



Brevard County Budget Workshop Save Our Indian River Lagoon Program

March 27, 2025



Brevard County's
Save
our
LAGOON

Presentation Outline

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- A Program of the Natural Resources Department
- Colors of Money
- Economic Importance of the Lagoon
- Board Action, Referendum and Municipal Agreements
- Citizen Oversight of Adaptive Management
- Benefit: Cost Ratio Driven Project Selection
- Inflation Impacts
- Progress and Performance

NATURAL RESOURCES MANAGEMENT DEPARTMENT OVERVIEW



Our Mission is to promote sustainable use and stewardship of Brevard County's natural resources through cost-effective and science-based management.

Environmental
Resources
Management

Environmental
Remediation &
Compliance

Beaches,
Boating &
Waterways

Stormwater
Management

Operations &
Support
Services

Save Our
Indian River
Lagoon

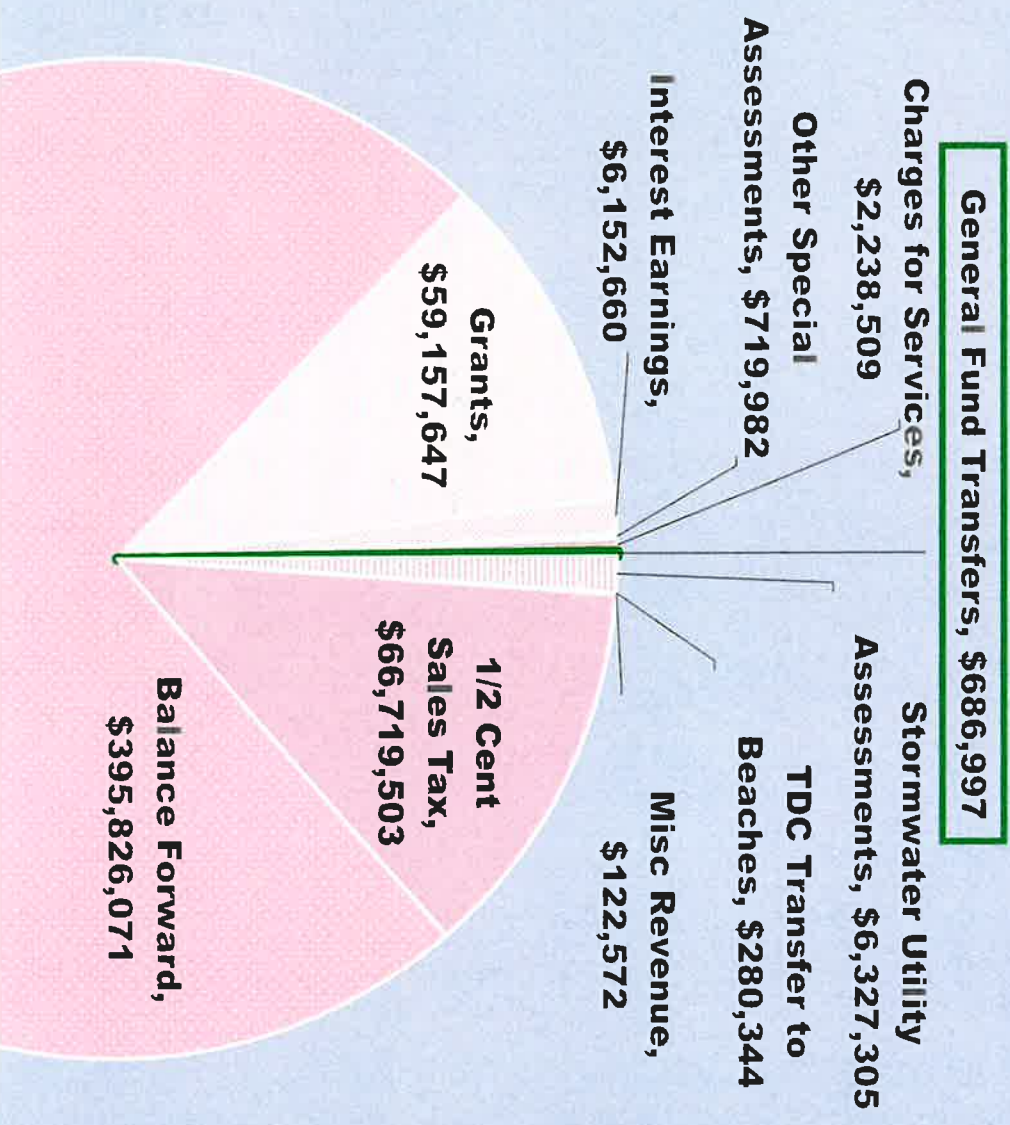
COLORS OF MONEY

NATURAL RESOURCES FUNDING SOURCES

The Natural Resources Management Department's total budget is:

- 91% SOIRL (\$488M)
- 9% OTHER 5 PROGRAMS (\$50M)
- 99.9% RESTRICTED (PINK)
REVENUE
- 0.13% GENERAL FUND (GREEN)
REVENUE

NATURAL RESOURCES MANAGEMENT BUDGET \$538M

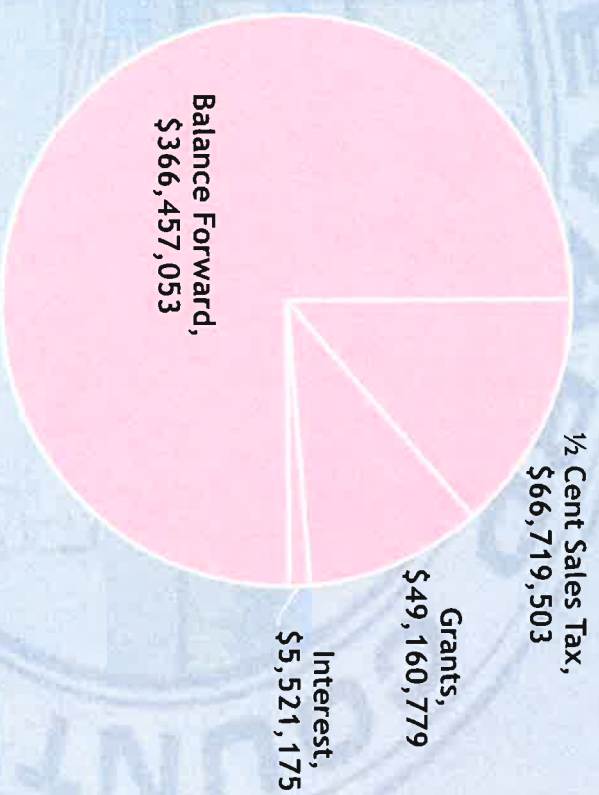


Save Our Indian River Lagoon Program

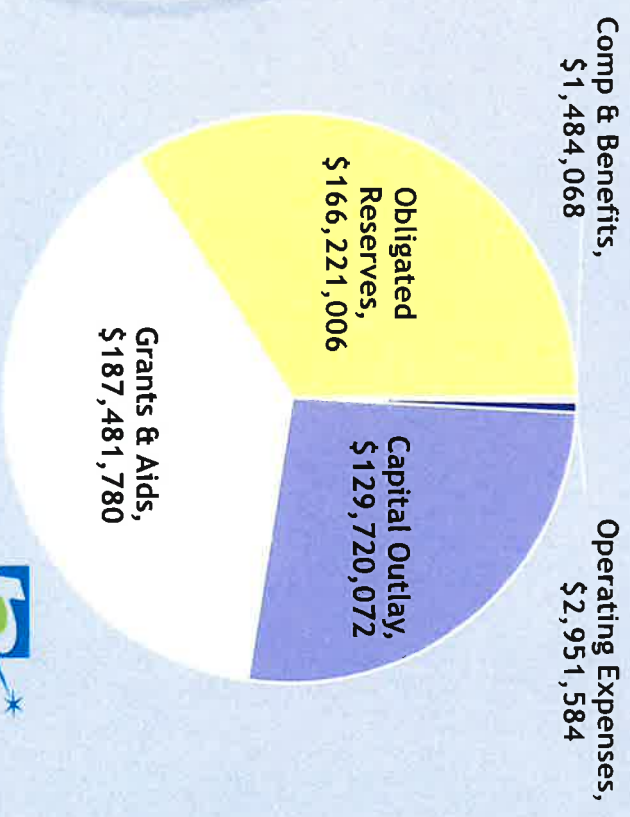
COLORS OF MONEY

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Revenue: \$487,858,510



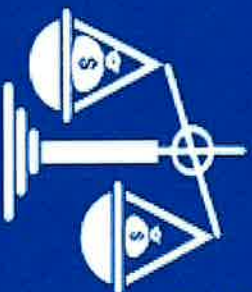
Expense: \$487,858,510



INDIAN RIVER LAGOON

by the numbers

ECONOMIC VALUATION UPDATE 2016



33:1 RETURN ON INVESTMENT

\$230 MILLION
REAL ESTATE INVESTMENT
\$7.6 BILLION
REAL ESTATE MARKET CAPITAL

TOTAL ANNUAL INCOME: *IRE-Related Industry*



\$934 MILLION
ANNUAL REAL ESTATE VALUE ADDED FROM IRL



LIVING RESOURCES
\$48,230,566



MARINE INDUSTRY
\$757,440,497



RESEARCH & DEVELOPMENT
\$101,470,946



DEFENSE & AEROSPACE
\$5,149,151,378



OPERATIONS & VISITOR-RELATED
\$1,574,078,178

HOW MUCH

\$7,640,311,564

TOTAL ANNUAL ECONOMIC VALUE



7.4M LAGOON REGION VISITORS 2014

11.1M LAGOON REGION VISITORS 2025

71,918 RELATED JOBS



RESEARCH & DEVELOPMENT
39,287



DEFENSE & AEROSPACE
24,744



MARINE INDUSTRY
7,001

RESEARCH & DEVELOPMENT
779

85=1
Tourists = Job



\$162 per day
Per Visitor Spending



Recreational, Environmental & Economic Treasure



Healthy Seagrass, Healthy Lagoon

- Seagrass is the Foundation of a Healthy and Productive Lagoon
- Uptakes and sequesters nutrients and provides food, habitat, & oxygen
- Supports up to 40,000 fish per acre
- Ideal seagrass environment - shallow, protected, expansive

2016 Fish Kill Response

- **April**
 - Letter to the Governor
 - State agency site visits
 - Legislative Delegation
 - Federal permitting
- **May**
 - Board direction to develop referendum options
 - Board direction to draft a project plan
- **August**
 - Board Adopted the Save Our Indian River Lagoon (SOIRL) Project Plan
 - Approved the Ballot Language and SOIRL Enabling Ordinance
 - Established the Citizen Oversight Committee and SOIRL Trust Fund
 - Directed Negotiation of Sales Tax Use and Distribution Agreements with Cities





November 2016 Ballot Language

Brevard County, Florida

Save Our Indian River Lagoon ½ Cent Sales Tax Referendum

To restore the Indian River Lagoon through financing, planning, constructing, maintaining, and operating capital improvements and capital maintenance projects and programs designed to improve water quality, fish, wildlife and marine habitat, remove muck and reduce pollution, shall an ordinance be approved levying a ½ cent sales tax for ten years and requiring deposit of all revenue to a Save Our Lagoon Trust Fund solely for such projects, with citizen committee oversight and annual independent audits?

YES For the ½ cent sales tax

NO Against the ½ cent sales tax

November 8, 2016 General Election Results

- The Referendum was approved by 62.41% of Brevard voters
- Approved in every voting precinct
- Interlocal Agreements were signed by all municipalities
 - Place the levy of a discretionary infrastructure sales tax on the ballot
 - Deposit the revenues into a Save Our Lagoon Trust Fund, to be administered by the County
 - Use the funds to implement the Save Our Lagoon Project Plan, consistent with the enabling ordinance
 - Establish Citizen Advisory Committee to recommend plan updates to the County Commission annually

County Referendum - Save Our Indian River Lagoon (Vote For 1)

Participating Precincts Reporting: 170 / 170

 Precinct Details

Choice

Yes - For the 1/2 cent sales tax

No - Against the 1/2 cent sales tax



309,334

Adaptive Management

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- **Citizen Oversight Committee**
 - Scientists
 - Technology entrepreneurs
 - Economists/Finance
 - Real estate interests
 - Education/outreach/advocacy
 - Tourism/nature-based tourism
 - IRL Commerce
- **League of Cities nominates 1/2 of the Seats**
- **Board of County Commissioners nominates 1/2**

Citizen Oversight

Annual Project Plan Updates

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- **Transparency** -
 - How are the funds being spent?
- **Accountability** -
 - Does implementation follow policy and plans?
- **Performance** -
 - Are the projects reducing pollution, as planned?
- **Responsive Management** -
 - Are there better projects to go in the plan?



Save Our Indian River Lagoon Project Plan

REDUCE Excess Nitrogen & Phosphorus Inputs by 25%

- Fertilizer management through public education and outreach
- Septic system removal
- Septic system upgrades
- Wastewater treatment plant upgrades to improve reclaimed water quality
- Stormwater treatment

REMOVE Detrimental Muck to Reduce Flux by 25%

Remove muck through environmental dredging. Muck contributes to turbidity, inhibits seagrass growth, consumes oxygen, stores and releases nutrients, smothers the natural bottom, and destroys healthy communities of benthic organisms.

RESTORE 20 Miles of Oyster Bars and Living Ecosystem Services

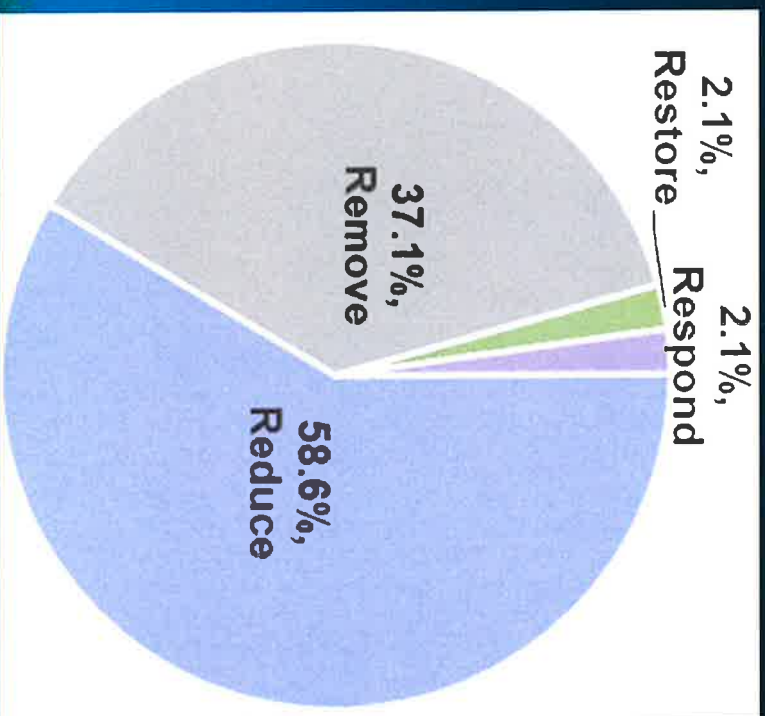
Create long, narrow oyster bars throughout the lagoon to increase filtration and decrease shoreline erosion.

RESPOND to New Information

Measure progress annually, evaluate changing needs and conditions, consider technological opportunities, and respond by amending the plan accordingly.

Save Our Indian River Lagoon Project Plan

- Use best available data and experts
- Address major sources of pollution
- Schedule parallel and in series
- Optimize Return on Investment (ROI)
- Foster innovation and adaptation
- Minimize cost and risk



Sources of Nitrogen Pollution in Brevard

Nitrogen Loading in the 1990s
Nitrogen Loading in 2010



100 Community Projects Completed!

1,842 Home Owner Projects Completed!

2025 Save Our Indian River Lagoon Project Status

Progress as of December 31, 2024

142,023 lbs/Year of total nitrogen (TN) load reduced

132,103 lbs of one-time nitrogen removal

Public Education & Engagement



Budget: \$4,017,807
TN Reduction: 33,709 lbs/year
Average Cost/lb TN: \$119
Projects Completed: 1
Projects Underway: 6
Projects in the Plan: 7

WWTF Upgrades for Reclaimed Water



Budget: \$36,471,408
TN Reduction: 82,151 lbs/year
Average Cost/lb TN: \$444
Projects Completed: 4
Projects in Design: 3
Projects in the Plan: 9

Rapid Infiltration Basin/ Sprayfield Upgrades



Budget: \$90,658
TN Reduction: 317 lbs/year
Average Cost/lb TN: \$286
Projects Completed: 1
Projects in Construction: 0
Projects in the Plan: 2

Package Plant Connections



Budget: \$1,574,111
TN Reduction: 992 lbs/year
Average Cost/lb TN: \$1,587
Projects Completed: 1
Projects in Design: 1
Projects in the Plan: 3

Smoke Testing/ Sewer Lateral Repairs



Budget: \$1,700,205
TN Reduction: 6,196 lbs/year
Average Cost/lb TN: \$274
Miles Smoke Tested: 276
Miles of 1,126 leaks Repaired
Miles in the Plan: 299

Septic to Sewer



Budget: \$163,254,830
TN Reduction: 113,243 lbs/year
Average Cost/lb TN: \$1,441
Homes Connected: 830
Homes Upgraded: 353
Homes Contracted: 591
Homes in the Plan: 1,469

Septic System Upgrades



Budget: \$30,731,280
TN Reduction: 34,294 lbs/year
Average Cost/lb TN: \$896
Homes Upgraded: 353
Homes Contracted: 591
Homes in the Plan: 1,469

Stormwater Projects



Budget: \$84,213,758
TN Reduction: 239,381 lbs/year
Average Cost/lb TN: \$352
Projects Completed: 46
Projects in Construction: 5
Projects in the Plan: 253

Aquatic Vegetation Harvesting



Budget: \$2,337,175
TN Reduction: 42,913 lbs
Average Cost/lb TN: \$54
Projects Completed: 8
Projects in Construction: 0
Projects in the Plan: 10

Muck Removal



Budget: \$161,761,411
TN Reduction: 235,134 lbs/year
Average Cost/lb TN: \$688
Projects Completed: 3
Projects in Construction: 2
Projects in the Plan: 21

Interstitial Water Treatment



Budget: \$50,660,669
TN Reduction: 500,032 lbs
Average Cost/lb TN: \$102
Projects Completed: 2
Projects in Construction: 2
Projects in the Plan: 16

Oyster Bars



Budget: \$11,361,634
TN Reduction: 23,057 lbs/year
Average Cost/lb TN: \$493
Projects Completed: 11
Projects in Construction: 5
Projects in the Plan: 28

Planted Shorelines



Budget: \$115,895
TN Reduction: 450 lbs/year
Average Cost/lb TN: \$258
Projects Completed: 8
Projects in Construction: 1
Projects in the Plan: 10

Clam Restoration



Budget: \$510,117
TN Reduction: 3,574 lbs
Average Cost/lb TN: \$143
Projects Completed: 6
Project Underway: 4
Projects in the Plan: 12

2017-2024 Revenue = \$434.7M

10-Year Revenue Estimate = \$585.7M

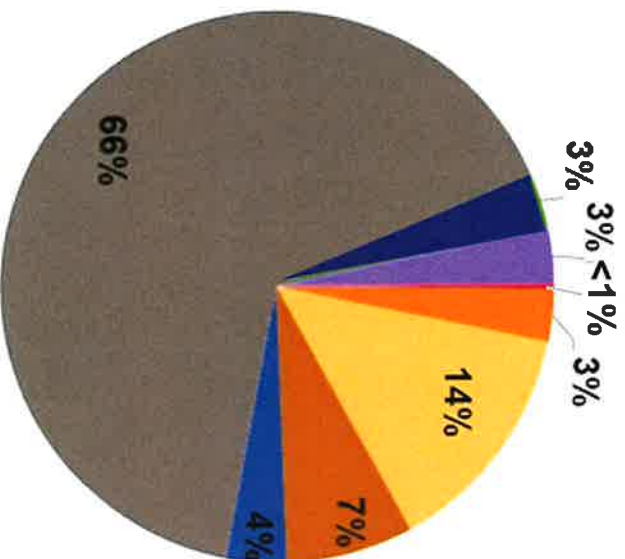
2017-2024 Expenditures = \$79.5M

Projects Underway = \$332.9M

Save Our Indian RIVER LAGOON

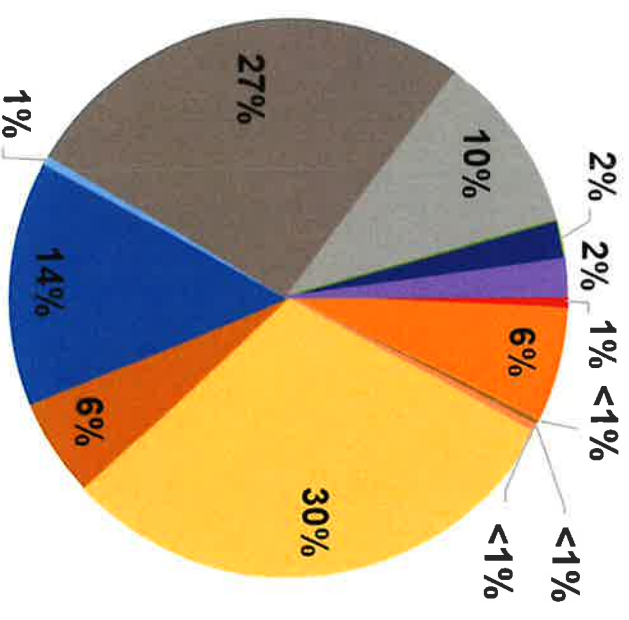
Comparison of Plan Allocations

Original 2016 Plan



- Public Education
- WMTF 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

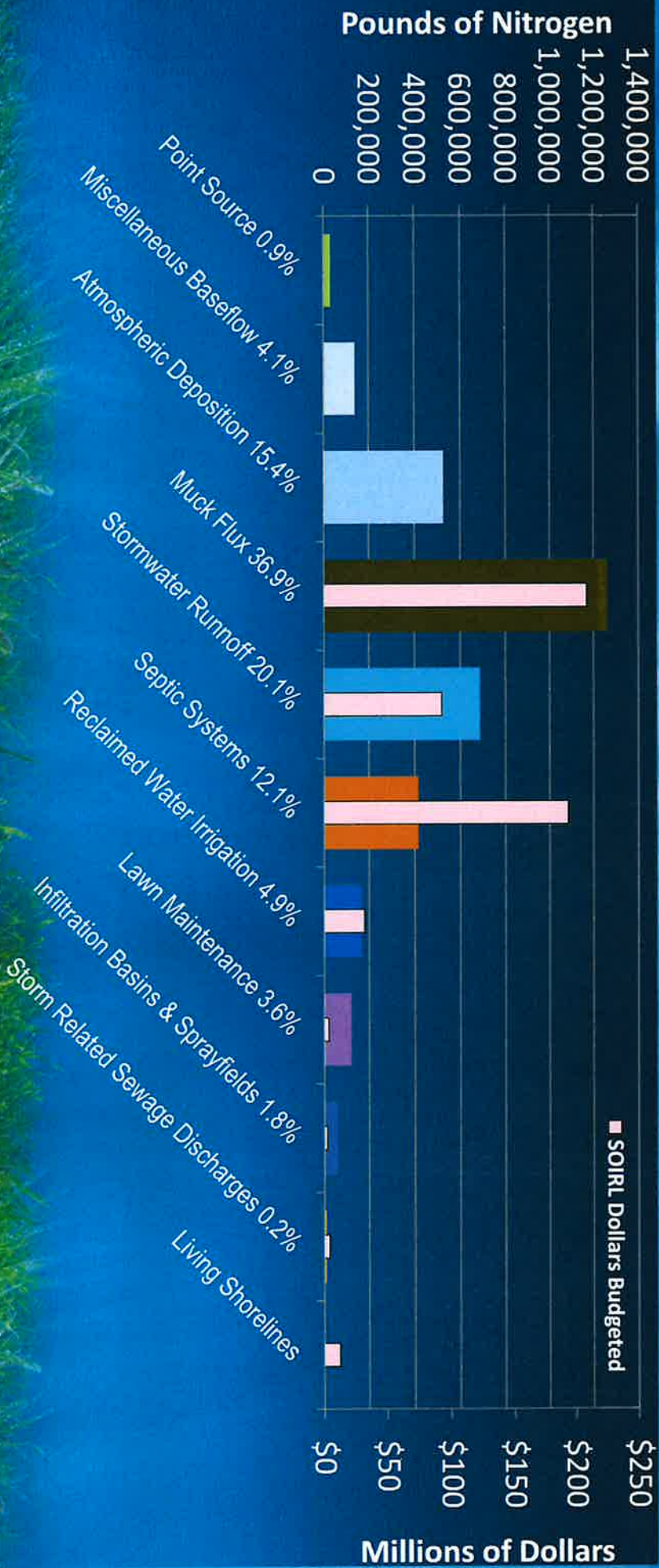
2025 Plan Update



Comparing 2016 SOIRL Fund Allocation to 2025

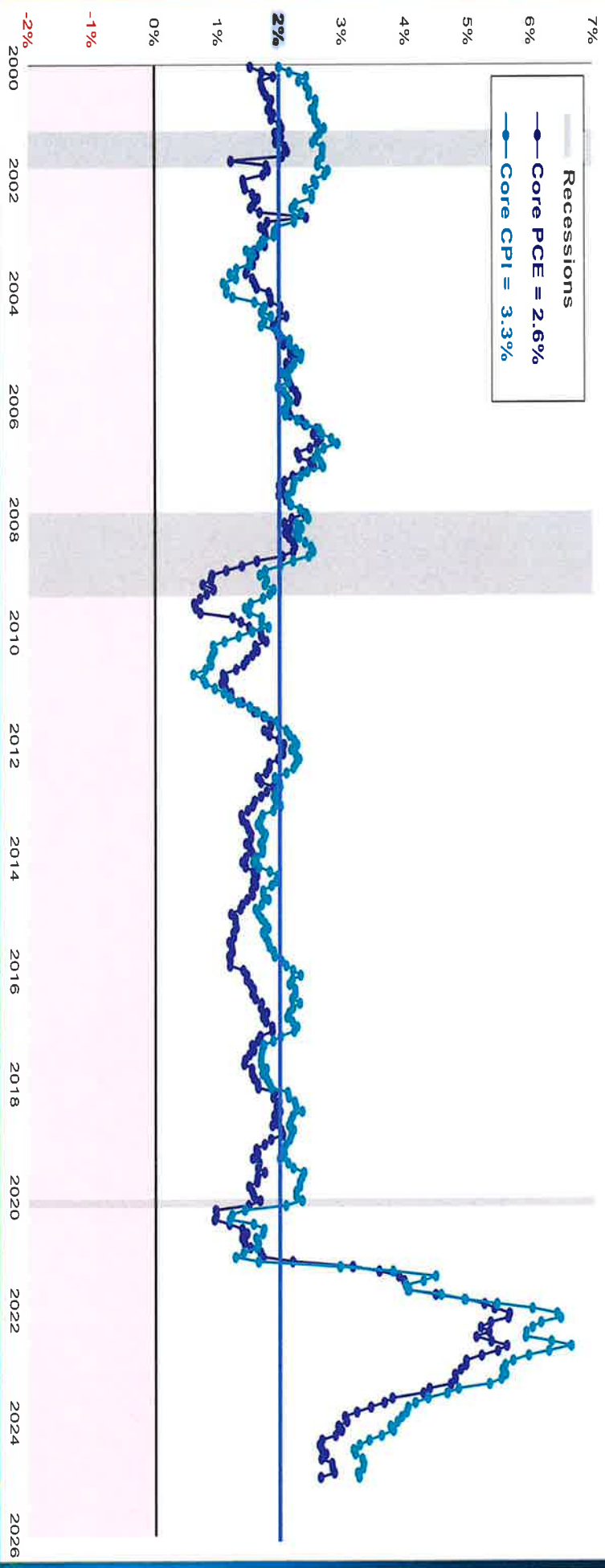
Project Type	2016 Allocations	2025 Allocations	Increase
Public Education and Outreach	\$625,000	\$4,017,807	\$3,392,807
Wastewater	\$73,356,000	\$238,285,455	\$164,929,455
Stormwater	\$10,375,000	\$86,703,885	\$76,328,885
Muck and Interstitial	\$198,100,000	\$212,839,133	\$14,739,133
Restoration	\$10,000,000	\$11,987,751	\$1,987,751
Performance Monitoring	\$10,000,000	\$10,000,000	\$0
Contingency	\$0	\$21,900,738	\$21,900,738
Total	\$302,456,000	\$585,734,769	\$283,278,769

Pollution Sources vs Fund Allocations



Inflation

Core CPI and PCE Since 2000



ANNUAL % CHANGE IN SOIRL REVENUE COLLECTIONS

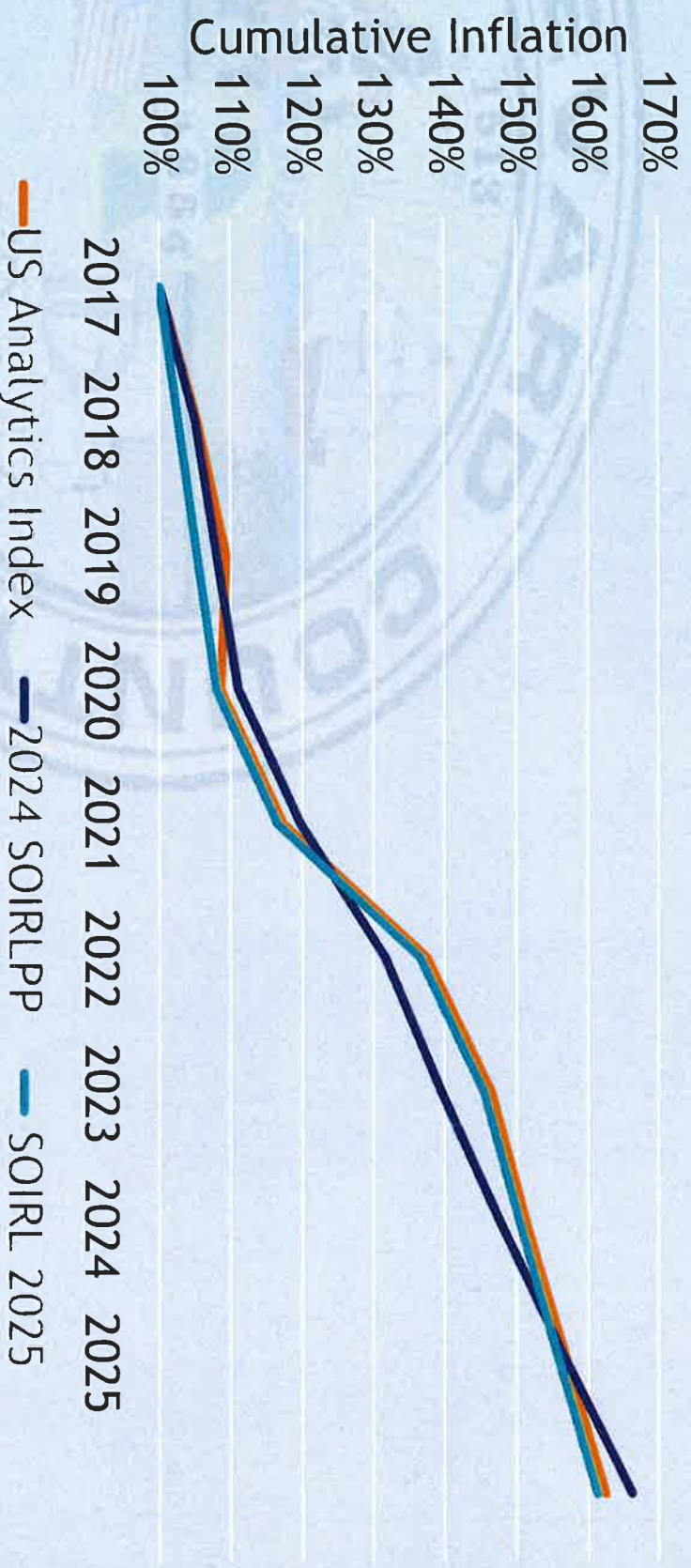


Revenue Projections vs Actuals

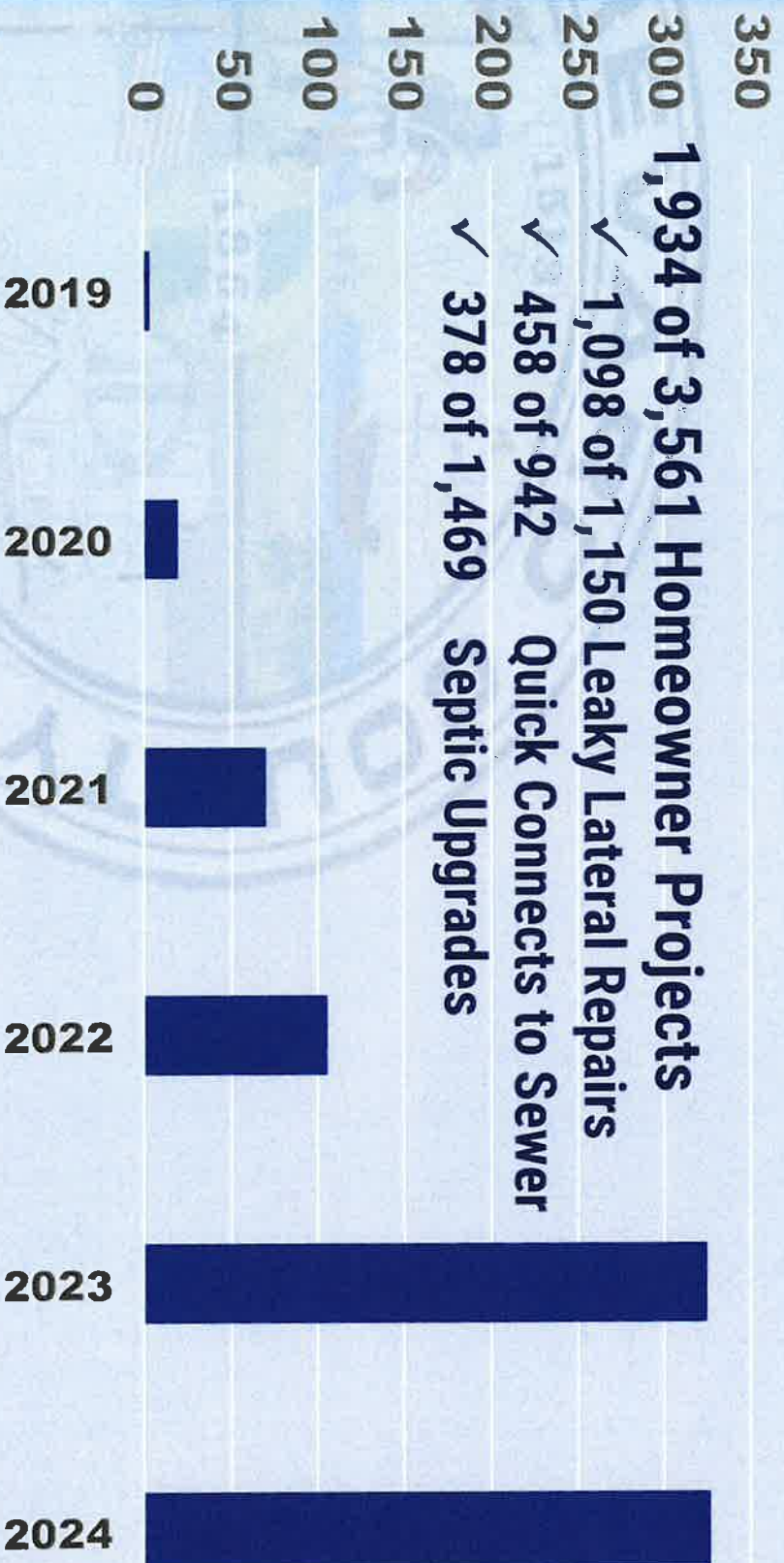
Save Our Lagoon Surtax Revenues



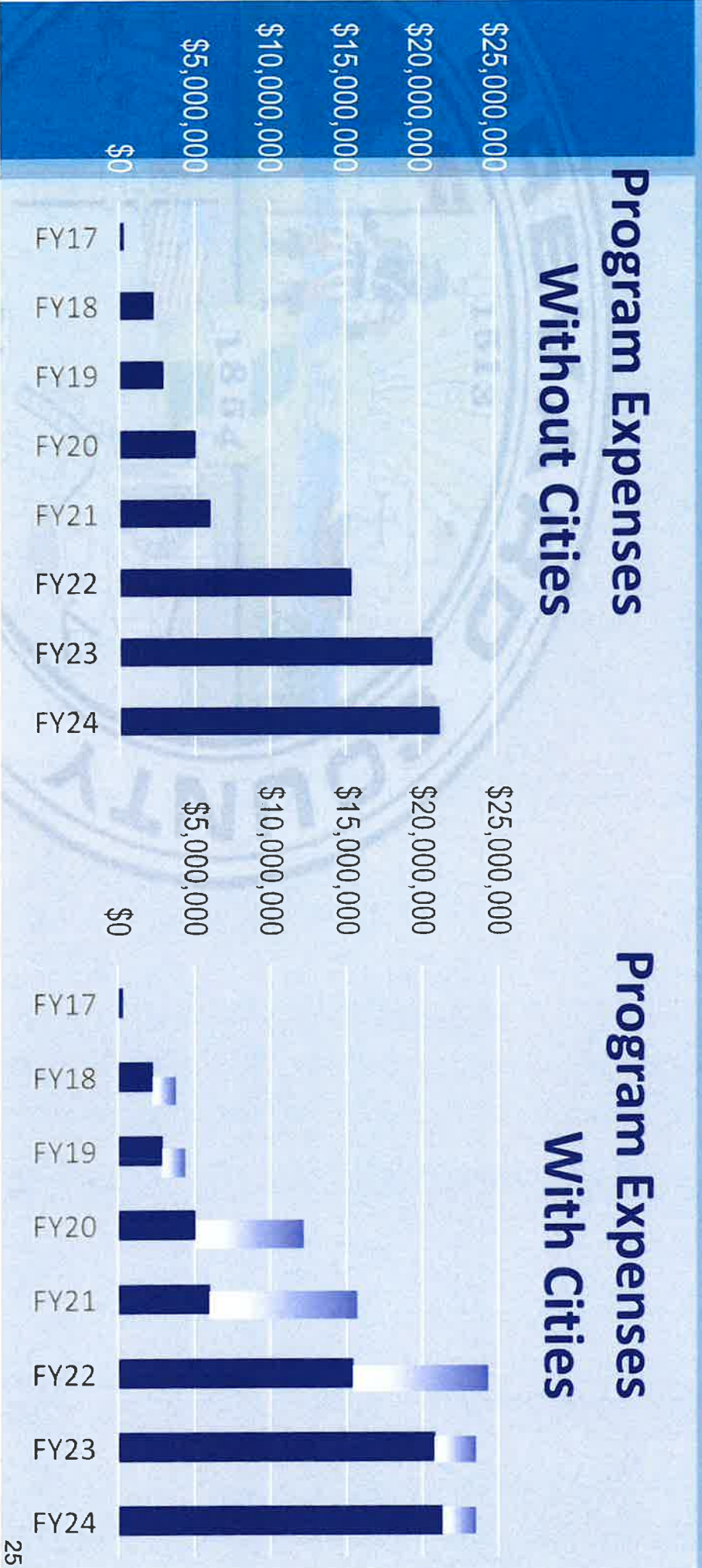
Inflation – Construction Trends



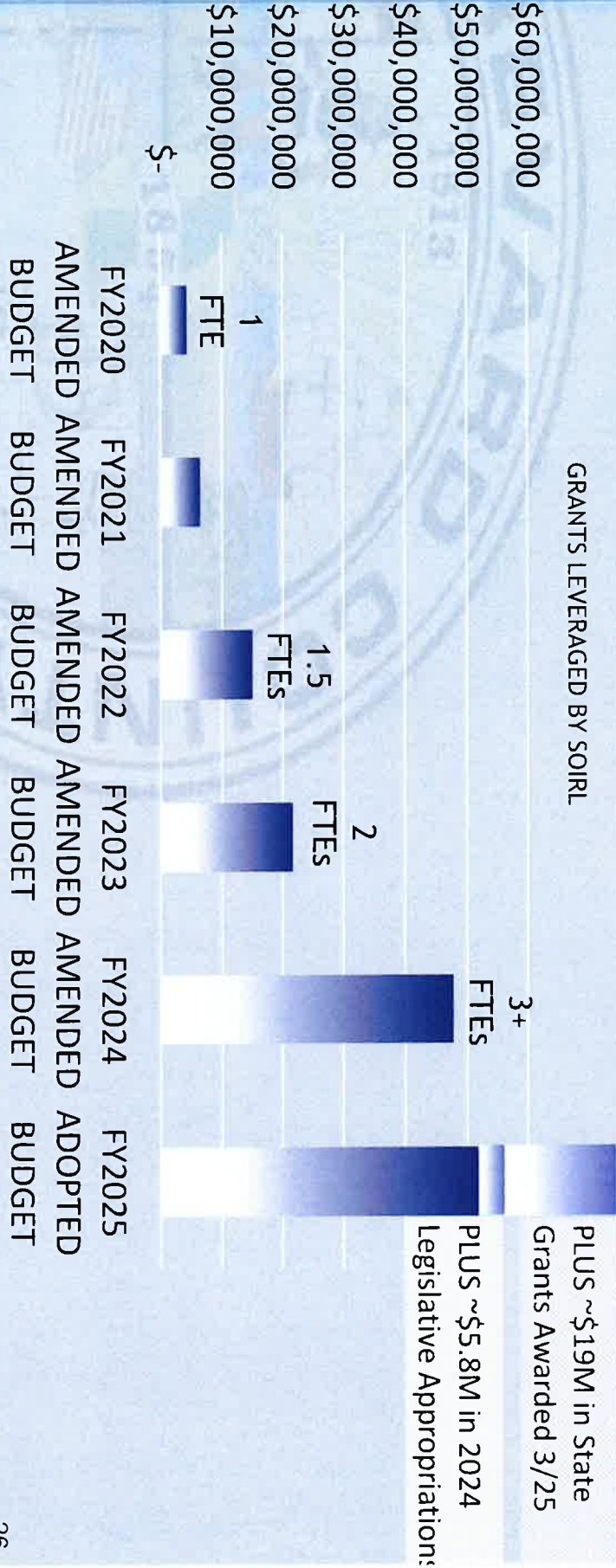
Number of Homeowner Projects Completed by Fiscal Year



Program Expenses by Fiscal Year With and Without Cities

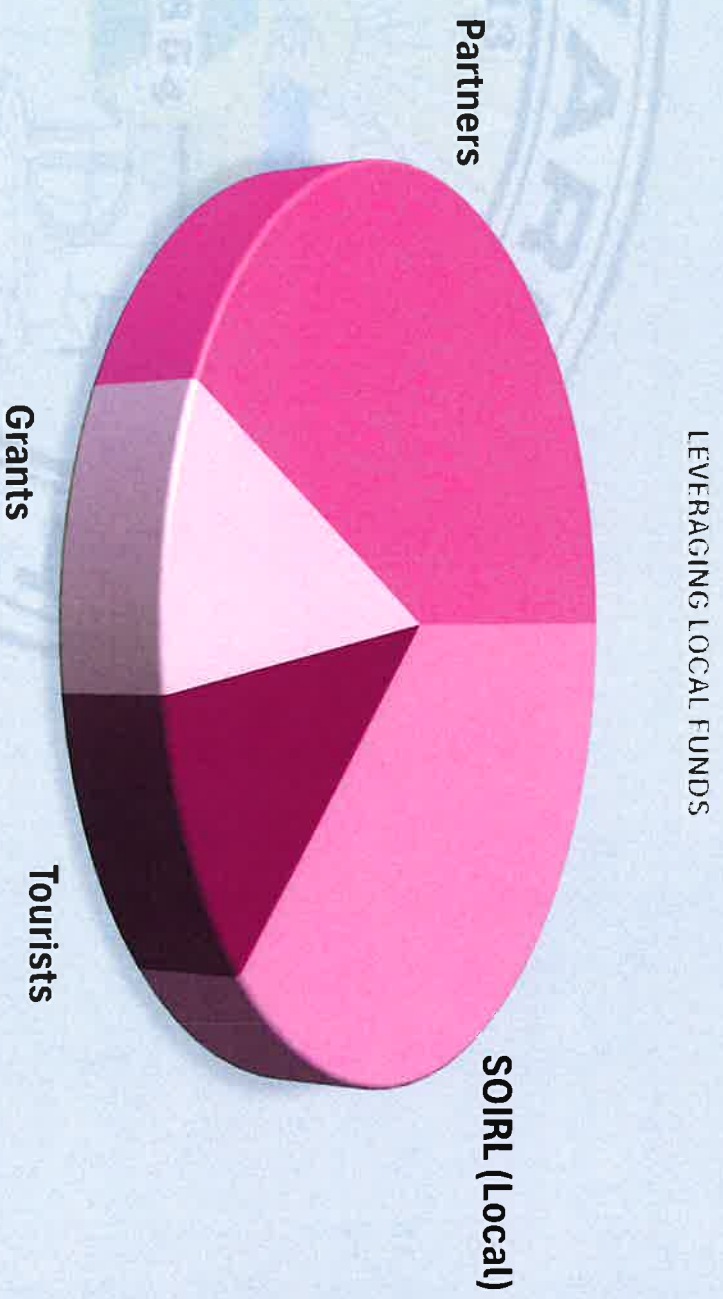


Grants Leveraged by SOIRL Funds



Leveraging Local Funds

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Legislative Appropriations

2024 Appropriation Requests

• Sykes Creek Ph 2 Environmental Dredging & Interstitial Water Treatment Project	\$4,324,002
• Eau Gallie NE Environmental Dredging and Interstitial Water Treatment	\$1,500,000
• Merritt Island Canal Dredging	\$1,500,000
• 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
Total 2024 Appropriations Funded	\$5,774,002

2025 Appropriation Requests

• Sykes Creek Ph 2 Environmental Dredging & Interstitial Water Treatment Project	\$4,324,000
• Eau Gallie NE Environmental Dredging and Interstitial Water Treatment	\$4,200,000
• Indian River Lagoon Connections to Sewer	\$2,900,000
• Homeowner Connection Costs for Sykes M, N & T Septic to Sewer	\$ 900,000
Total 2025 Appropriations Requested	\$12,324,000

SAVE OUR INDIAN RIVER LAGOON PROGRAM

COMPLETED PROJECTS



Scan for more
project information



Project Progress

101 Completed Projects

14 Titusville	2 West Melbourne
11 Brevard Zoo	2 Rockledge
10 Cocoa Beach	1 Cape Canaveral
6 Clam Farmers	1 Indialantic
5 Marine Resources Council	1 Melbourne Tillman Water
5 Melbourne	Control District
4 Cocoa	1 Merritt Island
3 Satellite Beach	Redevelopment Agency
2 Indian Harbour Beach	1 Private Mobile Home Park
2 Palm Bay	30 Brevard County Projects
	+1,934 Homeowner Projects

SAVE OUR INDIAN RIVER LAGOON PROGRAM
COMPLETED PROJECTS

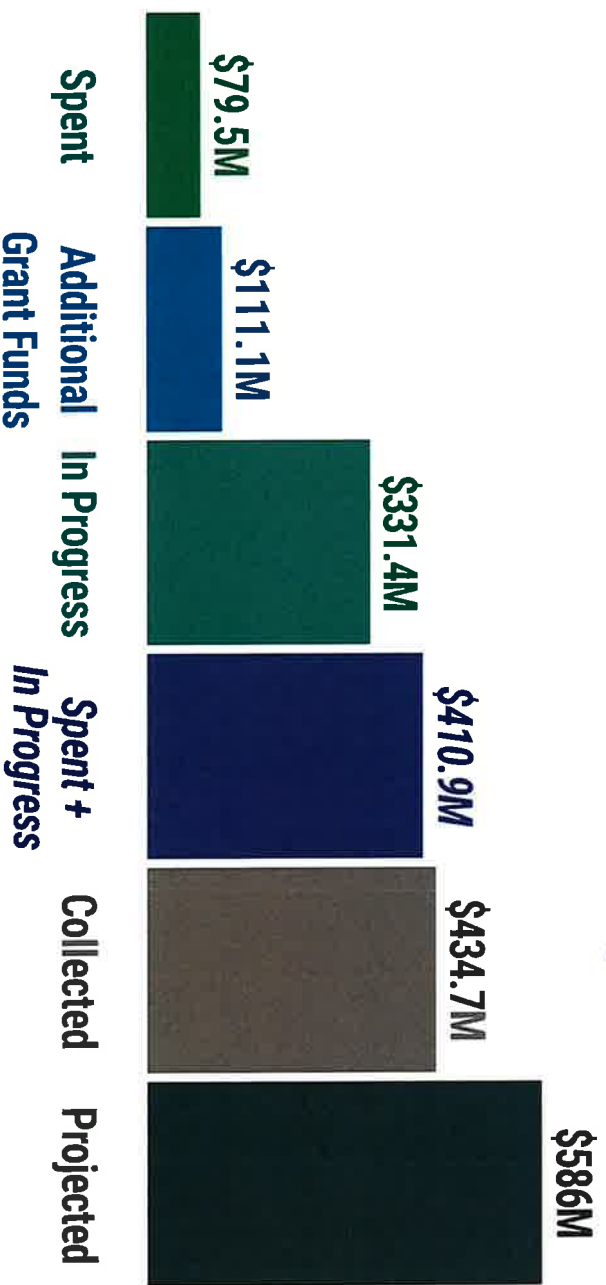


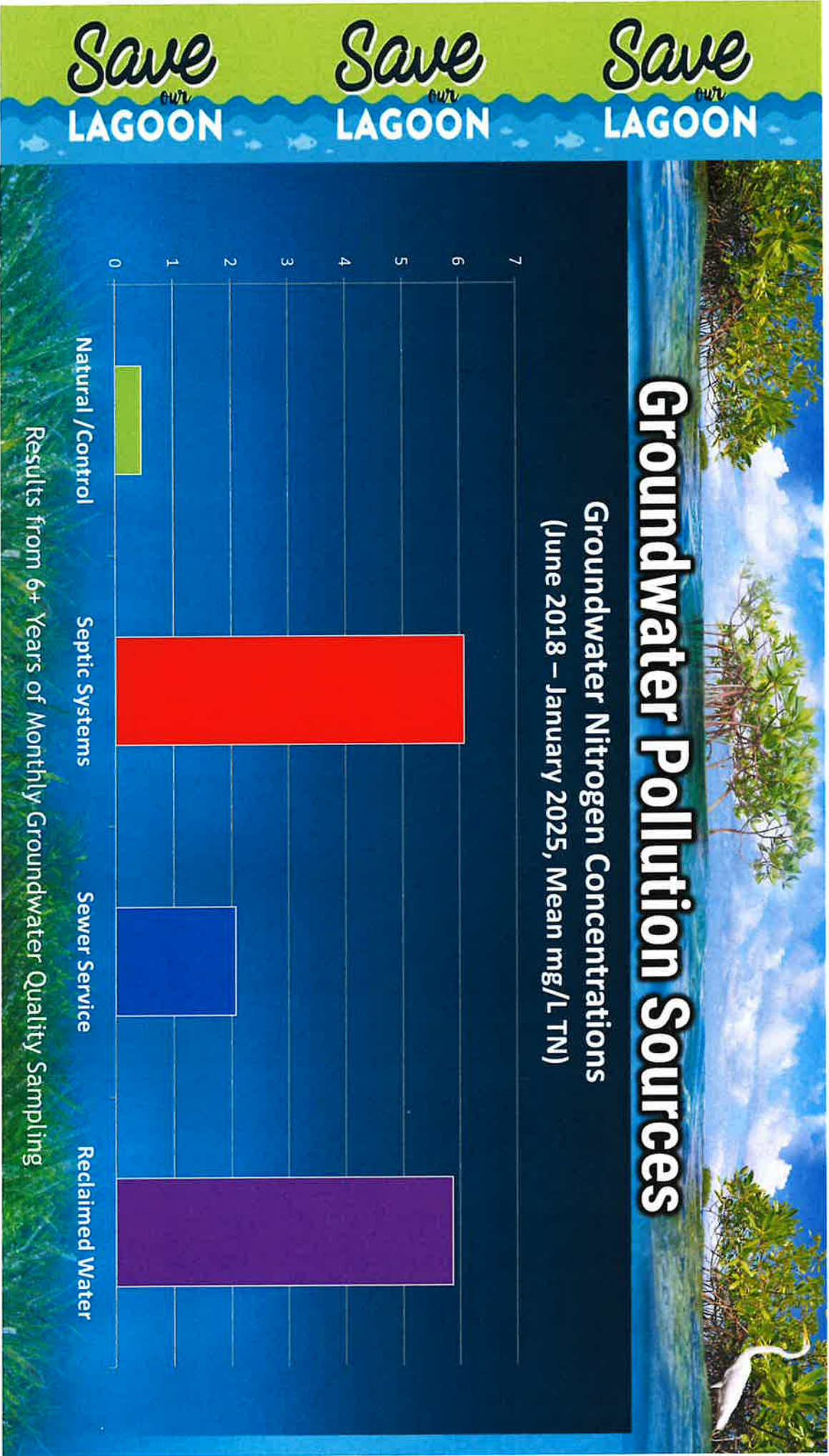
Scan for more
project information



Project Progress

1/2 Cent Sales Tax Summary



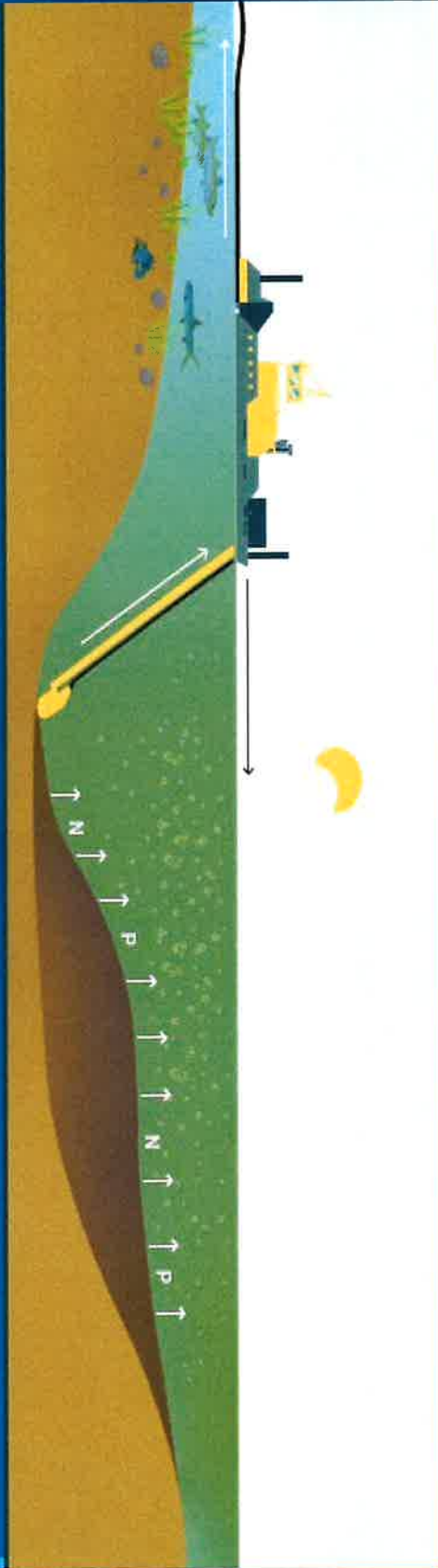


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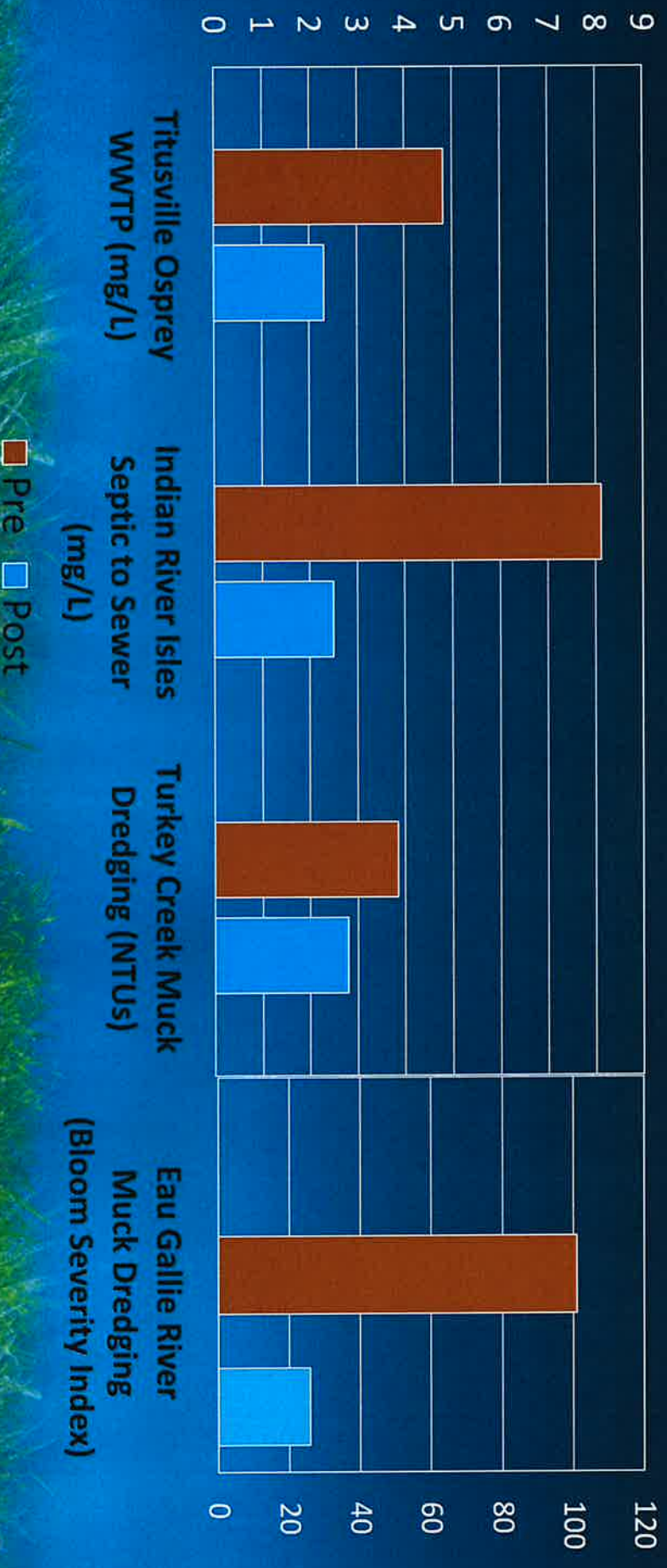
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Muck Removal



Pollution Reduction Progress Pre vs Post



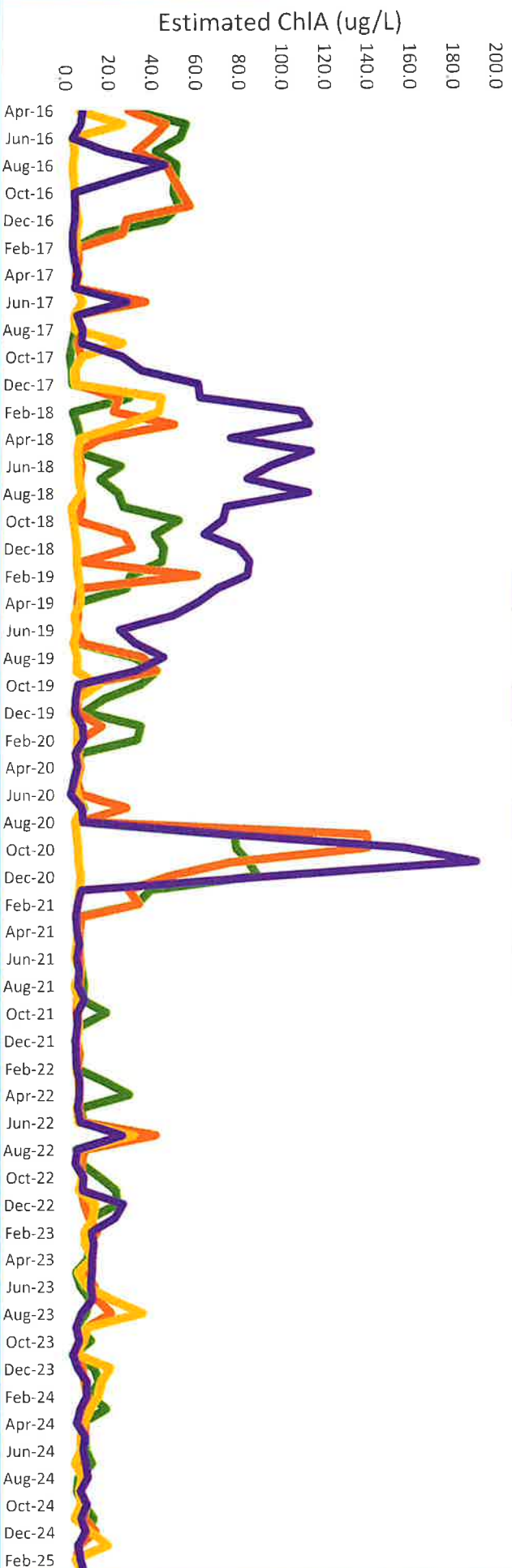
Cumulative Total Nitrogen Reduction



Algae Blooms 2016-2025

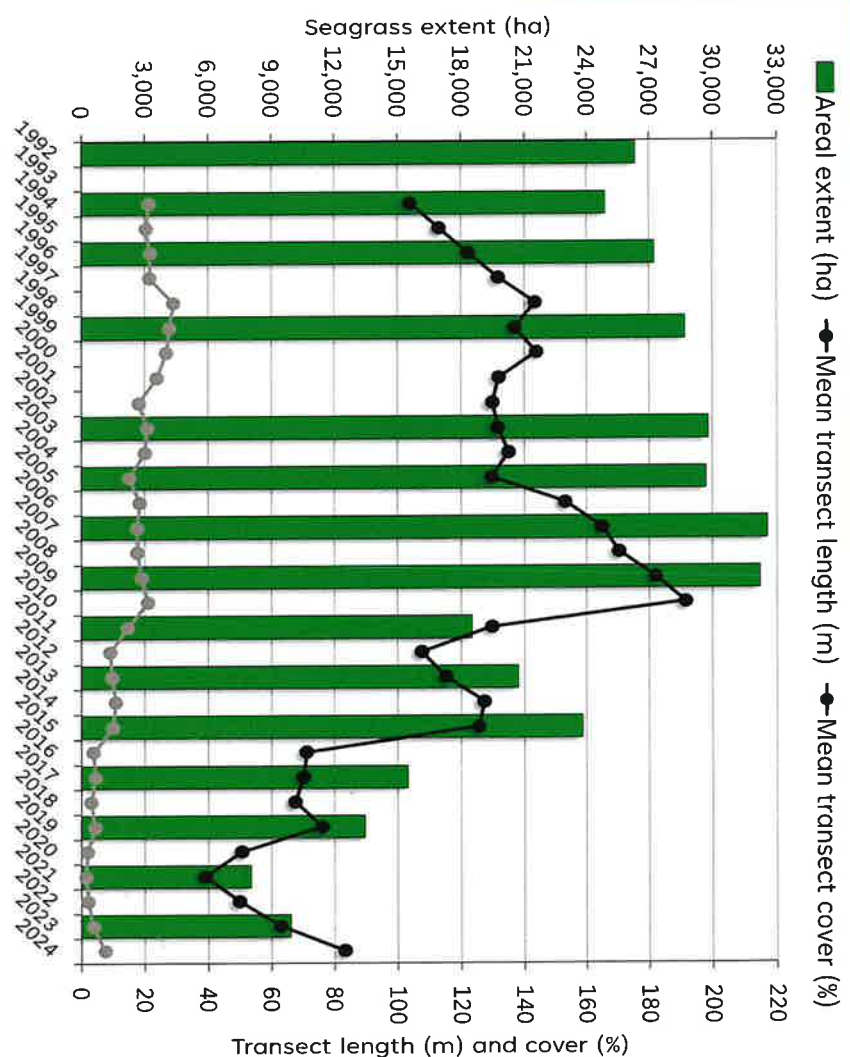
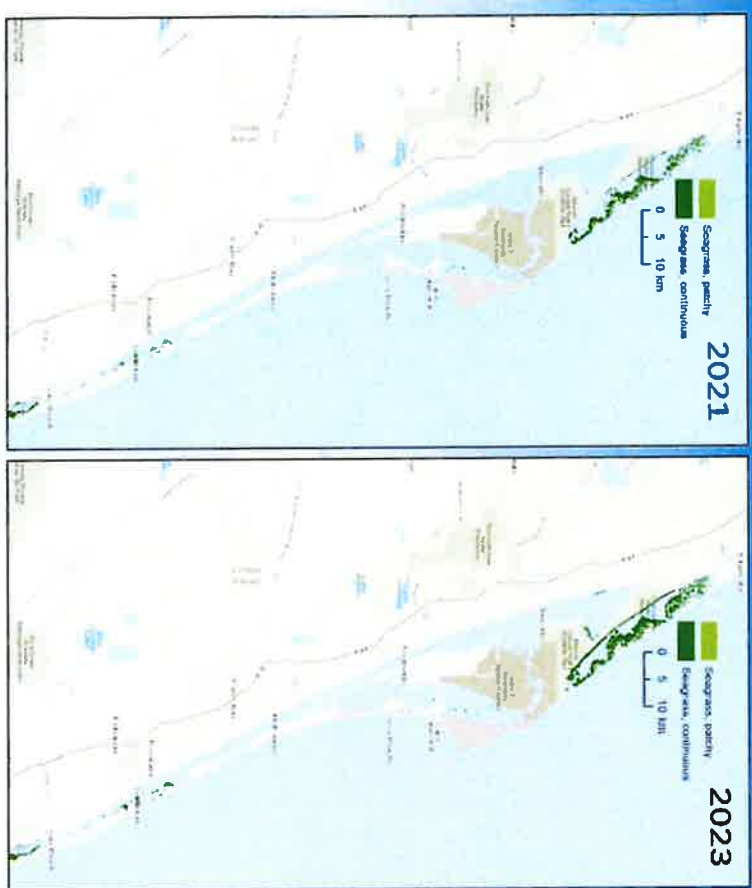
Median Monthly NDCI Estimated Chlorophyll A Concentrations
for Indian River Lagoon Basins in Brevard County, FL

SML NIRL CIRL BRL





Seagrass Extent



Septic Remediation Plan

Ranking	Project Name	Estimated Project Cost	Amount of Nitrogen Removed (lb/yr)	Cost per Pound of Nitrogen Removed
1	SOIRL – Funded OSTDS Upgrades (1,769)	\$ 31,957,000	40,141	\$ 796.12
2	Enhancement of 8,919 Unfunded OSTDS within Brevard County's Adopted Septic Overlay Ordinance Area	\$ 178,380,000	48,095	\$ 3,708.94
3	Enhancement of 7,931 Unfunded OSTDS Outside Brevard County's Adopted Septic Overlay Ordinance Area	\$ 156,620,000	22,461	\$ 6,972.84
Area Combinations				
1 & 2	SORIL Funded OSTDS Upgrades and Enhancements within Brevard County's Adopted Septic Overlay Ordinance Area (10,688)	\$ 210,337,000	88,236	\$ 2,383.81
1, 2, & 3	All Unincorporated Areas (18,519)	\$ 366,957,000	110,697	\$ 3,314.94
2 & 3	All unfunded in Unincorporated Areas (16,750)	\$ 335,000,000	70,556	\$ 4,748.00



Questions?

Robyn C. Smith
PHOTOGRAPHY