

Tigertail Lagoon & Sand Dollar Island

Ecosystem Restoration Project



Project Update

HB Taxing District Oct 14, 2021

Tigertail Lagoon & Sand Dollar Island

Ecosystem Restoration Project



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Permitting Update

- RAI responses submitted to FDEP and USACE (August 2021)
- DEP Permit Application Complete
- USACE Permitting (FWS and NOAA NMFS consultation progress)

Biological Monitoring Plan

SAND DOLLAR ISLAND RESTORATION PROJECT

MONITORING PLAN

OCTOBER 1, 2021

TURRELL, HALL & ASSOCIATES, INC.
3584 EXCHANGE AVENUE
NAPLES, FL 34104
(239) 643-0166
tuna@thanaples.com

- **Annual Monitoring Scope of Work**

Environmental monitoring requirements coordinated with state and federal agencies.

Ongoing monitoring after construction will generally consist of: .

- Shorebird monitoring
- Water quality physical samples collected quarterly.
- Maintenance and data retrieval from the in-situ water quality meter.
- Seagrass survey and data collection annually for 5 years post construction.

For budgetary purposes, recurring monitoring is anticipated to cost in the range of \$40,000 per year.

- Baseline Preconstruction Monitoring Authorization

SCOPE OF SERVICESTigertail Lagoon / Sand Dollar Island Ecosystem Restoration ProjectPre-Construction Environmental Services

CONTRACT# 17-005

October 07, 2021

The attached proposal from Turrell, Hall & Associates consists of environmental monitoring required to comply with anticipated permit conditions, gather background information on the ecological system at this point in time, and advance the project to construction during the 2021/2022 winter season. Environmental monitoring requirements have been closely coordinated with state and federal agencies. This pre-construction monitoring proposal will satisfy the anticipated environmental monitoring that will be required by permit for construction and implementation of the project.

Pre-construction environmental monitoring consists of:

- Pre-construction shorebird monitoring compliant with the Piping Plover Programmatic Biological Opinion (P3BO). **\$3,600.00**
- Water quality sampling at 3 locations in October and December to document pre-construction water quality within the lagoon system to document changes potentially associated with the project. This continues sampling begun in July 2021. **\$1,866.00**
- Establishment of a permanent, in-situ water quality meter to document near-continuous pre-construction and post-construction water quality parameters for comparison to document changes potentially associated with the project. This has been requested by State and Federal agencies in order to document infrequently occurring water quality events of short duration. **\$11,721.00**
- Collect near-continuous water elevation data over a two week period similar to monitoring conducted in 2017 and 2020 for comparison and assessment of pre-construction conditions. This will document the continued deterioration of tidal exchange within the system. **\$990.00**
- Seagrass survey data collection and reporting. The Florida Department of Environmental Protection will require extensive data collection within the existing seagrass beds to thoroughly document existing, pre-construction conditions. This forms the basis for comparison with a required post construction survey required to verify that construction did not adversely affect the protected seagrass beds. **\$27,895.00**
- Final permit coordination. **\$2,550.00**

Total: **\$48,622.00**

- Baseline Preconstruction Monitoring Authorization (THA)

SCOPE OF SERVICESTigertail Lagoon / Sand Dollar Island Ecosystem Restoration ProjectPre-Construction Environmental Services

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- Engineering Proposal for Pre-Construction Services

SCOPE OF SERVICES**Tigertail Lagoon / Sand Dollar Island Ecosystem Restoration Project****Pre-Construction Phase****CONTRACT# 17-005****October 07, 2021**

Humiston & Moore Engineers (H&M) is pleased to provide this scope of work to the City of Marco Island. This proposal is to provide professional services during the pre-construction phase. Work at this time will consist of preparation of construction and bid documents.

Construction Administration will be provided under a future proposal for consideration by Hideaway Beach Tax District and Marco City Council. This proposal includes the items as described below:

1. Construction Documents and Bid Documents: \$20,274

The project team will prepare and assist preparation of the following:

- Construction plans,
- Construction specifications,
- Engineer's opinion of probable cost (OPC),
- Bid forms, and
- Bid package review.

Construction plans and specifications will be prepared for the Tigertail/Sand Dollar Island Ecosystem Restoration Project. These documents will form the basis of contractor's bids and govern project construction. Beach profile data from the May 2021 Survey will be used to develop the Construction Plans. A bid schedule will be provided for inclusion with the plans and specifications in the City bid package and contract documents. An opinion of probable costs will be developed based upon recent similar projects. Documents will be provided to the Tax District and City of Marco Island as necessary.

Deliverables: Completed construction plans, completed bid package.

Total Proposed costs: \$20,274 (LS)

- Cost-share funding application



RESILIENT FLORIDA

CALL FOR PROJECT PROPOSAL WORKSHEET

The Florida Department of Environmental Protection is seeking project proposals for use of FY 21-22 Water Protection Funds to be distributed as grants to governmental entities for the Resilient Florida Grant Program. Please submit your project proposal using this portal. DEP will accept and review proposals through August 31, 2021, for viable grant projects awards. Additional information may be required, as necessary, pursuant to the criteria in s. 380.093, F.S. You will receive notice on how to submit further information, if this next step is deemed necessary by the Department.

Project Details

Entity/Sponsor Name:	City of Marco Island
Project Title:	Tigertail Lagoon/Sand Dollar Island Ecosystem Restoration
Short Project Description: <i>Please provide a concise summary of the work to be done, including why the project is necessary.</i> <p>Implementation of this restoration Project (0401778-001-JC) to restore the vulnerable segment of barrier island and wetland system. The project provides natural multi-layer coastal resiliency barrier to north Marco Island where a 2-mile sand spit is the coastal barrier protecting critical wildlife and upland community. The project includes adaptive and sustainable sand resources management to maintain the future resilience of the constructed berm while preserving critical wildlife habitat.</p>	
Project Outcomes: <i>Please provide a list of outcomes that will result from this project.</i> <p>Project will address vulnerability to storm damages and establish:</p> <ul style="list-style-type: none"> -A sustainable natural-based resilient barrier system to preserve wildlife habitat and protect upland communities. -Improve the resiliency of the ecosystem, reduce the risks of flooding and establish a natural based adaptation plan for sea level rise. -Maintain and improve water quality for wildlife and public health safety. -Regional sand management cycle to reduce inlet shoaling and supply sand for the resiliency berm. 	