

LFIR # 1817

1. Project Title	Biscayne Bay Seagrass Restoration Project
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2. Senate Sponsor Bryan Avila

**3. Date of Request** 11/13/2023

### 4. Project/Program Description

Seagrass rhizomes are unable to grow if the vertical depth is greater than 20 cm, so it is necessary to restore the topography to the grade of the surrounding seagrass flat as the first step in restoration. Topographic restoration through sediment tube installation offers stabilization against potentially destructive forces such as waves, boat wakes, frequent storms, and currents. By stabilizing the scarred areas from these forces, seagrass from adjacent, non-damaged beds can naturally recruit into damaged areas. Robust meadows provide habitat for fish and other marine life; improve water quality by cycling out excess nutrients in the water column; and increase resilience against coastal flooding. Testing, annual monitoring, and reporting for three years will ensure project objectives are met. The project will include an educational outreach component with signage to alert boaters of the restoration project. Outreach efforts will include press releases, social media posts, and eNews.

#### 5. State Agency to receive requested funds

Department of Environmental Protection

State Agency contacted? Yes

## 6. Amount of the Nonrecurring Request for Fiscal Year 2024-2025

Type of Funding	Amount	
Operations	3,000,000	
Fixed Capital Outlay	0	
Total State Funds Requested	3,000,000	

7. Total Project Cost for Fiscal Year 2024-2025 (including matching funds available for this project)

Type of Funding	Amount	Percentage	
Total State Funds Requested (from question #6)	3,000,000	92%	
Matching Funds			
Federal	0	0%	
State (excluding the amount of this request)	0	0%	
Local	0	0%	
Other	278,000	8%	
Total Project Costs for Fiscal Year 2024-2025	3,278,000	100%	

8. Has this project previously received state funding? No

Fiscal Year	Amount		Specific	Vetoed	
(уууу-уу)	Recurring	Nonrecurring	Appropriation #		

#### 9. Is future funding likely to be requested?

No

a. If yes, indicate nonrecurring amount per year.

b. Describe the source of funding that can be used in lieu of state funding.



We have matching funds in the sum of \$228,000 from FWFF, and \$50,000 from CCA. We have also submitted a grant application for the Biscayne Bay Water Quality Improvements Grant (awaiting award notification)

### 10. Has the entity requesting this project received any federal assistance related to the COVID-19 pandemic?

No

If yes, indicate the amount of funds received and what the funds were used for.

## **Complete questions 11 and 12 for Fixed Capital Outlay Projects**

Construction

## 11. Status of Construction

O Planning

a. What is the current phase of the project?

b. Is the project "shovel ready" (i.e permitted)?

O Design

c. What is the estimated start date of construction?

d. What is the estimated completion date of construction?

12. List the owners of the facility to receive, directly or indirectly, any fixed capital outlay funding. Include the relationship between the owners of the facility and the entity.

🔘 N/A

#### 13. Details on how the requested state funds will be expended

Spending Category	ng Category Description	
Administrative Costs:		
Executive Director/Project Head Salary and Benefits	Administrative Duties, Supporting the work of the Director of Conservation, Contracting, and Public Outreach	
Other Salary and Benefits	Project oversight by finance and administrative staff	120,000
Expense/Equipment/Travel/Supplies/ Other		0
Consultants/Contracted Services/Study		0
Operational Costs: Other		
Salary and Benefits		0
Expense/Equipment/Travel/Supplies/ Other		0
Consultants/Contracted Services/Study	Permitting, Sediment Tube Application, Maintenance, Testing, Annual Monitoring and Reporting	2,700,000
Fixed Capital Construction/Majo	r Renovation:	
Construction/Renovation/Land/ Planning Engineering		0
Total State Funds Requested (must equal total from question #6) 3,00		3,000,000

## 14. Program Performance



### a. What specific purpose or goal will be achieved by the funds requested?

Seagrass rhizomes are unable to grow if the vertical depth is greater than 20 cm, so it is necessary to restore the topography to the grade of the surrounding seagrass flat as the first step in restoration. If topographic restoration is not conducted, the injury feature will be subject to both vertical and horizontal erosion, causing the footprint of the injury to increase in size and depth. Therefore, topographic restoration is the highest restoration priority. Topographic restoration through sediment tube installation will be applied to moderate to severe propeller scars (20 cm deep or deeper) in seagrass beds within the preserve. These techniques will allow for natural recruitment of seagrass from adjacent, non-damaged beds into vessel-damaged areas.

#### b. What activities and services will be provided to meet the intended purpose of these funds?

This project aims to restore seagrass within the Biscayne Bay Aquatic Preserve by repairing propeller scars, blowouts, and impacts from vessel groundings that are 20 cm deep or deeper left by commercial and recreational boaters in vital seagrass meadows. Healthy seagrass meadows in the Bay are the foundation of a healthy aquatic ecosystem. A healthy ecosystem is directly related to economic viability for the citizens of Miami-Dade County. The Biscayne Bay Economic Study (2005) concluded that the most popular recreational activities for residents and tourists within the Bay are related to the aquatic ecosystem and drive the local and regional economy. The project scope of work includes surveying, permitting, mobilization, manufacturing and installation of sediment tubes to fill vessel groundings, demobilization, and project monitoring to ensure that project goals and objectives are achieved. This project will promote sustainable economic use and viability of the Bay's resources.

#### c. What direct services will be provided to citizens by the appropriation project?

Seagrass provides critical nursery habitat for many invertebrates and fish in the preserve; juveniles rely on seagrass for the protection it provides. Sea turtles also feed on seagrass and rely on it for nutrition. This project will help to heal seagrass beds with vessel damage to accelerate seagrass recovery; help restore vital habitat for fish and other marine wildlife to enhance fishing opportunities; improve water quality by facilitating seagrass growth, which will cycle out excess nutrients that could otherwise cause harmful algal blooms; and stabilize the sediments to help prevent coastal flooding, thereby building resilience. As mentioned above, the valuable natural--and cultural--resources that drive the local and regional economy will be enhanced and safeguarded.

#### d. Who is the target population served by this project? How many individuals are expected to be served?

This project will stimulate the local and regional economy. According to the SFWMD, Biscayne Bay contributes \$64B per annum in economic output. Approximately 448,000 jobs depend on Bay-related activities. These jobs will be safeguarded with improvements in water quality resulting from enhanced seagrass meadows in the preserve. Numerous studies document improvements in mental health with increased time spent in nature. The ecosystem benefits that restored seagrass beds provide will enhance the cultural experiences of Florida residents and tourists when they visit the preserve. This project will specifically benefit Miami-Dade residents (population est. of 2.67M as of 2022). According to the EPA's Environmental Justice mapper, Miami-Dade County is listed in the 96th percentile for demographic index (which includes people of color, low income, and unemployment rate). This project will especially benefit the undeserved communities in this area.

# e. What is the expected benefit or outcome of this project? What is the methodology by which this outcome will be measured?

The project will improve water quality, enhance recreational/commercial fishing, & improve the tourism industry. Improved water quality means more fish will be available for the recreational sector, increasing local economic activity at bait & tackle shops, restaurants, hotels, etc. Many local residents work in industries dependent upon the health of the preserve. Sportfishing, boat construction and sales, bait and tackle shops, and seafood restaurants rely on a healthy bay ecosystem. By enhancing the health of the preserve's seagrass meadows, job security in these fields will also be enhanced, allowing those who have these jobs economic self-sufficiency and job security. All of these benefits will improve real estate values in the area, including disadvantaged areas. Restored areas will be monitored to ensure they sufficiently re-vegetated with seagrass so that they can provide ecosystem services of improved water quality/clarity and decreased frequency and intensity of algal blooms.

f. What are the suggested penalties that the contracting agency may consider in addition to its standard penalties for failing to meet deliverables or performance measures provided for the contract?

If deliverables are not achieved, full monies allocated to the deliverable should be withheld.



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## **15. Requester Contact Information**

	a. First Name	Danielle	Last Name	Richter	
	b. Organization	Fish & Wildlife Foundation of Florida			
	c. E-mail Address	drichter@wildlifeflorida.org			
	d. Phone Number	(813)310-9211	Ext.		
16	Recipient Contact	Information			
	a. Organization	Fish & Wildlife Foundation	of Florida		
	b. Municipality and	I County Miami-Dade			
	c. Organization Type				
	□For Profit Entity				
	☑Non Profit 501(c	)1(c)(3)			
	□Non Profit 501(c	(c)(4)			
	□Local Entity				
	□University or Co	ollege			
	□Other (please sp	pecify)			
	d. First Name	Danielle	Last Name	Richter	
	e. E-mail Address	drichter@wildlifeflorida.org			
	f. Phone Number	(813)310-9211			
17.	17. Lobbyist Contact Information				
	a. Name	Mary Katherine DeFoor DeLoach The Southern Group			
	b. Firm Name				
	c. E-mail Address	deloach@thesoutherngroup.com			
	d. Phone Number	(850)671-4401			

## Please complete the questions below for Water Projects only.

## 18. Have you applied for alternative state funding?

- □ Waste Water Revolving Loan
- Drinking Water Revolving Loan
- □ Small Community Wastewater Treatment Grant
- ☑ Other (please specify) FDEP Biscayne Bay Water Quality Improvement Grant



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## D N/A

## 19. What is the population economic status?

- ☑ Financially Disadvantaged Community (ch. 62-552, F.A.C)
- ☑ Financially Disadvantaged Municipality (ch. 62-552, F.A.C)
- □ Rural Area of Economic Concern
- □ Rural Area of Opportunity (s. 288.0656, Florida Statutes)
- $\Box$  N/A

## 20. What is the status of construction?

Not ready

## 21. What percentage of the construction has been completed?

0%

### 22. What is the estimated completion date of construction?

12/31/2025