



# Agenda Report

2725 Judge Fran Jamieson  
Way  
Viera, FL 32940

## Resolution/Award/Presentation

---

E.3.

10/24/2023

---

### **Subject:**

Presentation: Duane DeFreese, Ph.D. Indian River Lagoon National Estuary Program Progress Update 2023 - Looking Ahead to 2024

### **Fiscal Impact:**

N/A

### **Dept/Office:**

District 4 Commission Office

### **Requested Action:**

### **Summary Explanation and Background:**

### **Clerk to the Board Instructions:**



Kimberly Powell, Clerk to the Board, 400 South Street • P.O. Box 999, Titusville, Florida 32781-0999

Telephone: (321) 637-2001  
Fax: (321) 264-6972  
Kimberly.Powell@brevardclerk.us

October 25, 2023

**M E M O R A N D U M**

**TO:** Commissioner Rob Feltner, District 4

**RE:** Item E.3., Presentation by Duane DeFreese, Ph.D. for the Indian River Lagoon National Estuary Program Progress Update 2023 – Looking Ahead to 2024

The Board of County Commissioners, in regular session on October 24, 2023, acknowledged presentation by Duane DeFreese, Ph.D. for the Indian River Lagoon National Estuary Program Progress Update 2023 – Looking Ahead to 2024.

Your continued cooperation is always appreciated.

Sincerely,

BOARD OF COUNTY COMMISSIONERS  
RACHEL M. SADOFF, CLERK

*for Denna Scott*  
Kimberly Powell, Clerk to the Board

/ds

Indian River Lagoon  
National Estuary Program



ONE LAGOON  
ONE COMMUNITY • ONE VOICE

<https://onelagoon.org/>

# **Indian River Lagoon National Estuary Program**

## *Progress Update 2023 – Looking Ahead to 2024*

October 24, 2023

Presentation to the Brevard County  
Board of County Commissioners  
by

Duane De Freese, Ph.D.

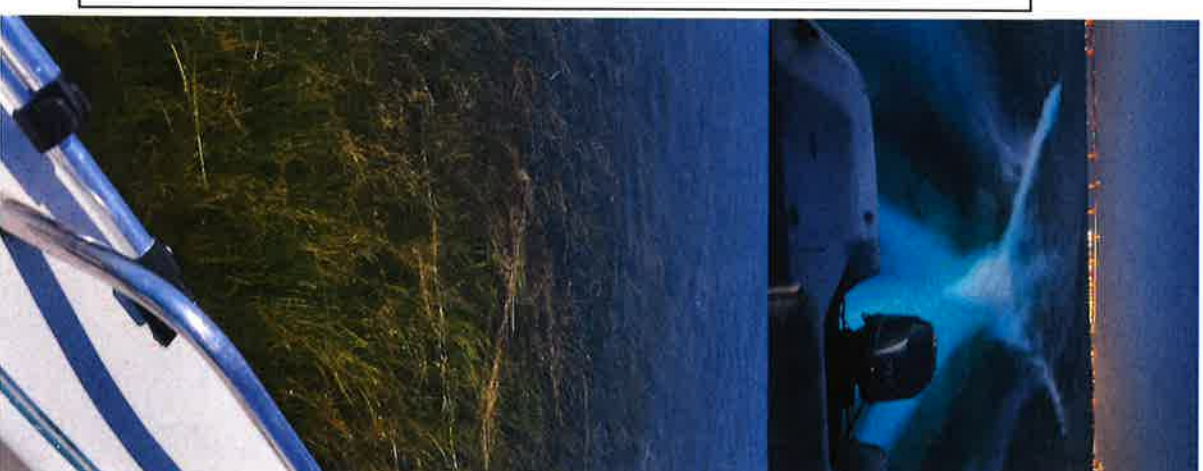
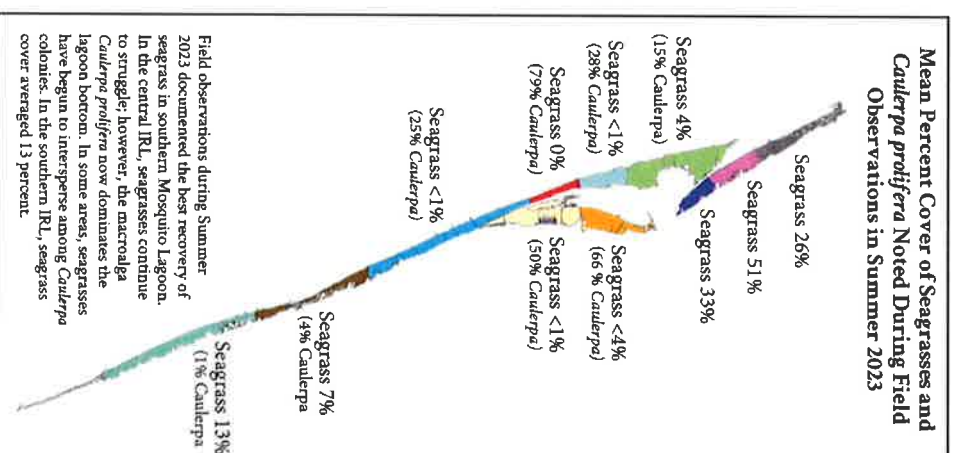
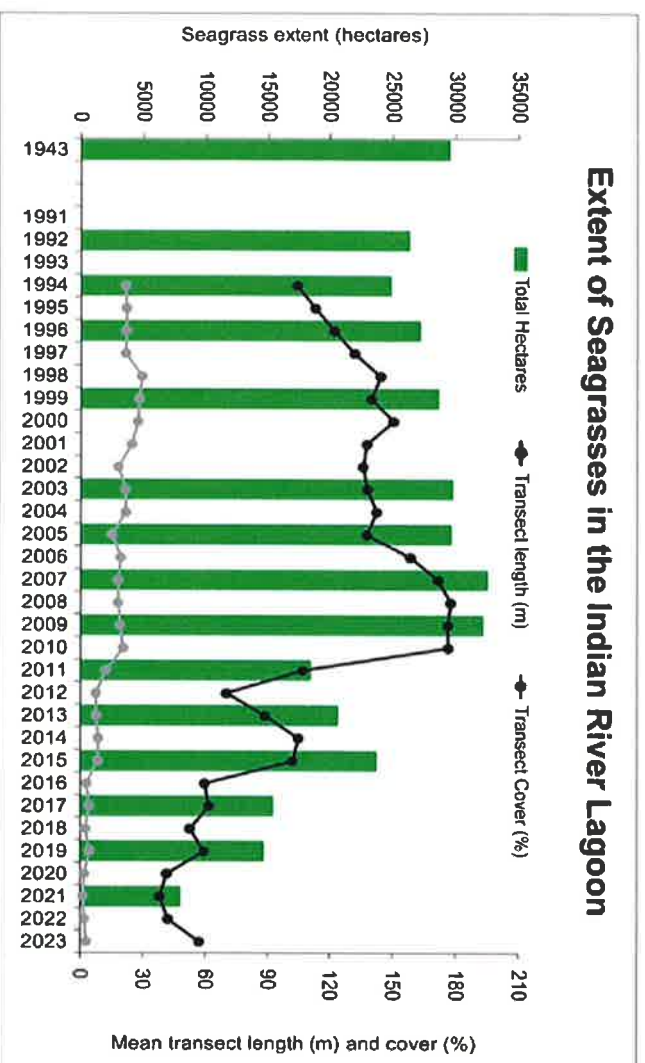
IRL Council and IRLNEP Executive Director

[ddefreese@irlcouncil.org](mailto:ddefreese@irlcouncil.org)

# IRL Water Quality

## - Some WQ Improvement

## - Highly Vulnerable



# Why is the IRL so Vulnerable?

## Spatial - Temporal Complexity

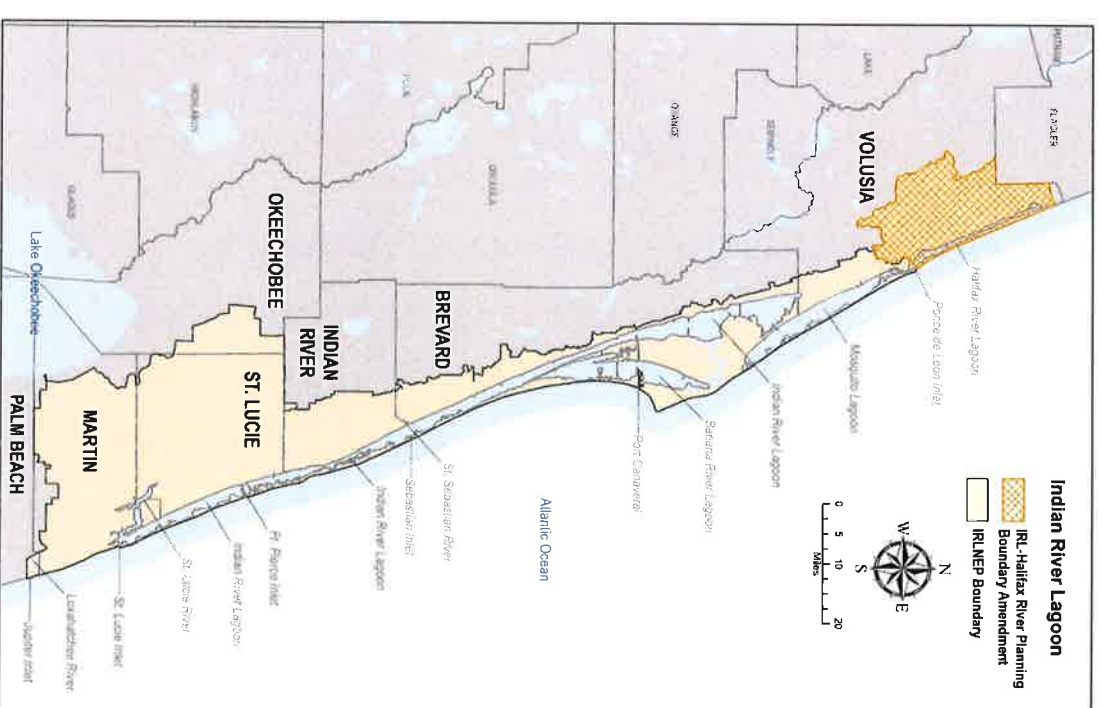
- 3 Waterbodies
  - Mosquito River/Banana River/Indian River
  - 156 mi long; Watershed (2,284 sq. miles)
  - Surface waters (353 sq. miles)
- IRL-Halifax River boundary amendment extended project boundary 25 miles north (310 sq. miles of watershed)

## Narrow – Shallow - Microtidal

- Micro-tidal; Wind-driven system
- Narrow/Shallow/Long Residence Time
- Poorly flushed - 5 inlets to Atlantic Ocean
- Water flow constricted by causeways/NASA Crawlerway

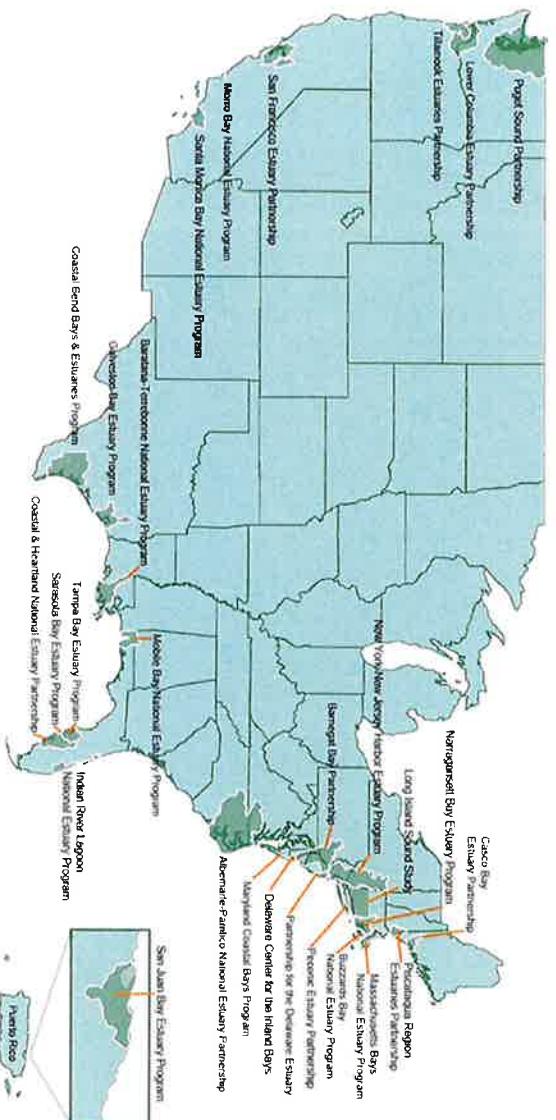
## Diverse Socio-Economics

- 7 counties in watershed/38 incorporated cities
- 1.6 million residents
- Population growth projections are high





**Who We Are?** One of 28 estuaries dedicated by the U.S. Congress as “*Estuaries of National Significance*”



- Authorized as a core water program of the Clean Water Act (Section 320).
- Unique “*Management Conference*” network governance model.
  - *Science-Based*
  - *Innovative*
  - *Non-Regulatory*
  - *Collaborative*
  - *Inclusive*
  - *Community-Driven*
  - *Consensus-Building*
  - *Coordinated Action*





# IRL Council, Agency Host to IRLNEP

## *An Independent Special District of Florida*

Created in 2015

Host and reorganize the IRLNEP

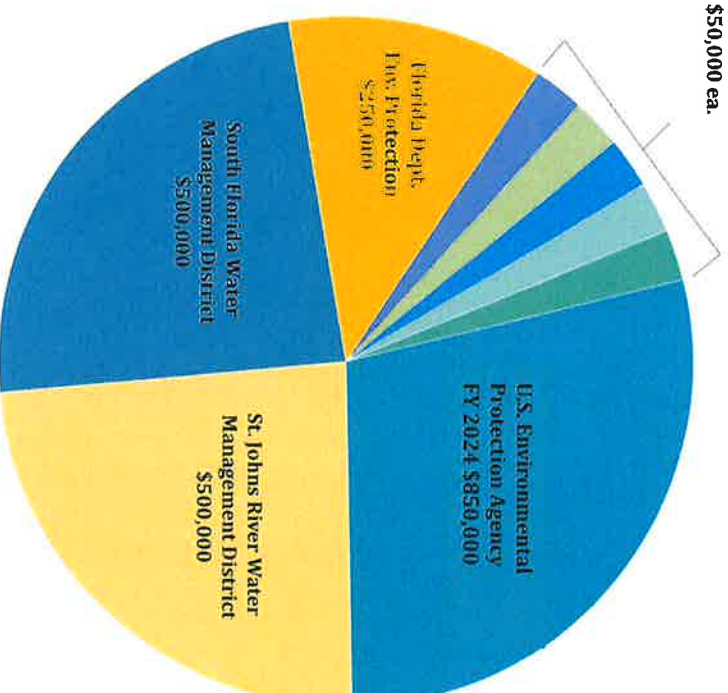
Empower and expand local leadership, partnerships and funding

Partners provide annual funding pursuant to an Interlocal Agreement (2015 and as amended)

***Shared Leadership - Shared Responsibility - Shared Investment***

Annual IRLNEP Funding  
From IRL Council Partners

Volusia, Brevard, Indian  
River, St. Lucie and  
Martin Counties  
\$50,000 ea.



# What We Do?

## Convene and Sustain a Management Conference

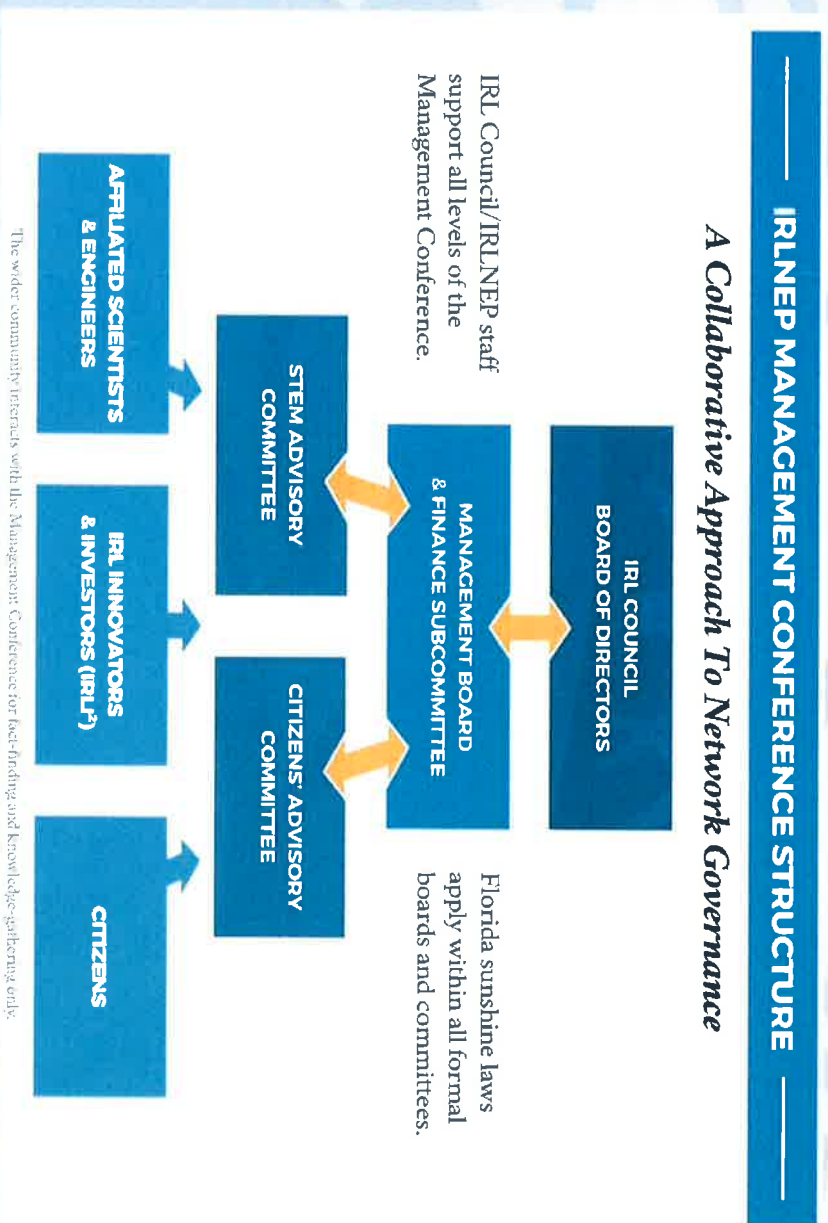
FY 2023

~100 Volunteers

IRL Council Staff

8 FTE's

Management Conference







**ONE LAGOON**

ONE COMMUNITY · ONE VOICE

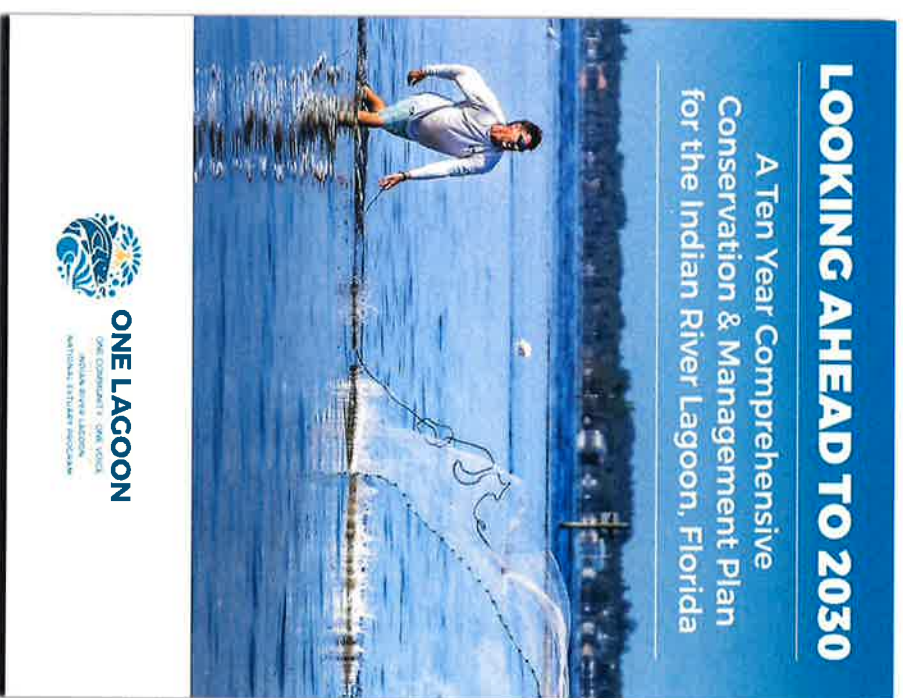
INDIAN RIVER LAGOON

NATIONAL ESTUARY PROGRAM

- Develop and Implement a 10-year Comprehensive Conservation and Management Plan
- Track Progress
- Update CCMP in 2025

[www.onelagoon.org](http://www.onelagoon.org)

# What We Do?





# ONE LAGOON

ONE COMMUNITY · ONE VOICE

INDIAN RIVER LAGOON

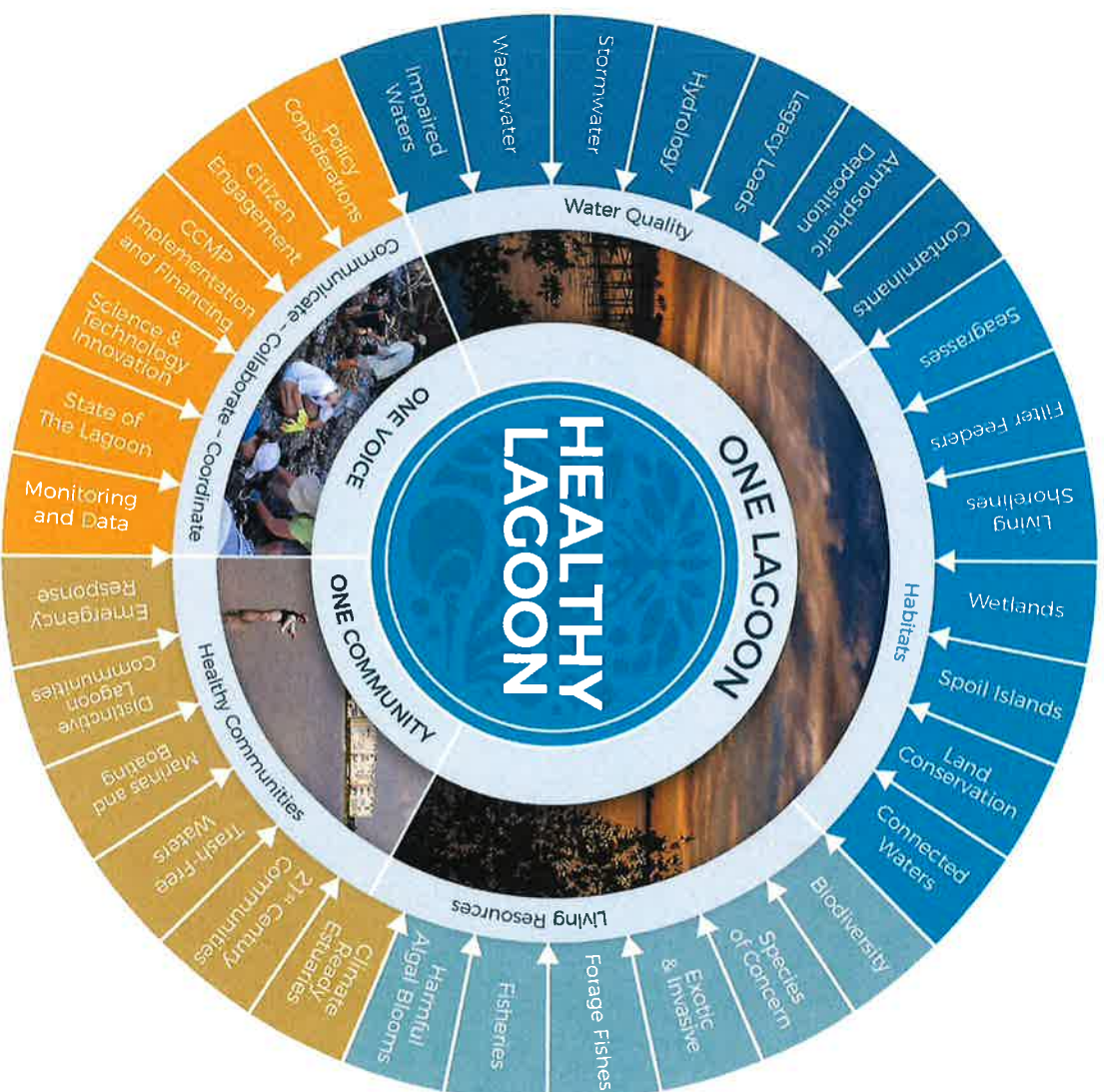
NATIONAL ESTUARY PROGRAM

## Heart of the

## CCMP

## 32 Lagoon

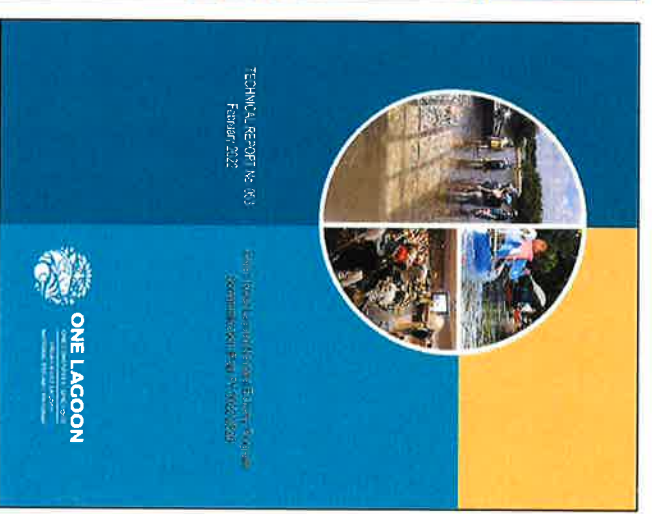
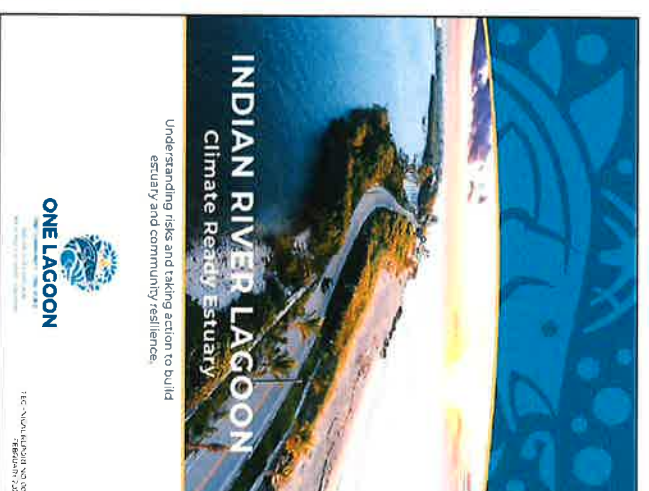
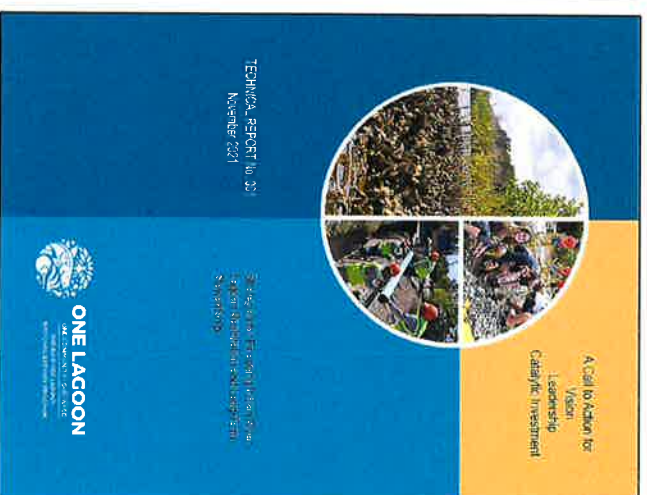
## Vital Signs





# What We Do?

## Develop Strategic Planning Documents to Support CCMP and Our Partners



[www.onelagoon.org](http://www.onelagoon.org)



**ONE LAGOON**  
ONE COMMUNITY ONE VOICE  
INDIAN RIVER LAGOON  
NATIONAL ESTUARY PROGRAM

# What We Do?

## *Support and Seek New Funding*

### Infrastructure Investment and Jobs Act (IIJA)

Congress appropriated \$132 million in funding for the 28 National Estuary Programs (NEPs) for fiscal years 2022 through 2026.

### *a.k.a Bipartisan Infrastructure Law (BIL)*

Funding evenly distributed to the NEPs annually providing each with \$909,800 in BIL funds.



**ONE LAGOON**

ONE COMMUNITY · ONE VOICE  
INDIAN RIVER LAGOON  
NATIONAL ESTUARY PROGRAM



MARINE DISCOVERY CENTER



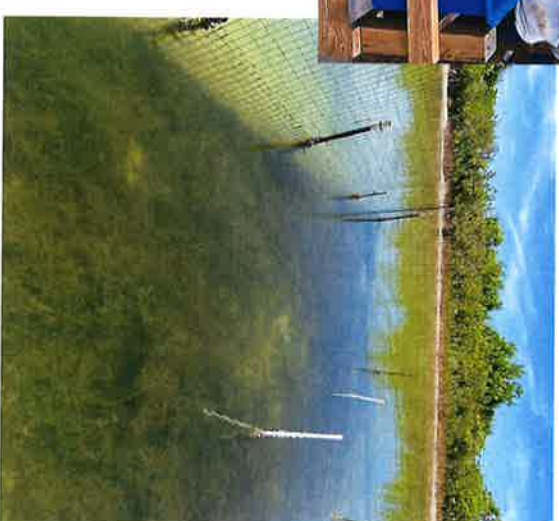
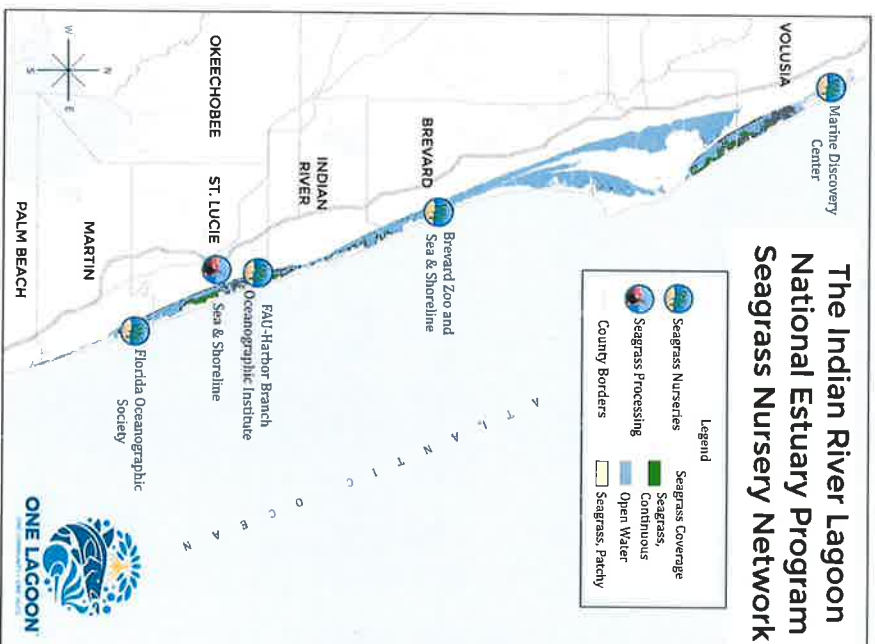
**BREVARD ZOO**

**HARBOR  
BRANCH**

FLORIDA ATLANTIC UNIVERSITY



# Build Lagoon-Wide Capacity *Seagrass Nursery Network*





# 2023 Historic Statewide Funding



**Governor DeSantis  
Executive Order 23-06**

## **Indian River Lagoon Protection Program**

**\$100 million FY 23-24**



<https://protectingfloridatogether.gov/state-action/grants-submissions>



**ONE LAGOON**  
ONE COMMUNITY • ONE VOICE  
INDIAN RIVER LAGOON  
NATIONAL ESTUARY PROGRAM

# What We Do?

## Expand Revenues – New Plate Art

Ormond Beach  
on US 1

Cocoa US 1 North  
of SR 528

Palm Bay on I-95

**HELP FUND LAGOON RESTORATION.**

**AVAILABLE NOW!**

**FLORIDA 1-IRL**

Indian River Lagoon

**ONE LAGOON**  
ONE COMMUNITY • ONE VOICE

**Onelagoon.org**

**Printed Bulletin**  
10'6" X 36"

**Notes:**  
Extensions, 7 ft.

The design created by Clear Channel Outdoor. Reproduction without permission is prohibited.

**Clear Channel Outdoor**

# What We Do? Support Our Partners



Angie Brewer, CEO and Owner  
9080 58th Drive East, Suite 200  
Bradenton FL 34202  
<http://angiebrewer.com/>

## Grant Writing Support

- **Brevard County** - Stan Mayfield Working Waterfront grant (Natua)
  - IRLNEP cost \$6,338
  - Award amount: \$1,493,300
- **Marine Discovery Center, NSB** - ECHO grant (T.Pinney)
  - IRLNEP cost \$2,700.
  - Award amount: \$224,851
- **St. Lucie County** - Federal 319 grant (Angie Brewer)
  - IRLNEP cost \$6,250.
  - Award amount: \$1,000,000



Teri Pinney, President  
1263 SW Cedar Cove  
Port Saint Lucie, FL 34986  
[www.teripinneypwc.com](http://www.teripinneypwc.com)



844-NATUA-ST x700 | 844-628-8278 x700  
140 S. BEACH STREET, SUITE 310, DAYTONA BEACH, FL 32114  
Kelli McGee, President  
[www.natuastراتيجيes.com](http://www.natuastراتيجيes.com)

- **City of Sebastian** – SJRWMD cost-share grant
  - IRLNEP cost \$4,500
  - Award amount \$803,874



**ONE LAGOON**  
ONE COMMUNITY · ONE VOICE  
INDIAN RIVER LAGOON  
NATIONAL ESTUARY PROGRAM

# What We Do? Fund Projects

<b>IRLNEP PROJECT FUNDING</b> <b>BY COUNTY (Fiscal Years 2015-2023)</b>		
<b>Project Location</b>	<b>Funding Amount (All Sources)</b>	<b>Number of Projects</b>
Volusia County	\$1,668,025	21
Brevard County	\$1,862,539	29
Indian River County	\$1,349,035	18
St. Lucie County	\$1,685,731	20
Martin County	\$2,774,223	22
Lagoon-wide	\$5,249,155	85
<b>Total:</b>	<b>\$14,588,708</b>	<b>195</b>





**ONE LAGOON**

ONE COMMUNITY · ONE VOICE  
INDIAN RIVER LAGOON  
NATIONAL ESTUARY PROGRAM

# Powered by One Lagoon

## IRLNEP Projects Fiscal Year 2016-2023

195 Projects  
\$14,588,708



**NUTRIENT REDUCTION &  
WATER QUALITY RESTORATION**

34 Projects  
\$4,733,949

### HABITAT RESTORATION

55 Projects  
\$3,942,592



**COMMUNITY-BASED RESTORATION  
AND ENGAGEMENT**

69 Projects  
\$3,291,736

**SCIENCE, MONITORING  
AND INNOVATION**

37 Projects  
\$2,620,431







**ONE LAGOON**

ONE COMMUNITY · ONE VOICE  
INDIAN RIVER LAGOON  
NATIONAL ESTUARY PROGRAM

# What We Do? Fund Projects

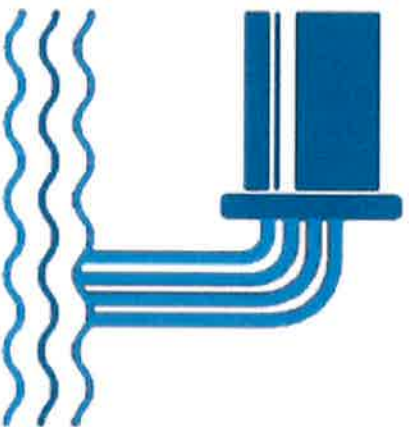
## **IRLNEP RFP Schedule (projects for FY 2024-2025)**

- Water Quality (Due 01/05/2024)
- Habitat Restoration (Due 01/05/2024)
- Community Engagement in Restoration (Due 01/05/2024)
- Science & Innovation (Due 01/05/2024)
- Small Grants Program (RFP release January 2024)
- Priority Communities (RFP release in 2024)

**<https://onelagoon.org/open-proposal-requests/>**

# Partners At Work

There's More Going on to Help the Lagoon Than You Think



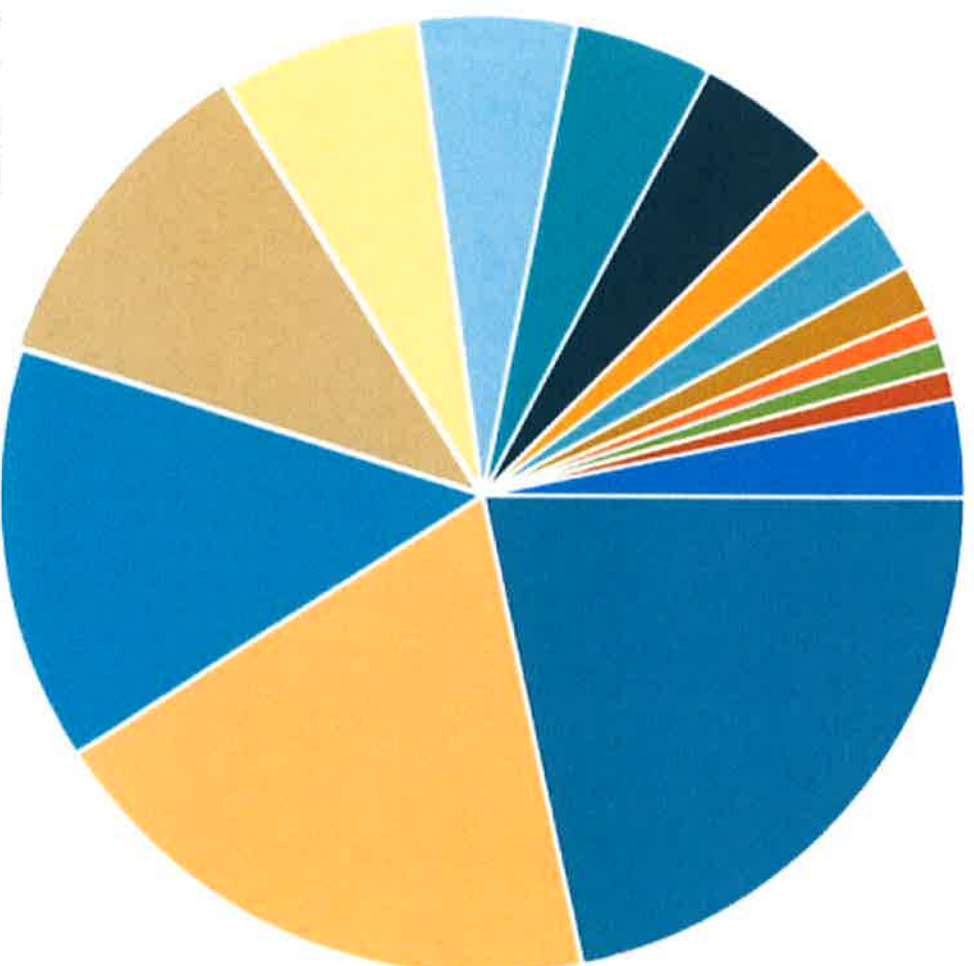
# 301

Projects accomplished  
by IRLNEP partners  
in fiscal year 2023

When we asked our federal, state and local partners what IRL-focused projects they were working on, outside of any joint projects with the IRLNEP, we received information on 301 projects that were either completed or in progress during fiscal year 2023.

This brings the total number of reported projects to 870 over the past three years. Congratulations partners!

## 2023 Partner Projects Completed or in Process



- Stormwater (65)
- Wastewater (58)
- Monitoring/Data Sharing (42)
- Citizen Engagement (34)
- Filter Feeders (20)
- Species of Concern (16)
- Legacy Loads (14)
- Trash Free Waters (14)
- Harmful Algal Blooms (7)
- Seagrasses (7)
- Biodiversity (5)
- Living Shorelines (3)
- Policy Considerations (3)
- Spoil Islands (3)
- Other (10)

**301 Projects in 2023!**

# **Brevard County Leadership**

## *A Transformational Investment*

**Brevard County Save Our  
Indian River Lagoon Sales  
Tax revenues now  
projected at \$586 million  
over 10 years.**

# **Thank you!**

## **Save Our Indian River Lagoon Project Plan 2023 Update for Brevard County, Florida**



Prepared by:  
Tetra Tech, Inc.  
 **TETRA TECH**

Prepared for:  
Brevard County, Natural Resources Management Department



February 7, 2023



# Thank You!



Questions?  
Contact: Duane De Freese, Ph.D.  
[ddefreese@ircouncil.org](mailto:ddefreese@ircouncil.org)