

# Brevard County Budget Workshop

## Save Our Indian River Lagoon Program Summary

February 29, 2024



Brevard County's  
**Save**  
*our*  
**LAGOON**



88 Community  
Projects  
Completed!

435 Home  
Owner Projects  
Completed!

# 2024 Save Our Indian River Lagoon Project Status

Progress as of December 31, 2023

190,305 lbs/year  
of nitrogen load  
reduced

14,681 lbs/year of  
phosphorus load  
reduced

## Public Education & Engagement



Budget: \$3,530,000  
TN Reduction: 33,709 lbs/year  
Average Cost/lb TN: \$105  
Projects Completed: 1  
Projects Underway: 4  
Projects in the Plan: 7

## WWTF Upgrades for Reclaimed Water



Budget: \$27,537,049  
TN Reduction: 74,139 lbs/year  
Average Cost/lb TN: \$371  
Projects Completed: 3  
Projects in Construction: 1  
Projects in the Plan: 7

## Rapid Infiltration Basin/ Sprayfield Upgrades



Budget: \$82,207  
TN Reduction: 317 lbs/year  
Average Cost/lb TN: \$259  
Projects Completed: 1  
Projects in Construction: 0  
Projects in the Plan: 2

## Package Plant Connections



Budget: \$2,016,627  
TN Reduction: 1,442 lbs/year  
Average Cost/lb TN: \$1,398  
Projects Completed: 1  
Projects in Construction: 0  
Projects in the Plan: 4

## Smoke Testing/ Sewer Lateral Repairs



Budget: \$1,454,498  
TN Reduction: 6,196 lbs/year  
Average Cost/lb TN: \$235  
Miles Smoke Tested: 276  
842 of 1,247 Leaks Repaired  
Miles in the Plan: 299

## Septic to Sewer



Budget: \$135,374,605  
TN Reduction: 114,440 lbs/year  
Average Cost/lb TN: \$1,196  
Homes Connected: 513  
Homes in Construction: 256  
Homes in the Plan: 4,822

## Septic System Upgrades



Budget: \$29,250,000  
TN Reduction: 37,981 lbs/year  
Average Cost/lb TN: \$770  
Homes Upgraded: 229  
Homes Contracted: 394  
Homes in the Plan: 1,625

## Stormwater Projects



Budget: \$71,559,345  
TN Reduction: 249,781 lbs/year  
Average Cost/lb TN: \$286  
Projects Completed: 43  
Projects in Construction: 1  
Projects in the Plan: 269

## Aquatic Vegetation Harvesting



Budget: \$2,243,689  
TN Reduction: 33,111 lbs  
Average Cost/lb TN: \$68  
Projects Completed: 6  
Projects in Construction: 1  
Projects in the Plan: 10

## Muck Removal



Budget: \$133,749,381  
TN Reduction: 355,868 lbs/year  
Average Cost/lb TN: \$376  
Projects Completed: 3  
Projects in Construction: 2  
Projects in the Plan: 21

## Interstitial Water Treatment



Budget: \$38,761,200  
TN Reduction: 519,439 lbs  
Average Cost/lb TN: \$75  
Projects Completed: 2  
Projects in Construction: 2  
Projects in the Plan: 16

## Oyster Bars



Budget: \$9,813,625  
TN Reduction: 24,747 lbs/year  
Average Cost/lb TN: \$397  
Projects Completed: 9  
Projects in Construction: 5  
Projects in the Plan: 28

## Planted Shorelines



Budget: \$126,480  
TN Reduction: 527 lbs/year  
Average Cost/lb TN: \$240  
Projects Completed: 8  
Projects in Construction: 0  
Projects in the Plan: 11

## Clam Restoration



Budget: \$60,000  
TN Reduction: 1,000 lbs  
Average Cost/lb TN: \$60  
Projects Completed: 4  
Projects Underway: 1  
Projects in the Plan: 10

2017–2023 Revenue = \$361.8M

10-Year Revenue Estimate = \$585.7M

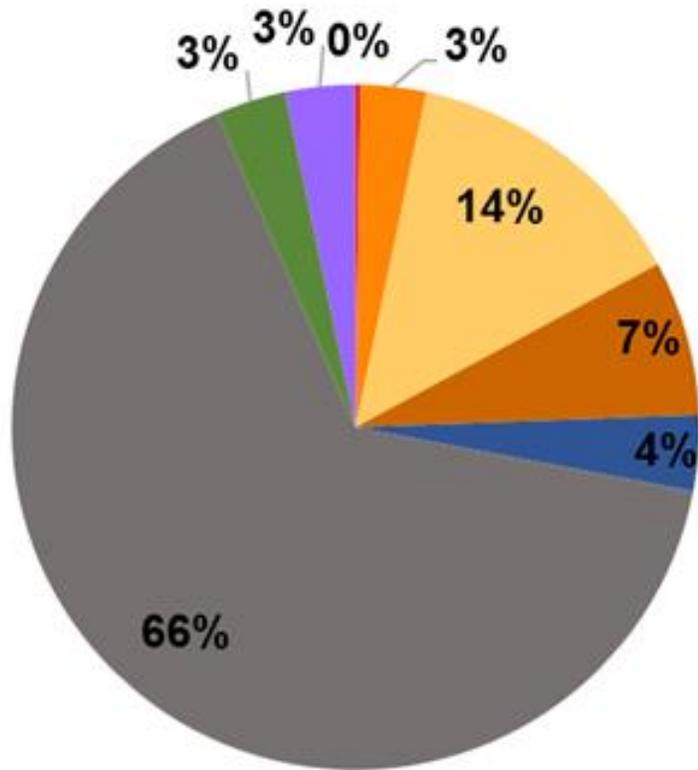


2017–2023 Expenditures = \$73.7M

Projects Underway = \$324.8M

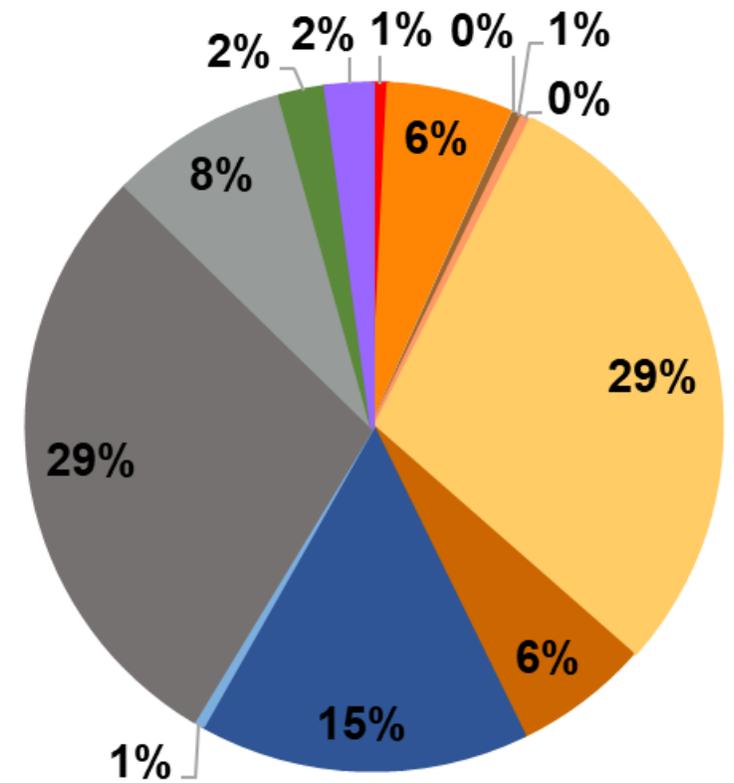
# Comparison of Plan Allocations

Original 2016 Plan



- Public Education
- WWTF Upgrades for Reclaimed Water
- Rapid Infiltration Basin/Sprayfield Upgrades
- Package Plant Connection
- Sewer Laterals
- Septic-to-Sewer
- Septic System Upgrades
- Stormwater Projects
- Vegetation Harvesting
- Muck Removal
- Treatment of Interstitial Water
- Oyster Reef Living Shorelines
- Project Monitoring

2024 Plan Update



# SOIRL Project Progress

<b>City Projects</b>		<b>County Projects</b>		<b>Homeowner Projects</b>	
<b># Complete</b>	<b>43</b>	<b># Complete</b>	<b>45</b>	<b># Complete</b>	<b>1,423</b>
<b># Allocated</b>	<b>85</b>	<b># Allocated</b>	<b>291</b>	<b># Allocated</b>	<b>3,566</b>
<b>\$ Awarded</b>	<b>\$115,764,901</b>	<b>\$ Awarded</b>	<b>\$276,711,375</b>	<b>\$ Awarded</b>	<b>\$41,077,777</b>
<b>\$ Spent</b>	<b>\$ 29,488,576</b>	<b>\$ Spent</b>	<b>\$ 33,169,103</b>	<b>\$ Spent</b>	<b>\$ 4,900,084</b>

# Inflation – Construction Trends



■ ENGINEER'S ESTIMATE ■ vs CONTRACTORS LOW BID ■ VARIANCE

■ ENGINEER'S ESTIMATE ■ vs CONTRACTORS LOW BID ■ VARIANCE

# Comparing 2016 SOIRL Fund Allocation to 2024

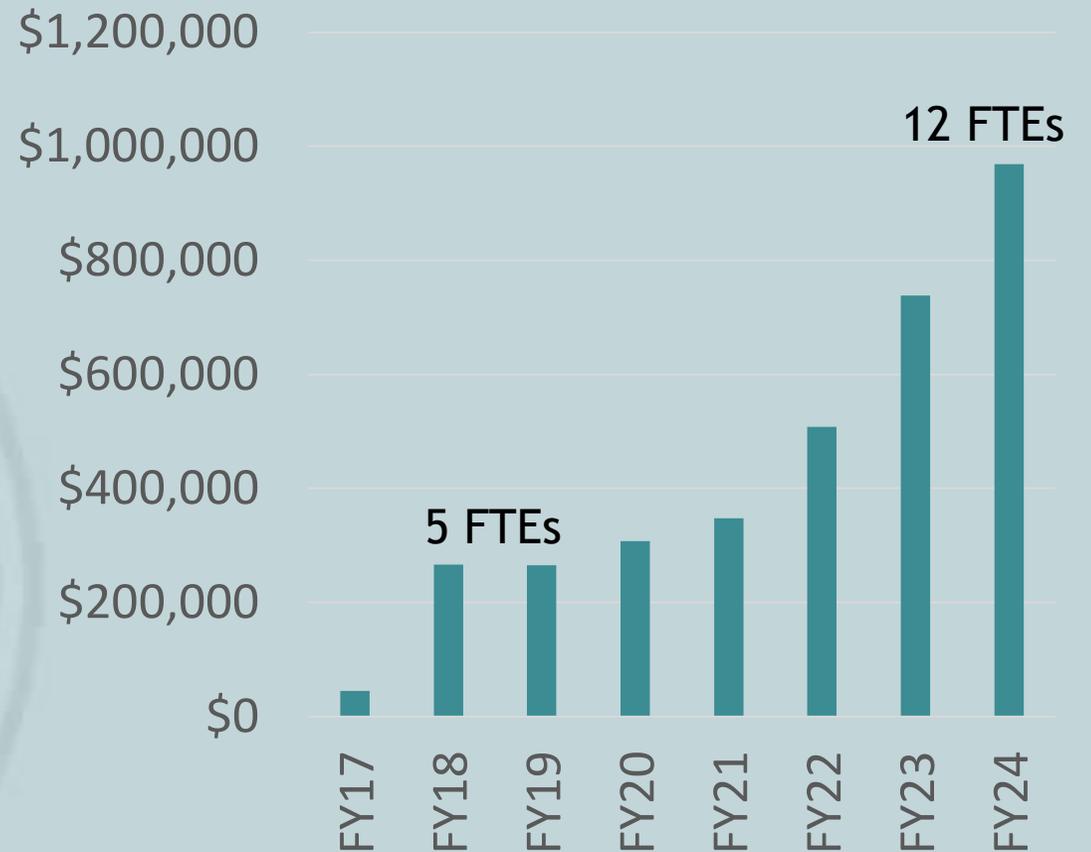
Project Type	2016 Allocations	2024 Allocations	Increase
Public Education and Outreach	\$625,000	\$4,001,009	\$3,376,009
Wastewater	\$73,356,000	\$232,431,032	\$159,075,032
Stormwater	\$10,375,000	\$92,656,607	\$82,281,607
Muck and Interstitial	\$198,100,000	\$208,720,439	\$10,620,439
Restoration	\$10,000,000	\$12,250,898	\$2,250,898
Monitoring	\$10,000,000	\$10,000,000	\$0
Contingency	\$0	\$25,654,341	\$25,654,341
<b>Total</b>	<b>\$302,456,000</b>	<b>\$585,714,326</b>	<b>\$283,258,326</b>

# Program and Salary Expenses by Fiscal Year

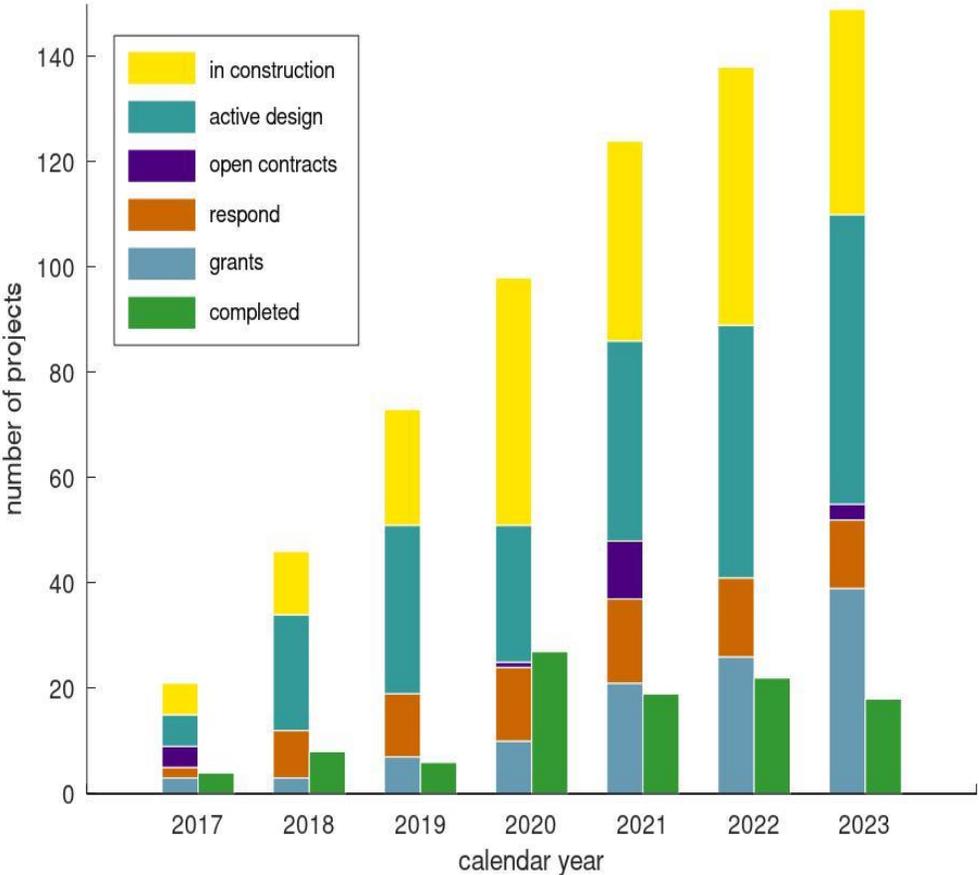
## Program Expenses



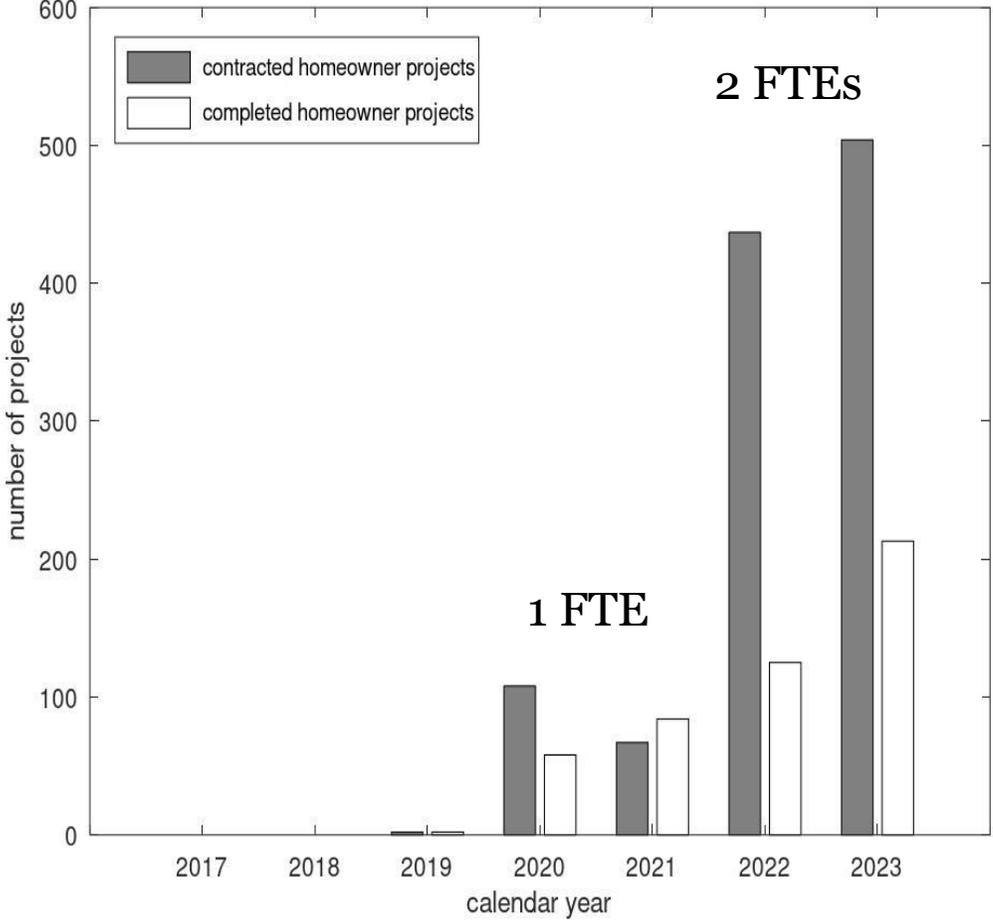
## Salary Expenses



# SOIRL Project Management

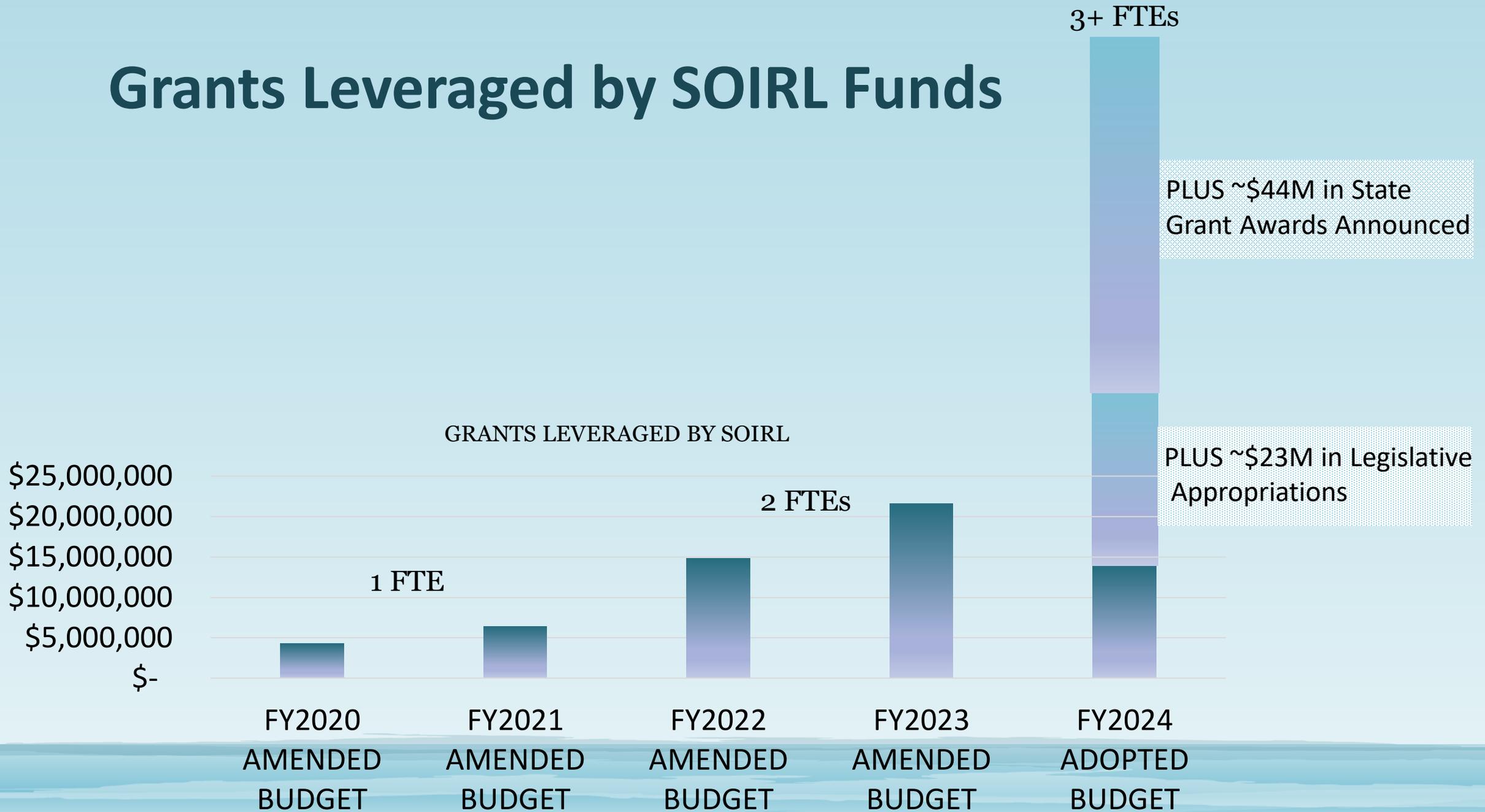


Community Project Counts



Homeowner Project Counts

# Grants Leveraged by SOIRL Funds



# Water Project Funding for Brevard in the 2023 Appropriations Bill

SOIRL	• Grand Canal Phase 5 Environmental Dredging -	\$9,000,000
	• Eau Gallie NE Construction Environmental Dredging -	\$5,010,244
	• Micco/Little Hollywood Septic to Sewer Conversion -	\$4,500,000
	• Sykes Creek Phase 2 Environmental Dredging -	\$4,324,002
	• Brevard County Septic Upgrades to Advanced Treatment Phase 3 -	\$450,000
	• South Beaches 2nd Deep Injection Well -	\$2,000,000
Utilities Services	• North Brevard Water Treatment Plant Expansion -	\$1,500,000
	• South Brevard Advanced Wastewater Treatment Plant -	\$1,500,000
	• Palm Bay Septic to Sewer Conversions -	\$2,100,000
	• Cocoa Beach Bicentennial Park -	\$1,250,000
Cities	• Cocoa Beach Gravity Sewer Rehabilitation -	\$1,000,000
	• Cocoa Beach Jr./Sr. High School Indian River Restoration Project-	\$850,000
	• Melbourne Espanola Baffle Box Water Quality Project -	\$287,500
	• Indian Harbour Beach 2nd Generation Baffle Box at Cheyenne Court -	\$250,000
	• Indian Harbour Beach Gleason Park Lake Bank Stabilization -	\$175,000
Other	• Sebastian Inlet North/South Jetty Maintenance/Safety Improvements -	\$2,000,000
	• Kilroy Monitoring System Indian River Lagoon -	\$1,000,000

# 2023 Florida Legislation

1. **\$100 Million for Indian River Lagoon Cleanup Projects**
2. **SB 1632 = Indian River Lagoon Protection Program**
  - **Water Quality Monitoring**
  - **BMAP Enforcement, Comp Plan to include BMAP projects**
  - **Septic to Sewer for Developments > 50 lots, < 1 acre**
  - **65% Nitrogen Reducing Septic, No Conventional Septic**
3. **South Beaches Area of Critical State Concern**
4. **SLIP Studies for “all areas at risk due to SLR”**
5. **Florida Seagrass Restoration Plan**
6. **Fertilizer Pre-emption**
7. **Biosolids Grants**

# 2024 Draft Appropriations (HB 5001)

Programs	Grant	▪ Indian River Lagoon Water Quality Improvement Projects	\$100,000,000 (\$25M in SB)
		▪ Special Water Quality Enhancement & Accountability (Blue Green Algae Task Force)	\$10,800,000
		▪ Florida DEP Innovative Technologies Grants and Aids	\$10,000,000
		▪ Grants and Aids - Harmful Algal Blooms	\$5,000,000
Brevard County	SOIRL	• Sykes Creek Ph 2 Environmental Dredging & Interstitial Water Treatment Project	\$2,162,001
		• Eau Gallie NE Environmental Dredging and Interstitial Water Treatment	\$1,250,000
		• Merritt Island Zone F Septic-to-Sewer (71 sites)	\$1,000,000
		• Indian River Lagoon Quick Connects to Sewer	\$450,000
		• Indian River Lagoon Septic Upgrades to Advanced Treatment Units	\$450,000
	Utilities	• Port St. John Regional Advanced Wastewater Treatment Plant Ph 2	\$1,250,000
		• Merritt Island Sewer and Manhole Lining Phase 2	\$1,000,000
		• Merritt Island Lift Station Replacement ( <i>SB only</i> )	\$350,000
	Other	• Pre-Construction Activities Re: Ellis Road Widening Project	\$2,000,000
		• Merritt Island Canal Dredging	\$1,500,000
		• Medal of Honor Tribute Merritt Island Veterans Memorial Park ( <i>SB only</i> )	\$600,000
		• Mud Lake for West Cocoa Drainage Improvements ( <i>SB only</i> )	\$350,000

# 2024 Draft Appropriations (HB 5001)

Cities	• Cocoa Beach Gravity Sewer Rehabilitation	\$500,000
	• Cocoa City Septic to Sewer Conversion for 88 Homes	\$3,000,000
	• Palm Bay Indian River Lagoon Baffle Box Projects	\$750,000
	• Palm Bay Indian River Lagoon Water Quality Improvement Project Baseflow & Ponds	\$550,000
	• Satellite Beach Grand Canal Finger Canals Muck Dredging	\$1,500,000
	• West Melbourne Flood Risk Reduction Connect Canal 70 to Canal 63	\$400,000
Other IRL Water Projects	• Kilroy Network Expansion (ORCA Water Quality Monitoring Systems)	\$250,000
	• University of Central Florida Restore Lagoon Inflow Final Phase	\$2,450,000
	• Deltona Sanitary Sewer Collection System Rehabilitation	\$1,000,000
	• Fort Pierce Utilities Authority Relocate WW Treatment Plant off Indian River Lagoon	\$2,500,000
	• Indian River County IRL Outfall Upgrades to Provide Nutrient and Waste Removal	\$375,000
	• Martin County Bessey Creek Retrofit	\$1,000,000
	• Martin County Gomez Community Pettway Potable Water Service	\$940,000
	• Port St. Lucie A14 Water Control Structure Improvements	\$262,500
	• Port St. Lucie Westport Wastewater Treatment Facility Nutrient Reduction Improvements	\$2,500,000
	• Sebastian Inlet North and South Jetty Maintenance and Safety Improvements	\$1,000,000
	• South Daytona Sewer System Rehabilitation Pipelining	\$375,000
	• Stuart Sewer Connection Assistance	\$500,000
	• Wetlands Restoration (FDEP projects that benefit fish & wildlife habitat, water quality)	\$2,500,000

# Return on Investment for the ½-cent Tax

- \$4 Save Our IRL dollars from residents



raises

- \$1 Save Our IRL dollar from tourists\*



and leverages

- \$3.25 in other federal, state, non-governmental and local match



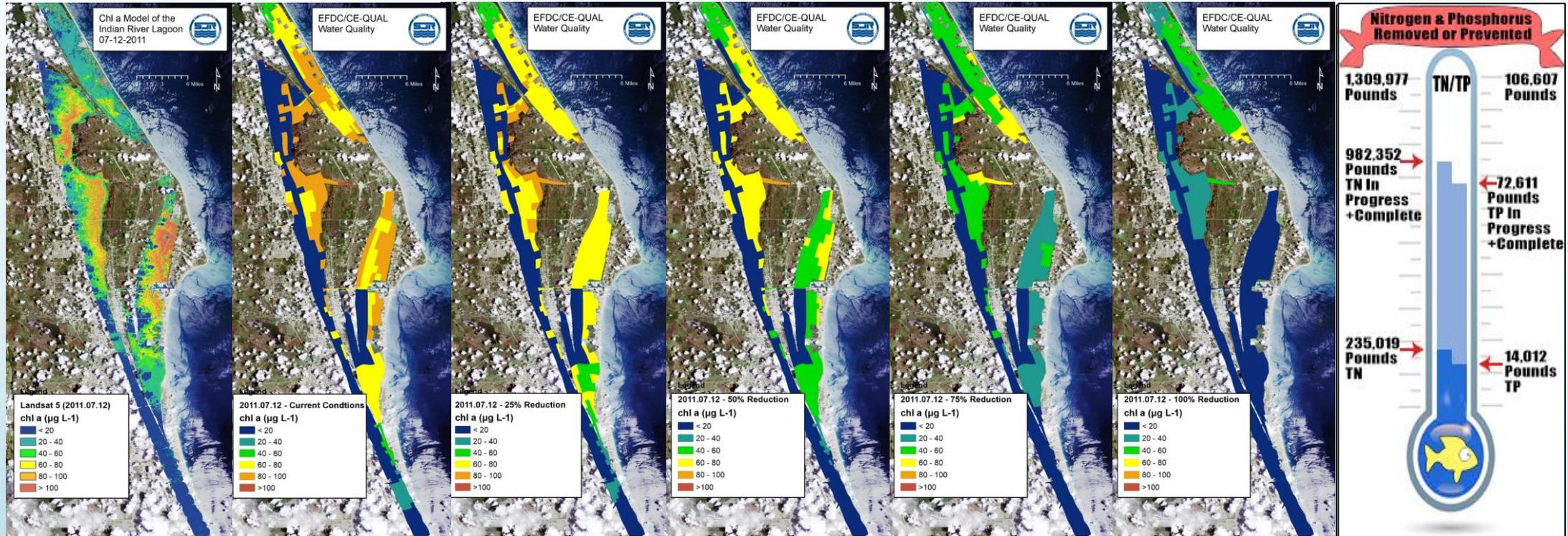
for a total buying power of

- \$8.25, which is more than double what residents contribute to the ½ cent sales tax



*\*Based on a 2018 tourism study that indicated about 20% of SOIRL collections are from tourists and updated total project costs in the draft 2024 Plan, Table 6-9*

# Algal Bloom Response to Reducing Pollution



Landsat algorithm

0% of TMDL

25% of TMDL

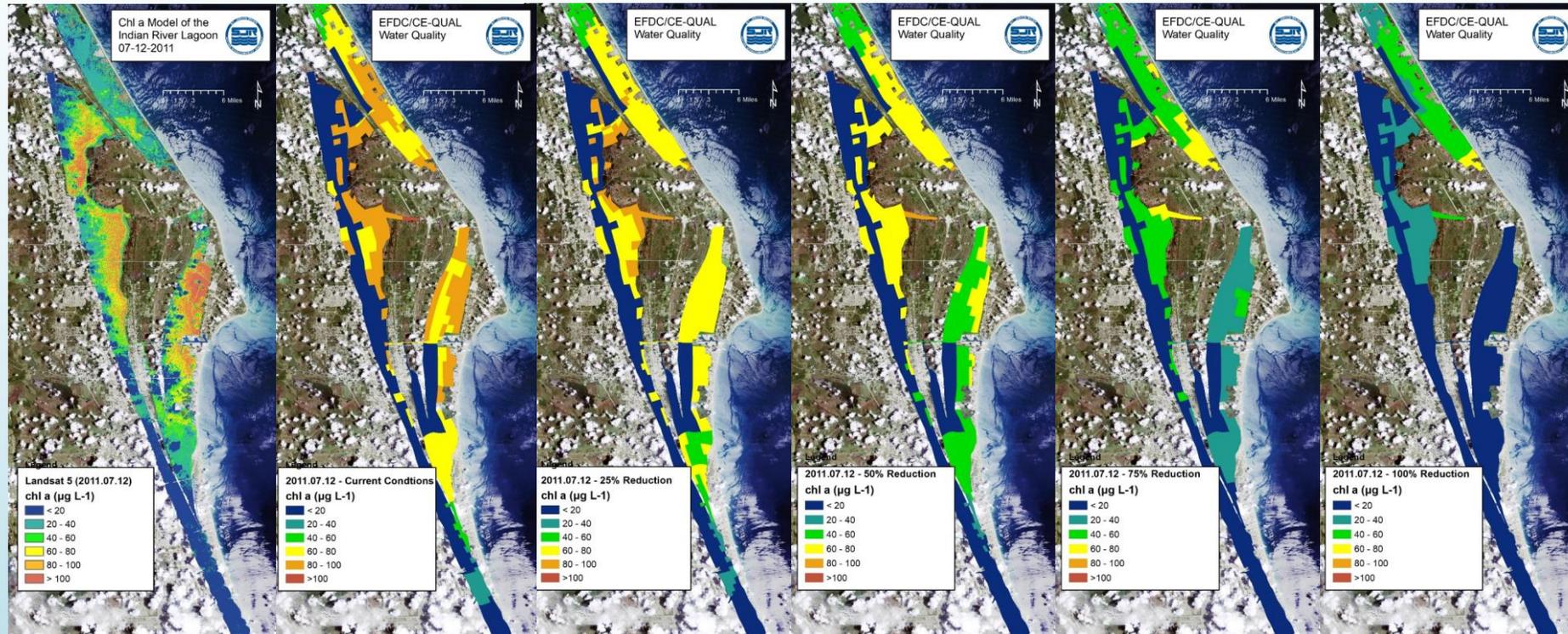
50% of TMDL

75% of TMDL

100% of TMDL



# Algal Bloom Response to Reducing Pollution



Landsat algorithm

0% of TMDL

25% of TMDL

50% of TMDL

75% of TMDL

100% of TMDL

2017 Average  
Stormwater Cost  
\$79/lb of TN



2021 Average  
Stormwater Cost  
\$104/lb of TN



2026 Average  
Stormwater Cost  
\$286/lb of TN

A scenic sunset over a body of water. The sky is a mix of deep blue, purple, and orange. Several palm trees are silhouetted against the sky. A wooden pier extends into the water. The water reflects the colors of the sunset.

# Questions?