i).
[375] 44 C.F.R. § 206.226(j)(2)(ii).

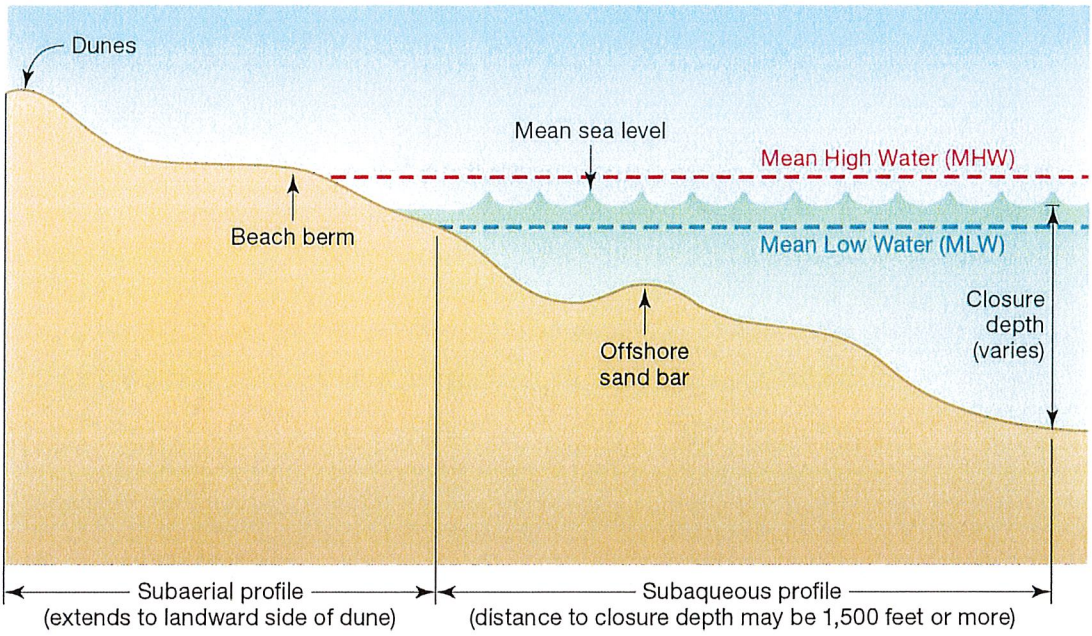

Figure 19. Typical Beach Profile

Sand replenishment for beaches under the specific authority of the USACE is not eligible for PA funding.

The amount of sand eligible for replacement is limited to the amount lost due to the incident. The applicant needs to substantiate the amount of sand claimed with pre-and post-incident profiles that extend at least to the seaward edge of the sub-aqueous nearshore zone (Depth of Closure) (see Figure 19. Typical Beach Profile). If pre-storm profiles are not available, documentation may include design documents and renourishment history. Applicants need to adjust quantities to account for any erosion that occurred between the pre- and post-incident profiles.

Replacing sand that eroded prior to the incident is ineligible. However, FEMA encourages applicants to renourish the project to maintain and achieve the design profile.

To document eligibility of a beach as a designed and maintained facility, applicants must provide the following information:

- Design studies, plans, construction documents, and as-builts for the original nourishment;
- Documentation and details of the maintenance plan, including how the need for renourishment is determined and funded; and,
- Renourishment history, design studies, and as-builts for every renourishment, including construction documents if applicable.

FEMA may request only a portion of this information if the beach was previously determined eligible.

Beach access crossover structures are eligible facilities for repair or replacement. Sand placement adequate for covering crossover footings is eligible, unrelated to eligible beach sand replacement.

TOWN OF JUPITER ISLAND

MEMORANDUM

To: Mayor & Town Commission

Through: Robert Garlo, Town Manager

CC: Kimberly Kogos, Town Clerk

From: John Duchock, Asst. Town Manager

RE: Agenda Item No. 5 – Turtle & Shorebird Monitoring Spending Authorization (Ecological Associates)

Date: 12/5/2025

Background:

Ecological Associates, Inc. was awarded a multi-year contract to provide sea turtle and shorebird monitoring services in support of the Town's beach nourishment program. The costs for monitoring sea turtle nesting activity is based on estimated numbers of nests and crawls over a season and the anticipated nest marking ratios which are provided by the Florida Fish & Wildlife Conservation Commission each year.

Last year nesting began earlier than normal with the first nest documented on February 4th, compared to the typical mid-February first occurrence. The total number of nests marked for inventory last year was 1,124 (of 12,393 total nests documented) – significantly higher than the original estimate used for scoping and budgeting purposes. The upcoming year's monitoring budget (February to November 2026) will be based on a projection of 1,000 marked nests for inventory, anticipating a similar number of total nests as last year and the expected marking scheme to be set by FWC in February. Attached to this memo is an updated work proposal reflecting this year's turtle and shorebird monitoring needs. The costs are based on the unit costs adopted under the contract and work authorization for last season, updated to reflect this year's projected numbers.

Recommendation:

Town staff requests Commission approval of the attached work proposal and corresponding spending authorization in the amount of $368,082.51.

ECOLOGICAL ASSOCIATES, INC.

Mr. John Duchock
Asst. Town Manager/Beach District Dir.
Town of Jupiter Island
2 Bridge Road
Hobe Sound, FL 33455

December 4, 2025

Dear Mr. Duchock,

Ecological Associates, Inc. (EAI) is pleased to submit its Scope of Work and Cost Proposal for professional environmental services in support of the Town of Jupiter Island's beach nourishment program in Martin County, Florida. This proposal addresses post-construction sea turtle and shorebird permit-compliance monitoring along approximately 14.9 km of beach between Florida Department of Environmental Protection (FDEP) Range (R) Monuments R-73 and R-127 +400 (Survey Area) during the 2026 nesting season. A reference beach will also be monitored for nesting and reproductive success. This monitoring will comply with all applicable conditions set forth in the regulatory permits and related authorizations issued for the project and support long-term monitoring efforts for sea turtles along the Town's beaches.

SCOPE OF WORK

This scope of work was developed based on conditions and requirements set forth in the following documents:

- FDEP Joint Coastal Permit (JCP) No. 0186991-008-JC
- U.S. Fish and Wildlife Service (USFWS) Revised Statewide Programmatic Biological Opinion (BO) dated March 13, 2015
- USFWS Programmatic Piping Plover BO dated May 22, 2013

Task 1: Marine Turtle Monitoring (FDEP Specific Conditions 17, 19, & 21)

All equipment, staff, and schedules will be prepared prior to project commencement. Daily early morning nesting surveys of the Survey Area will be conducted beginning February 14, 2026, and will continue uninterrupted through October 31, 2026, or until 15 days without a crawl in the Project Area, whichever is earlier. If there is a fifteen-day period where no nests are laid in the Project Area, EAI will request a waiver from the USFWS and FWC to discontinue daily monitoring. If permission is granted, EAI will then perform surveys three days per week to monitor marked nests.

Surveys will commence within 30 minutes of sunrise. Monitoring will be performed by EAI staff either on foot or using ATVs. All emergences (turtle crawls) apparent from the previous night will be interpreted to determine which species of turtle came ashore and whether it nested. Crawls will be denoted as being above or below the previous high tide line. The approximate geographic location of each crawl will be determined by GPS (sub-meter accuracy). In addition to segregating crawls into nesting and non-nesting emergences (false crawls), each false crawl will be assigned into one of the following categories denoting the stage at which the nesting attempt was abandoned: no digging, abandoned body pit, or abandoned egg cavity. Any obstacles encountered by turtles during their crawls will be documented.

Within the Survey Area, the Project Area (area nourished) is split into two segments, from the southern end of the Hobe Sound National Wildlife Refuge to approximately three miles north of the Jupiter Inlet. The northern segment extends from R-73 and R-84 (approximately 3.1 km) and the southern segment extends from R-86 to R-117 (approximately 8.4 km). The Reference Area which extends from R-117 to R-127 +200 ft. (approximately 2.6 km) will also be monitored. Pre-existing survey zone boundaries will be verified, and re-marked, and project-specific data sheets and a database will be created.

An EAI project manager will oversee all fieldwork and data management operations and consult with the Town of Jupiter Island on permit requirements, as necessary. A project schedule, as well as field survey schedules, will be created and maintained throughout the life of the project.

Disorientation Reporting. During the course of daily monitoring, any evidence of hatchling misorientation or disorientation from either marked or unmarked nests will be documented using FWC's electronic Marine Turtle Hatchling Disorientation Incident Report Form. Based on track evaluations, an estimate of the number of hatchlings disoriented will be recorded and light sources potentially responsible for the disorientation identified. Information concerning each incident will be forwarded by email to the Town of Jupiter Island so appropriate remedial action may be taken.

Stranding and Salvage. During the course of daily monitoring, EAI will respond to the stranding of sick, injured, and dead sea turtles within their survey area. These animals are examined, and if alive, EAI will coordinate with FWC to facilitate transport to a state-approved care facility. A standard Sea Turtle Stranding and Salvage data form will be completed and submitted for each stranded animal encountered by EAI. This information will be transmitted to FWC in accordance with established guidelines.

State and Federal Authorizations. All sea turtle monitoring and related activities will be performed under FWC Marine Turtle Permit #010 issued by FWC to EAI Co-President/Director of Operations, Niki Desjardin. All persons engaged in monitoring performed by EAI for the Town of Jupiter Island Beach Nourishment Project will be listed on the permit.

All data will be subject to rigorous QA/QC protocols and stored in EAI's project-specific database. Monthly summary reports will be furnished to the Town of Jupiter Island. These reports will tabulate the dates and times of monitoring, names of monitoring personnel, numbers of sea turtle emergences by species, and numbers of nests marked and evaluated for reproductive success, as applicable. Monthly reports will be submitted to the Town of Jupiter Island by the last day of the month following delivery of services (e.g., March report due no later than April 30), or as otherwise mutually agreed upon. A permit-required Excel spreadsheet summarizing all nesting activity and reproductive success will be prepared and submitted electronically to the Town of Jupiter Island.

Task 2: Nest Fate and Reproductive Success (FDEP Specific Condition 21)

A representative sample of nests in the Project and Reference Areas will be marked for determination of nest fate and reproductive success (not to exceed 1,000 nests total).

Nests will be marked using a series of stakes and surveyor's tape. These nests will be monitored throughout their incubation period to determine nest fate (e.g., hatched, washed out, depredated, vandalized, etc.). After an appropriate incubation period, and in accordance with the FWC Handbook, nests will be excavated to determine reproductive success. Two measures of reproductive success will be calculated: hatching success (the percentage of eggs in the nest that hatch) and emerging success (the percentage of eggs in the nest that produce hatchlings which successfully escape from the nest).

Task 3: Nighttime Construction Monitoring (FDEP Specific Conditions 7 & 17)

Nighttime monitoring is not required in 2026.

Task 4: Weekly Escarpment Survey and Lighting Surveys (FDEP Specific Conditions 20 & 22)

Beginning on March 1, 2026, surveys of the Project Area to document the formation of scarps greater than 18 inches over a distance of 100 feet or more and potentially interfering with sea turtle nesting/hatching will be conducted weekly throughout the nesting and hatching season. EAI will notify the Town of Jupiter Island of any scarps that meet these conditions and may potentially interfere with sea turtle nesting. FDEP/FWC may require that those areas be leveled, or the beach profile be reconfigured to minimize subsequent scarp formation. If scarp leveling is required, EAI will create maps of and/or barricade unmarked nests for avoidance, oversee field work to ensure nests are protected, and prepare a summary report of actions taken and submit to the Town of Jupiter Island. If requested, additional pre-season escarpment surveys may be conducted in February 2026 if tilling and escarpment remediation is not scheduled to occur.

Two surveys (one between May 1 and May 15 and another between July 15 and August 1) of beachfront lighting conditions will be performed. The location, number, and type of lights visible from the beach and not in compliance with the Town of Jupiter Island's lighting regulations will be documented and reported to the Town. Photos (long exposure, without flash) will also be taken of all lights visible from the nourished beach.

A sub-meter GPS will be used to record coordinates from which observations are made, and results will be provided to the Town of Jupiter Island in standard report form as well as on an Excel spreadsheet. Reports, including recommendations for correcting problem lights, will be provided within 30 days of each survey.

It shall be the responsibility of the Town of Jupiter Island to notify property owners of problem lights. Following submission of an annual report on enforcement actions (to be prepared by the Town of Jupiter Island), an EAI lighting specialist will participate in a meeting with the Town of Jupiter Island, FWC, and USFWS to discuss the survey reports and marine turtle disorientations documented within the Project Area, if required.

Task 5: Shorebird Monitoring (FDEP Specific Conditions 23, 24, & 25; Programmatic Piping Plover Biological Opinion – Condition 8)

Twice-monthly piping plover surveys must be performed in the Project Area and in any other intertidal or shoreline areas within or affected by the project for up to three years following construction. Surveys are to be performed from July 15 each year through May 15 of the following year.

Surveys performed under this work assignment will run from February 2026 through January 2027. During each survey, experienced surveyors will note the number of piping plovers present, their behavior at the time of sighting (feeding, resting, etc.), their location on the beach, and presence of any leg bands. The location of each bird will be recorded using GPS. Recreational use of the beach by humans and the presence of other shorebirds will also be documented. A summary report will be submitted to USFWS within 60 days of completion of monitoring for the 2025 over-wintering period (July 15, 2025 through May 15, 2026).

EAI will submit its monthly billings for the services described above to the Town of Jupiter Island in accordance with the fees and schedules set forth in Attachment A. No deposit or mobilization fees are required.

Ecological Associates, Inc. appreciates the opportunity to be of service to the Town of Jupiter Island. Should you have any questions regarding the enclosed Scope of Work or associated costs, I can be reached at (772) 334-3729.

Sincerely,

Grace Botson

Grace Botson
Senior Project Manager

c: Niki Desjardin / Co-President, Director of Operations
Joseph Scarola / Senior Scientist

ATTACHMENT A

ECOLOGICAL ASSOCIATES, INC.
3552 NE CANDICE AVE.
JENSEN BEACH, FLORIDA 34957

COST PROPOSAL – December 4, 2025

PROJECT NAME: Town of Jupiter Island Sea Turtle and Shorebird Monitoring – 2026 (Project No. 26-5950)

CLIENT:
Mr. John Duchock
Town of Jupiter Island
2 Bridge Road
Hobe Sound, FL 33455
Phone: (772) 545-0187 Email: jduchock@tji.martin.fl.us

PROJECT DESCRIPTION: Post-construction sea turtle and shorebird monitoring in support of the Town of Jupiter Island Beach Nourishment Project, as described in EAI's Scope of Work dated December 4, 2025.

PROJECT DURATION: February 2026 – February 2027

COSTS: All services will be provided at the fixed rates specified below (***except where noted***), inclusive of all time and materials required to perform the Scope of Work.

TASK	DESCRIPTION	CHARGE
Task 1: Marine Turtle Monitoring		
A	One Turtle Monitor: February 14 - April 15 & October 1 - December 1 ***(Daily Rate; not to exceed 118 days @ $320.52/day)***	$37,821.36
B	Two Turtle Monitors: April 16 - May 15 & September 1 - September 30 ***(Daily Rate; not to exceed 60 days @ $764.27/day)***	$45,856.20
C	Three Turtle Monitors: May 16 - August 31 ***(Daily Rate; not to exceed 108 days @ $1,313.02/day)***	$141,806.16
D	Data Entry/QAQC ***(Fixed Cost)***	$27,695.00
E	Reporting ***(Fixed Cost)***	$787.50
F	Project Management ***(Fixed Cost)***	$3,510.00
G	Equipment: ATV ***(Daily Rate; not to exceed 286 days @ $38.42/day)***	$10,988.12
H	Equipment: Data Collector/GPS ***(Daily Rate; not to exceed 286 days @ $6.02/day)***	$1,721.72
Subtotal		**$270,186.06**
Task 2: Nest Fate and Reproductive Success		
A	Nest marking and monitoring ***(Per Nest Rate; not to exceed 1,000 nests @ $70.00/nest)***	$70,000.00
B	Project Management ***(Fixed Cost)***	$877.50

C	Materials: Stakes, survey tape, etc. ***(Fixed Cost)***	$2,656.00
Subtotal		**$73,533.50**
Task 3: Nighttime Construction Monitoring		
A	Nighttime Turtle Monitor: February – April	N/A
B	Nest Relocation	N/A
C	Reporting	N/A
D	Project Management	N/A
E	Equipment: ATV	N/A
F	Equipment: Data Collector/GPS	N/A
G	Materials: Stakes, Survey Tape, etc.	N/A
Subtotal		**N/A**
Task 4: Weekly Escarpment Survey and Lighting Surveys		
A	Escarpment Surveys: March – October ***(Weekly Rate: not to exceed 37 weeks @ $225.00/week)***	$8,325.00
B	Lighting Surveys (***Per Survey Rate; not to exceed 2 surveys @ $4,904.30/survey)***	$9,808.60
Subtotal		**$18,133.60**
Task 5: Shorebird Monitoring		
A	Bird Monitor ***(Daily Rate: not to exceed 20 days @ $210.00/day)***	$4,200.00
B	Data Entry/QAQC ***(Daily Rate; not to exceed 20 days @ $30.00/day)***	$600.00
C	Project Management ***(Fixed Cost)***	$438.75
D	Equipment: ATV ***(Daily Rate; not to exceed 20 days @ $39.45/day)***	$789.00
E	Equipment: Data Collector/GPS ***(Daily Rate; not to exceed 20 days @ $4.08/day)***	$81.60
F	Permit Required Report/Submittals ***(Fixed Cost)***	$120.00
Subtotal		**$6,229.35**
GRAND TOTAL (*Not to Exceed*)		**$368,082.51**

TERMS: All conditions related to this proposal shall be governed under EAI's Consultant Agreement for Marine Turtle and Shorebird Monitoring (ITB#2025-01) with the Town of Jupiter Island.