

# Brevard County Save Our Indian River Lagoon Project Plan Citizen Oversight Committee

August 20, 2021 – 8:30 to 11:30 am Brevard County Government Center 2725 Judge Fran Jamieson Way Viera, Florida 32940 County Commission Chambers and On-line via Zoom Conference

- I. Call to Order
- II. Roll Call
- III. Acceptance of Virtual Votes
- IV. Approval of the Agenda
- V. Approval of Minutes
- VI. Progress and Fiscal Reports
  - a. Monthly Progress Report Virginia Barker, Director
  - b. Monthly Revenue Graph Crystal Melton, Finance Manager
  - Quarterly Save Our Indian River Lagoon Finance & Project Performance Table Update – Crystal Melton, Finance Manager & Terri Breeden, Associate Environmental Specialist and Project Managers
- VII. Other Reports and Special Presentations
  - a. Getting Ready for Shovel-Ready Seagrass Restoration Mark S. Fonseca, Ph.D., Vice President Science, CSA Ocean Sciences Inc.
  - b. Manatee Habitat Enhancement of the Atlantic Estuaries Julie Mitchell, Fish & Wildlife Biologist III, Florida Fish & Wildlife Conservation Commission
  - c. Brevard Zoo Lagoon Restoration: Past, Present and Future Ashley Rearden, Conservation Curator, Brevard Zoo
  - d. Project Videos Jackson Court Stormwater Treatment Train, Ray Bullard Stormwater Management Area and Susan Hodgers' My Lagoon Story
- VIII. Old Business
  - a. Proposed Cost Share Eligibility by Project Type for the 2022 Save Our Indian River Lagoon Project Plan Update
  - IX. New Business
    - a. Contingency Funding Request of \$29,053 for the City of Titusville's Draa Field Aquatic Vegetation Harvesting Project
  - X. General Public Comments
- XI. Final Comments by Chair and Committee Members
- XII. Adjournment

# Save Our Indian River Lagoon Citizen Oversight Committee Meeting Minutes

July 16, 2021 – 8:30 a.m. 2725 Judge Fran Jamieson Way, Building C, 3<sup>rd</sup> Floor, Florida Room Viera, FL 32940

#### **Members Present:**

Expertise	Member	Present	Alternate	Present
Science	Science Lorraine Koss		Charles Venuto	Yes
Technology	Vinnie Taranto - Chair	Yes	David Sherrer	No
Education	Stephany Eley – Vice Chair	Yes	Kimberly Newton	Yes
Finance	Courtney Barker	No	Todd Swingle	Yes
Tourism	David Lane	Yes	Laurilee Thompson	Yes
Real Estate	Susan Hodgers	Yes	Dennis Basile	No
Lagoon Advocacy	John Windsor	Yes	Terry Casto	No

# Staff Present:

Virginia Barker, Brevard County Natural Resources Management Director Alex Esseesse, Assistant County Attorney Brandon Smith, Environmental Specialist Matt Badolato, Associate Environmental Specialist Terri Breeden, Associate Environmental Specialist Jenny Hansen, Associate Environmental Specialist Courtney Maier, Engineer I Walker Dawson, Engineer III Anthony Gubler, Environmental Specialist Crystal Melton, Department Finance Manager

# I. Call to Order

# II. Roll Call

A quorum was established.

#### III. Approval of the Agenda

David Lane moved to approve the Agenda as written; Seconded by John Windsor. Motion was unanimously approved.

#### **IV. Approval of Minutes**

John Windsor moved to approve the May 21, 2021 minutes as written; Seconded by Lorraine Koss. Motion was unanimously approved.

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# V. Progress and Fiscal Reports

# a. Monthly Progress Report – Virginia Barker, Director

The Monthly Progress Report was given by Virginia Barker.

Discussion ensued. The Committee's questions were answered by Virginia Barker.

# b. Monthly Revenue Graph – Crystal Melton, Department Finance Manager

Crystal Melton reported on the Monthly Revenue Graph and Quarterly Financial Statement.

# VI. Other Reports and Special Presentations

# a. 2021 Audit Report – Jill Reyes and Laura Manlove, Directors at RSM US LPP

Jill Reyes and Laura Manlove gave a power point presentation entitled: Brevard County Half Cent Sales Surtax – Save Our Indian River Lagoon Audit Report. Ms. Manlove presented the results of the audit and noted there were no material audit findings. The findings focused on: 1) collections and expenditures.2) process and approvals; 3) reconciliations; 4) objectives and approach; and, 5) expenditure testing process.

# b. Wastewater Asset Management Overview – Todd Swingle, P.E., Executive Director, Toho Water Authority

Todd Swingle gave a power point presentation entitled: Wastewater Asset Management Overview. Topics included: 1) Integrated Solutions – Domestic Wastewater, Septic Systems, Stormwater, Yards and Fertilizer, Agriculture, Atmospheric Deposition and Muck / Other Accumulation; 2) Infrastructure Report Card; 3) Utility Management; 4) The Asset Planning Challenge; 5) The Asset Cycle; 6) Toho Water Authority WIFIA Program; 7) Utility Programs Working Together; 8) Performance Impacts – Beyond the Pipes; 9) Advancing Technology; and, 10) Asset Management Solution.

Discussion ensued. The Committee's questions were answered by Mr. Swingle.

# c. City of Melbourne Baffle Box Program – Danielle Straub, P.E. Engineering Project Manager

Danielle Straub gave a power point presentation entitled: City of Melbourne Baffle Box Program. Topics included; 1) Baffle Box Maintenance; 2) Locations; 3) Maintenance Operations/ Training / Schedule; 4) Inspection Form; 5) Things learned after baffle box installations; 6) Future Needs; and 7) Sherwood Park Water Quality Improvements.

Discussion ensued. The Committee's questions were answered by Ms. Straub, Ms. Barker and Mr. Swingle.

# d. Project Video – Oak Point Package Plant Conversion to Central Sewer

A video, Oak Point Package Plant Conversion to Central Sewer Project, was shown.

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# e. My Lagoon Story Video – David Sherrer

A My Lagoon Story Video, featuring David Sherrer, Technology Alternate, was shown.

#### VII. Old Business

None.

#### VIII. New Business

# a. 2022 Plan Update Schedule

Virginia Barker gave a summary and timeline of the 2022 Plan Update Schedule.

John Windsor moved to accept the proposed schedule for developing the Save Our Indian River Lagoon Project Plan 2022 Update; Seconded by Lorraine Koss.

There were no public comments.

Motion was unanimously approved.

# b. 2022 Cost Share Eligibility by Project Type

Virginia Barker gave a summary of the proposed cost share eligibility by project type for projects proposed for the 2022 Save Our Indian River Lagoon Project Plan Update. Ms. Barker explained that there were three exceptions to the cost share eligibility.

Stephany Eley moved to recommend offering the proposed cost shares for recruiting project proposals for the 2022 Save Our Indian River Lagoon Project Plan Update; Seconded by John Windsor.

Discussion ensued. It was noted that the Table in the Agenda Package was not accurate. Ms. Barker mentioned it appeared that last year's cost share table was inadvertently added to the package when compiling the PDF. Ms. Barker opened the correct version of the document on the computer and presented the accurate cost share information which was shown on the screen.

After further discussion, Stephany Eley noted for clarification that the motion the Committee is voting on is to accept the schedule on the screen.

There were no public comments.

Motion was unanimously approved.

#### **IX. General Public Comment**

None.

# X. Final Comments by Chair and Committee Members

Final Comments were heard.

#### XI. Adjournment



# Save Our Indian River Lagoon Project Plan August 2021 Progress Report

#### WORK COMPLETED THIS MONTH:

- Revenues are approximately \$2.5 million ahead of the forecast used for the 2021 Plan Update
- Annual Intergovernmental Coordination Meeting was held to kickoff the 2022 Plan Update cycle
- Big Muddy and Thrush Drive Baffle Boxes Construction complete
- Sherwood Park Stormwater Quality Project Construction complete
- Draa Field Pond and Marina B Managed Aquatic Plant Systems Projects Complete
- Brevard Zoo North Plant Project 2 45 linear feet of shoreline planted to complete contract
- Brevard Zoo Oyster Gardening -bags of live spat on shell were distributed to 318 gardeners
- Living Shoreline Performance University of Central Florida conducted 12-month monitoring at Ahmed-Niland and found an average of 28 live oysters/bag. Density decreased from January but there are new recruits and gardened oysters have grown in size, through the bag, and are forming bridges.
- Derelict Vessels 3 removed
- Videos Jackson Court Stormwater Treatment Train, Ray Bullard Stormwater Management Area and Susan Hodgers' My Lagoon Story complete

#### WORK UNDERWAY THIS MONTH:

- Brevard County Smoke Testing Finalizing code enforcement mechanics for fall start; December finish
- Beaches Leaking Sewer Laterals 63 of 280 repairs complete; 10 reimbursements processed to date
- Titusville Osprey Waste Water Treatment Facility Upgrade project began excavation
- South Central C Septic-to-Sewer Bid price was negotiated down ~\$250,000; County Commissioners approved American Rescue Plan Act funds to cover budget shortfall; proceeding with contracting
- Micco Septic-to-Sewer Reviewing final bid documents and coordinating with FDOT resurfacing project
- Sykes Creek M Septic-to-Sewer Land acquisition in progress
- Sykes Creek T Septic-to-Sewer Awaiting approve from the Girl's Scouts for property acquisition
- Sykes Creek N Septic-to-Sewer –75% design underway
- South Beaches P Septic-to-Sewer Preliminary design underway
- South Beaches O Septic-to-Sewer Awaiting Right of Way permit review by Public Works
- INRB Study Preparing for second quarterly sampling
- Septic Upgrades processed 2 more reimbursements for a total of 33; 74 sites in progress
- Convair Cove Low Impact Development project began construction
- Jackson Court Stormwater Treatment Facility Project began construction
- Sunset Road/Serenity Park/Basin 26 and Johns Rd/Basin 62 Construction underway
- Grand Canal Muck Dredging Approximately 100,000 cubic yards of muck dredged through June
- Sykes Creek Phase I Muck Dredging Reviewing prequalification documents from contractor
- Cocoa Beach Golf Muck Project Pre-Application meeting held with FDEP staff
- Contracts Melbourne Tillman Aquatic Harvesting, Cocoa Beach McNabb Oysters and Plants in draft
- Videos Underway Convair Cove Low Impact Development scheduled to film in September
- Grants TDC recommended our projects for funding; State Resiliency applications due September 1
- Homeowner Grant Portal Training and testing of application



#### PRESENTATIONS THIS MONTH:

- July 21 Permitting Summer School Virginia
- August 23 Catalina Isles Association Anthony
- August 24 Sewalls Point City Council Virginia

#### UPCOMING LAGOON SCIENCE FORUMS AND PUBLIC EVENTS:

- August 19 ORCA One Health Fish Monitoring: Introduction and Processing
- August 23 ORCA One Health Fish Monitoring: Intro to Fish Monitoring
- October 21-22 Marine Resources Council Low Impact Development Conference

#### UPCOMING VOLUNTEER PARTICIPATION OPPORTUNITIES:

August 19, 24, 26, & September 1 – Orca Fish Processing and Fish Extractions – <u>Email Missy Weiss to register</u> September 18 – <u>International Coastal Cleanup</u> Brevard Zoo Restore Our Shores <u>Clam Restoration Project seeking volunteers</u> Rotary Park rain garden maintenance – <u>Email Carlos Cuevas for opportunities</u> Storm drain marking in Cocoa – <u>Email Carlos Cuevas for opportunities</u> Storm drain marking in Melbourne – <u>Email Nicole Broquet for opportunities</u>

#### WEBSITE AND SOCIAL MEDIA LINKS:

Lagoon Loyal Outreach and Engagement Landing Page Save Our Indian River Lagoon Website Save Our Indian River Lagoon Facebook Save Our Indian River Lagoon Instagram Save Our Indian River Lagoon YouTube

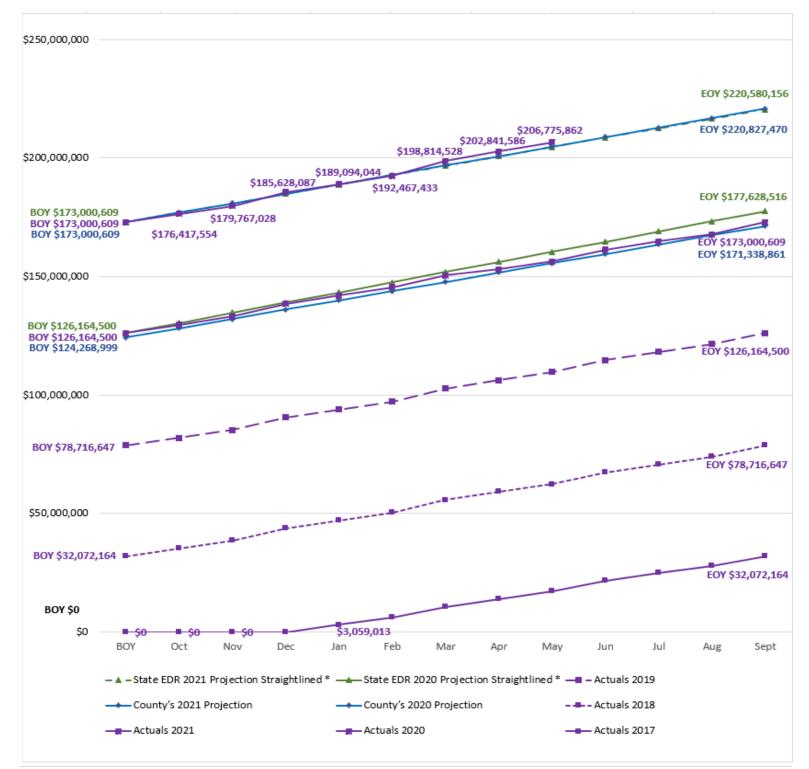
#### FUTURE TOPICS FOR SPECIAL PRESENTATIONS:

- 1. Pollution and Algal Bloom Mapping via Satellite Imagery Interpretation
- 2. Lagoon projects managed and funded by other agencies, entities or grant programs
- 3. Low Impact Development/Resilience Local examples, efforts and potential opportunities
- 4. Surface Water Remediation Phosphorus Free, S.W.I.G., D.T.G., Chemical Tech, HABITATS
- 5. New Enhanced Ocean Inflow Research Florida Tech Research Initiative
- 6. Completed and Ongoing Muck Research Florida Tech Research Initiative
- 7. Indian River Lagoon Research News: TechCon, Shore, and Harbor Branch Symposium Highlights
- 8. Water Technology Conference/Industry Day Economic Development and National Estuary Program
- 9. Lagoon Fish and Fisheries Research Dr. Grant Gilmore
- 10. Project Monitoring Results
- 11. Herbicide alternatives
- 12. Microplastics in the Lagoon

# Save Our Indian River Lagoon Revenues Cumulative Graph Fiscal Year 16-17 to Current Fiscal Year

\* Economic and Demographic Research Data is sourced from Florida's Office of Economic & Demographic Research using their Estimation of Realized and Unrealized Tax Revenues Table

- Projected and Actual Data is from Systems, Applications and Products program
- EDR-Economic and Demographic Research Data, BOY-Beginning of Year, EOY-End of Year
- For Screen Readers use the Save Our Indian River Lagoon Revenues Cumulative Chart Fiscal Year 16-17 to Current Fiscal Year Table
- Updated the State EDR Beginning Of Year to match Actuals End Of Year to the prior Fiscal Years



# Save Our Indian River Lagoon Revenues Cumulative Chart Fiscal Year 16-17 to Current Fiscal Year

Economic and Demographic Research Data is sourced from Florida's Office of Economic & Demographic Research using their Estimation of Realized and Unrealized Tax Revenues Table

- Projected and Actual Data is from Systems, Applications and Products program
- EDR-Economic and Demographic Research Data, BOY-Beginning of Year, EOY-End of Year
- For Screen Readers use the Save Our Indian River Lagoon Revenues Cumulative Chart Fiscal Year 16-17 to Current Fiscal Year Table

Month	State EDR 2021 Projection Straightlined *	County's 2021 Projection	Actuals 2021	State EDR 2020 Projection Straightlined *	County's 2020 Projection	Actuals 2020
BOY	\$173,000,609	\$173,000,609	\$173,000,609	\$126,164,500	\$124,268,999	\$126,164,500
Oct	\$176,965,571	\$176,986,181	\$176,417,554	\$130,453,168	\$128,191,487	\$129,590,162
Nov	\$180,930,533	\$180,971,752	\$179,767,028	\$134,741,836	\$132,113,976	\$133,089,868
Dec	\$184,895,496	\$184,957,324	\$185,628,087	\$139,030,504	\$136,036,464	\$138,551,296
Jan	\$188,860,458	\$188,942,896	\$189,094,044	\$143,319,172	\$139,958,953	\$142,014,229
Feb	\$192,825,420	\$192,928,467	\$192,467,433	\$147,607,840	\$143,881,441	\$145,518,464
Mar	\$196,790,382	\$196,914,039	\$198,814,528	\$151,896,508	\$147,803,930	\$150,424,958
Apr	\$200,755,345	\$200,899,611	\$202,841,586	\$156,185,176	\$151,726,418	\$153,099,730
May	\$204,720,307	\$204,885,183	\$206,775,862	\$160,473,844	\$155,648,907	\$156,326,096
Jun	\$208,685,269	\$208,870,754		\$164,762,512	\$159,571,395	\$161,413,353
Jul	\$212,650,231	\$212,856,326		\$169,051,180	\$163,493,884	\$164,827,524
Aug	\$216,615,194	\$216,841,898		\$173,339,848	\$167,416,372	\$167,886,836
Sept	\$220,580,156	\$220,827,470		\$177,628,516	\$171,338,861	\$173,000,609

Month	Actuals 2019	Actuals 2018	Actuals 2017
BOY	\$78,716,647	\$32,072,164	zero
Oct	\$81,926,390	\$35,300,032	zero
Nov	\$85,225,970	\$38,647,632	zero
Dec	\$90,640,944	\$43,870,270	zero
Jan	\$93,950,291	\$47,150,412	\$3,059,013
Feb	\$97,296,142	\$50,484,322	\$6,217,230
Mar	\$102,671,360	\$55,782,660	\$10,686,395
Apr	\$106,219,161	\$59,191,675	\$13,941,510
May	\$109,784,828	\$62,444,639	\$17,177,137
Jun	\$114,720,850	\$67,409,450	\$21,754,009
Jul	\$118,207,520	\$70,776,206	\$24,898,729
Aug	\$121,640,336	\$74,021,947	\$27,890,034
Sept	\$126,164,500	\$78,716,647	\$32,072,164

# Save Our Indian River Lagoon - FY 2021 Quarterly Financial Statement Date Range 01 October 2020 - 09 August 2021 Fund 1260

*Total Assigned YTD-Year to Date, includes all stages of accounting for expenditures, with data derived from Systems,	
Applications and Products program	

Revenues	Budget	Т	otal Assigned YTD*	% Earned
Taxes	\$ 47,826,861	\$	33,775,253	70.62%
Interest Earned	\$ 1,016,998	\$	839,197	82.52%
Other Int Earnings				
Refund of Prior Year Earnings				
Internal Governmental Revenue		\$	2,164	
Federal Grants Hurricane Irma	\$ 1,357,269			0.00%
State Grants Hurricane Irma	\$ 226,212			0.00%
Other Federal Grants	\$ 2,772,189			0.00%
Other State Grants	\$ 1,662,718			0.00%
Tourism Development Council Grants	\$ 176,234	\$	32,716	18.56%
Cost Sharing	\$ 474,440			0.00%
Statutory Reduction	\$ (2,775,649)			0.00%
Balance Forward	\$ 159,406,634	\$	159,406,634	100.00%
Total	\$ 212,143,906	\$	194,055,965	91.47%

Expenditures (Roll-Up)	Budget	Тс	otal Assigned YTD*	Actuals
Compensation & Benefits	\$ 446,810	\$	483,660	\$ 392,755
Operating Expenses	\$ 338,049	\$	217,206	\$ 111,887
Capital Outlay				
Transfers				
SOIRL Projects funded under Operating Expenses (Non Cap. County Project & Programs)	\$ 4,969,042	\$	1,325,276	\$ 538,944
SOIRL Projects funded under Capital Improvement (County Projects over \$35K)	\$ 65,768,540	\$	5,173,908	\$ 2,230,489
SOIRL Projects funded under Aid to Gov't Agencies (Cities & Water Management Districts)	\$ 56,565,144	\$	20,046,174	\$ 5,013,537
SOIRL Projects funded under Aid to Private Organizations (Property Owners & Non-Government Org.)	\$ 38,786,546	\$	3,033,893	\$ 975,611
Contingency	\$ 7,136,791			
Reserves for Cash Forward				
Reserves (for approved projects scheduled beyond this fiscal year)	\$ 38,132,984			
Total	\$ 212,143,906	\$	30,280,118	\$ 9,263,223

# Save Our Indian River Lagoon Financial Tables – Fiscal Year 20/21 Quarter 3

# Table 1. Project Financial Table

\*Projects Completed; \* Project using contingency funds; FY=Fiscal Year; TBD = To Be Determined; WWTF = Waste Water Treatment Facility

Project Number	Project	Responsible Entity	Save Our Lagoon Project Cost	Save Our Lagoon Funds Contracted	FY 2017 Actuals Year 0*	FY 2018 Actuals Year 1*	FY 2019 Actuals Year 2*	FY 2020 Actuals Year 3*	FY 2021 Actuals Year 4	Cumulative Actuals
	Public Education									
58a	Expanded Fertilizer Education	Brevard County	\$625,000	\$312,500	\$0	\$0	\$120,951	\$49,477	\$38,068	\$208,496
58b	Grass Clippings Campaign	Brevard County	\$200,000	\$100,000	\$0	\$0	\$20,000	\$0	\$6,638	\$26,638
58c	Septic System Maintenance Education	Brevard County	\$300,000	\$150,000	\$0	\$0	\$48,380	\$49,245	\$17,674	\$115,300
193	Oyster Gardening	Brevard Zoo	\$300,000	\$300,000	\$0	\$0	\$0	\$150,000	\$112,500	\$262,500
	Public Education Total		\$1,425,000	\$862,500	\$0	\$0	\$189,332	\$248,722	\$174,880	\$612,933
	WWTF Upgrades for Reclaimed Water									
99	Cocoa Beach Water Reclamation Facility Upgrade*	Cocoa Beach	\$945,000	\$945 <i>,</i> 000	\$0	\$0	\$0	\$945 <i>,</i> 000	\$0	\$945,000
59	City of Melbourne Grant Street Water Reclamation Facility	Melbourne	\$6,769,500	\$6,769,500	\$0	\$0	\$0	\$0	\$0	\$0
2016-17	City of Palm Bay Water Reclamation Facility	Palm Bay	\$3,636,900	\$3,636,900	\$0	\$43,573	\$101,679	\$373 <i>,</i> 976	\$2,128,402	\$2,647,630
2016-2	City of Titusville Osprey WWTF <sup>+</sup>	Titusville	\$8,300,000	\$8,300,000	\$0	\$90,586	\$333,705	\$528,975	\$469,261	\$1,422,528
138	Ray Bullard Water Reclamation Facility Biological Nutrient Removal Upgrades	West Melbourne	\$4,260,000	\$4,260,000	\$0	\$0	\$0	\$0	\$0	\$0
	WWTF Upgrades for Reclaimed Water Total		\$23,911,400	\$23,911,400	\$0	\$134,159	\$435 <i>,</i> 384	\$1,847,951	\$2,597,663	\$5,015,158
	Sewer Laterals									
63	Satellite Beach Pilot Project	Brevard County	\$840,000	\$840,000	\$0	\$0	\$0	\$4,228	\$6,204	\$10,432
114	Barefoot Bay Lateral Smoke Testing	Brevard County	\$90,000	\$90,000	\$0	\$0	\$0	\$0	\$0	\$0
115	South Beaches Lateral Smoke Testing	Brevard County	\$200,000	\$200,000	\$0	\$0	\$0	\$0	\$0	\$0
116	Merritt Island Lateral Smoke Testing	Brevard County	\$250,000	\$250,000	\$0	\$0	\$0	\$0	\$0	\$0
100	Osprey Basin Lateral Repair Project	Titusville	\$200,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Sewer Laterals Total		\$1,580,000	\$1,380,000	\$0	\$0	\$0	\$4,228	\$6,204	\$10,432
	Rapid Infiltration Basin/Sprayfield Upgrades									
2016-51	Port St John Wastewater Treatment Plant	Brevard County	\$980,100	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6	Long Point Park Upgrade*	Brevard County	\$22,207	\$22,207	\$22,086	\$120	\$0	\$0	\$0	\$22,207
2016-20	Canebreaker Condo	Property Owner	\$36,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
204	Cape Canaveral Air Force Station Regional WWTF	Air Force	\$5,227,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Rapid Infiltration Basin/Sprayfield Upgrades Total		\$6,265,507	\$22,207	\$22,086	\$120	\$0	\$0	\$0	\$22,207
-	Package Plant Connection									
197	South Shores Utility Connection	Property Owner	\$1,301,154	\$0	\$0	\$0	\$0	\$0	\$0	\$0
199	River Grove I & II Mobile Home Park Connection	Property Owner	\$1,004,640	\$0	\$0	\$0	\$0	\$0	\$0	\$0
192	Oak Point Wastewater Treatment Facility Improvements	Property Owner	\$279,000	\$279,000	\$0	\$0	\$0	\$0	\$0	\$0
	Package Plant Connection Total		\$2,584,794	\$279,000	\$0	\$0	\$0	\$0	\$0	\$0
	Septic System Removal by Sewer Extension									
2016-27	Sharpes - Zone A	Brevard County	\$6,207,192	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2016-29	South Banana - Zone B	Brevard County	\$1,368,252	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Project Number	Project	Responsible Entity	Save Our Lagoon Project Cost	Save Our Lagoon Funds Contracted	FY 2017 Actuals Year 0*	FY 2018 Actuals Year 1*	FY 2019 Actuals Year 2*	FY 2020 Actuals Year 3*	FY 2021 Actuals Year 4	Cumulative Actuals
2016-35	South Beaches - Zone A	Brevard County	\$1,234,764	\$18,000	\$0	\$0	\$0	\$18,000	\$0	\$18,000
2016-36	South Beaches - Zone O	Brevard County	\$133,488	\$133,488	\$0	\$0	\$0	\$0	\$14,375	\$14,375
2016-37	South Beaches - Zone P	Brevard County	\$500,580	\$500,580	\$0	\$0	\$0	\$0	\$41,325	\$41,325
2016-50	South Central - Zone C	Brevard County	\$6,600,000	\$6,600,000	\$0	\$47,592	\$142,218	\$13,565	\$109,404	\$312,779
3	Micco Sewer Line Extension (Phase I and II)	Brevard County	\$2,239,500	\$2,239,500	\$22,620	\$128,500	\$20,115	\$30,446	\$35,150	\$236,831
47	Sykes Creek - Zone N	Brevard County	\$2,603,016	\$2,603,016	\$0	\$29,462	\$32,911	\$8,477	\$76 <i>,</i> 056	\$146,906
48	Sykes Creek - Zone M	Brevard County	\$1,868,832	\$1,868,832	\$0	\$22,400	\$53 <i>,</i> 600	\$11,200	\$7 <i>,</i> 836	\$95 <i>,</i> 036
49	Sykes Creek - Zone T	Brevard County	\$4,939,056	\$4,939,056	\$0	\$26,000	\$97,500	\$16,700	\$4,564	\$144,764
136	Micco - Zone B	Brevard County	\$9,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
145	Merritt Island - Zone F	Brevard County	\$1,100,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
146	Merritt Island - Zone C	Brevard County	\$1,580,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0
147	Sykes Creek - Zone R	Brevard County	\$3,500,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
148	North Merritt Island - Zone E	Brevard County	\$3,635,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
150	South Central - Zone D (Brevard County)	Brevard County	\$4,774,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0
151	Merritt Island - Zone G	Brevard County	\$16,617,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
152	Sharpes - Zone B	Brevard County	\$4,038,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0
153	Cocoa - Zone C	Brevard County	\$5,248,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0
203	South Central - Zone A	Brevard County	\$3,370,572	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0
2016-31	City of Cocoa - Zone K	Сосоа	\$1,201,392	\$0	\$0	\$0	\$0	\$0	\$0	
2016-32	City of Cocoa - Zone J	Сосоа	\$3,136,968	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2016-28	South Central - Zone D (Melbourne)	Melbourne	\$265,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0
2016-33	City of Melbourne	Melbourne	\$867,672	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2020-34	South Central - Zone F	Melbourne	\$1,701,972	\$1,701,972	\$0	\$0	\$0	\$0	\$0	\$0
4	Hoag Sewer Conversion	Melbourne	\$86,031	\$86,031	\$0	\$0	\$13,520	\$0	\$0	\$13,520
5	Pennwood Sewer Conversion <sup>+</sup>	Melbourne	\$40,632	\$40,632	\$0	\$0	\$17,074	\$0	\$0	\$17,074
61	Riverside Drive Septic-to-Sewer Conversion	Melbourne	\$265,960	\$262,044	\$0	\$0	\$0	\$0	\$0	\$0
62	Roxy Avenue Septic-to-Sewer Conversion	Melbourne	\$88,944	\$88,944	\$0	\$0	\$0	\$0	\$55 <i>,</i> 630	\$55,630
189	Avendia del Rio Septic to Sewer	Melbourne	\$70,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
190	Bowers Septic to Sewer	Melbourne	\$147,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
191	Kent and Villa Espana Septic to Sewer Conversion	Melbourne	\$710,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2	Merritt Island Septic Phase Out Project**	Merritt Island Redevelopment Agency	\$320,000	\$320,000	\$128,875	\$0	\$0	\$134,517	\$56,608	\$320,000
2016-39	City of Palm Bay – Zone A	Palm Bay	\$2,569,644	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2016-46	City of Palm Bay – Zone B	Palm Bay	\$8,309,628	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2016-30	City of Rockledge	Rockledge	\$500,580	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2016-40	Rockledge - Zone B	Rockledge	\$5,339,520	\$0	\$0	\$0	\$0	\$0	\$0	\$0
1	Breeze Swept Septic to Sewer Connection*	Rockledge	\$880,530	\$880,530	\$0	\$880,530	\$0	\$0	\$0	\$880,530
2016-38	City of Titusville - Zone H	Titusville	\$1,168,020	\$0	\$0	\$0	\$0	\$0	\$0	\$0
109	City of Titusville - Zones A-G	Titusville	\$1,201,392	\$943,110	\$0	\$0	\$0	\$0	\$86,860	\$86,860
60	Sylvan Estates Septic-to-Sewer Conversion	West Melbourne	\$1,561,215	\$1,561,215	\$0	\$19,116	\$86,928	\$658 <i>,</i> 513	\$785,759	\$1,550,316

Project Number	Project	Responsible Entity	Save Our Lagoon Project Cost	Save Our Lagoon Funds Contracted	FY 2017 Actuals Year 0*	FY 2018 Actuals Year 1*	FY 2019 Actuals Year 2*	FY 2020 Actuals Year 3*	FY 2021 Actuals Year 4	Cumulative Actuals
	Septic System Removal by Sewer Extension Total		\$110,990,852	\$24,786,950	\$151,495	\$1,153,600	\$463,866	\$891,419	\$1,273,567	\$3,933,946
	Septic System Removal by Sewer Connection									
2016-16	Banana Septic System 144 Quick Connections	Property Owners	\$1,908,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2016-18	North IRL Septic System 463 Quick Connections	Property Owners	\$6,018,000	\$504,000	\$0	\$0	\$0	\$0	\$372,000	\$372,000
2016-19	Central IRL Septic System 269 Quick Connections	Property Owners	\$3,354,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Septic System Removal by Sewer Connection Total		\$11,280,000	\$504,000	\$0	\$0	\$0	\$0	\$372,000	\$372,000
	Septic System Upgrades									
51	Banana River Lagoon 100 Septic System Upgrades	Private Citizens	\$1,800,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
52	North IRL 586 Septic System Upgrades	Private Citizens	\$10,548,000	\$342,000	\$0	\$0	\$0	\$176,100	\$72 <i>,</i> 000	\$248,100
53	Central IRL 939 Septic System Upgrades	Private Citizens	\$16,900,485	\$720,000	\$0	\$0	\$0	\$34,485	\$384,236	\$418,721
	Septic System Upgrades Total		\$29,248,485	\$1,062,000	\$0	\$0	\$0	\$210,585	\$456 <i>,</i> 236	\$666,821
	Stormwater Projects									
2016-41	Banana River Lagoon 65 Basin Projects	Brevard County	\$13,832,464	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2016-42	North IRL 96 Basin Projects	Brevard County	\$22,936,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2016-43	Central IRL 8 Basin Projects	Brevard County	\$3,258,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0
18	Denitrification Retrofit of Johns Road Pond	Brevard County	\$105,512	\$105,512	\$0	\$17,173	\$6,320	\$3,738	\$0	\$27,230
22	Kingsmill-Aurora Phase Two	Brevard County	\$367,488	\$367,488	\$0	\$0	\$0	\$0	\$0	\$0
23	Denitrification Retrofit of Huntington Pond	Brevard County	\$104,720	\$104,720	\$0	\$9 <i>,</i> 074	\$0	\$0	\$0	\$9,074
24	Denitrification Retrofit of Flounder Creek Pond	Brevard County	\$75,328	\$75,328	\$0	\$19,923	\$0	\$0	\$0	\$19,923
85	Basin 1304 Bioreactor*	Brevard County	\$90,000	\$90,000	\$0	\$0	\$0	\$0	\$83,029	\$83,029
87	Basin 2134 Fleming Grant Biosorption Activated Media*	Brevard County	\$56 <i>,</i> 588	\$56,588	\$0	\$0	\$0	\$56,588	\$0	\$56,588
89	Basin 1298 Bioreactor*	Brevard County	\$86,198	\$86,198	\$0	\$0	\$0	\$0	\$85,829	\$85,829
90	Basin 51 Johns Road Pond Biosorption Activated Media*	Brevard County	\$23,030	\$23,030	\$0	\$0	\$0	\$0	\$23,030	\$23,030
91	Basin 100 Burkholm Road Biosorption Activated Media*	Brevard County	\$64,390	\$64,390	\$0	\$0	\$0	\$0	\$64,390	\$64,390
92	Basin 115 Carter Road Biosorption Activated Media*	Brevard County	\$62,510	\$62,510	\$0	\$0	\$0	\$62,510	\$0	\$62,510
93	Basin 193 Wiley Avenue Biosorption Activated Media*	Brevard County	\$82,735	\$82,735	\$0	\$0	\$0	\$0	\$82,735	\$82,735
94	Basin 832 Broadway Pond Biosorption Activated Media*	Brevard County	\$42,864	\$42,864	\$0	\$0	\$0	\$42,864	\$0	\$42,864
117	Basin 10 County Line Road Woodchip Bioreactor*	Brevard County	\$72,773	\$72,773	\$0	\$0	\$0	\$72,773	\$0	\$72,773
118	Basin 26 Sunset Road Serenity Park Woodchip Bioreactor	Brevard County	\$73,810	\$73,810	\$0	\$0	\$0	\$0	\$0	\$0
119	Basin 141 Irwin Avenue Woodchip Bioreactor*	Brevard County	\$69,174	\$69,174	\$0	\$0	\$0	\$0	\$69,174	\$69,174
121	Basin 2258 Babcock Road Woodchip Bioreactor	Brevard County	\$50,203	\$50,203	\$0	\$0	\$0	\$0	\$0	\$0
122	Basin 22 Huntington Road Woodchip Bioreactor*	Brevard County	\$40,077	\$40,077	\$0	\$0	\$0	\$0	\$40,077	\$40,077
205	Basin 998 Hampton Homes	Brevard County	\$194,400	\$0	\$0	\$0	\$0	\$0	\$0	\$0
206	Basin 1066 Angel Ave	Brevard County	\$232,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0
207	Basin 1124	Brevard County	\$148,100	\$0	\$0	\$0	\$0	\$0	\$0	\$0
13	Central Boulevard Baffle Box*	Cape Canaveral	\$34,700	\$34,700	\$0	\$34,700	\$0	\$0	\$0	\$34,700
14	Church Street Type II Baffle Box*	Сосоа	\$88,045	\$88,045	\$0	\$0	\$20 <i>,</i> 856	\$67,189	\$0	\$88,045
124	Floating Wetlands to Existing Stormwater Ponds*	Сосоа	\$1,497	\$1,497	\$0	\$0	\$0	\$0	\$1 <i>,</i> 497	\$1,497
125	Diamond Square Stormwater Pond	Сосоа	\$10,383	\$0	\$0	\$0	\$0	\$0	\$0	\$0
129	Forrest Avenue 72-inch Outfall Baseflow Capture/Treatment	Сосоа	\$13,956	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Project Number	Project	Responsible Entity	Save Our Lagoon Project Cost	Save Our Lagoon Funds Contracted	FY 2017 Actuals Year 0*	FY 2018 Actuals Year 1*	FY 2019 Actuals Year 2*	FY 2020 Actuals Year 3*	FY 2021 Actuals Year 4	Cumulative Actuals
177	North and South Lakemont Ponds Floating Wetlands	Сосоа	\$13,054	\$0	\$0	\$0	\$0	\$0	\$0	\$0
64	Stormwater Low Impact Development Convair Cove 1 – Blakey Boulevard	Cocoa Beach	\$4,650	\$4 <i>,</i> 650	\$0	\$0	\$0	\$0	\$0	\$0
65	Stormwater Low Impact Development Convair Cove 2 – Dempsey Drive	Cocoa Beach	\$4,495	\$4,495	\$0	\$0	\$0	\$0	\$0	\$0
127	Basin 5 Dry Retention*	Indialantic	\$16,680	\$16,680	\$0	\$0	\$0	\$0	\$16,680	\$16,680
16	Gleason Park Reuse*	Indian Harbour Beach	\$4,224	\$4,224	\$0	\$4,224	\$0	\$0	\$0	\$4,224
66	Big Muddy at Cynthia Baffle Box	Indian Harbour Beach	\$67,532	\$67,532	\$0	\$0	\$0	\$9,388	\$50,243	\$59,631
34	Cliff Creek Baffle Box*	Melbourne	\$347,781	\$347,781	\$0	\$0	\$0	\$347,781	\$0	\$347,781
35	Thrush Drive Baffle Box	Melbourne	\$322,200	\$322,200	\$0	\$0	\$0	\$0	\$0	\$0
67	Grant Place Baffle Box	Melbourne	\$82,481	\$0	\$0	\$0	\$0	\$0	\$0	\$0
69	Apollo/GA Baffle Box	Melbourne	\$297,522	\$0	\$0	\$0	\$0	\$0	\$0	\$0
95	Cherry Street Baffle Box	Melbourne	\$92,120	\$0	\$0	\$0	\$0	\$0	\$0	\$0
96	Spring Creek Baffle Box	Melbourne	\$99,358	\$0	\$0	\$0	\$0	\$0	\$0	\$0
88	Espanola Baffle Box	Melbourne	\$105,186	\$0	\$0	\$0	\$0	\$0	\$0	\$0
169	Sherwood Park Stormwater Quality Project <sup>+</sup>	Melbourne	\$292,400	\$292 <i>,</i> 400	\$0	\$0	\$0	\$0	\$0	\$0
175	High School Baffle Box	Melbourne	\$144,326	\$0	\$0	\$0	\$0	\$0	\$0	\$0
176	Funeral Home Baffle Box	Melbourne	\$58,682	\$0	\$0	\$0	\$0	\$0	\$0	\$0
15	Bayfront Stormwater Project*	Palm Bay	\$30,624	\$30,624	\$0	\$30,624	\$0	\$0	\$0	\$30,624
128	Jackson Court Stormwater Treatment Facility	Satellite Beach	\$8,266	\$0	\$0	\$0	\$0	\$0	\$0	\$0
179	Lori Laine Basin Pipe Improvement Project	Satellite Beach	\$17,525	\$0	\$0	\$0	\$0	\$0	\$0	\$0
68	Crane Creek/M-1 Canal Flow Restoration	St. Johns Water Management District	\$2,033,944	\$2,033,944	\$0	\$0	\$65,949	\$34,051	\$0	\$100,000
19	St. Teresa Basin Treatment*	Titusville	\$272,800	\$272 <i>,</i> 800	\$0	\$0	\$0	\$272,800	\$0	\$272,800
20	South Street Basin Treatment*	Titusville	\$86,856	\$86 <i>,</i> 856	\$0	\$0	\$0	\$86,856	\$0	\$86 <i>,</i> 856
21	La Paloma Basin Treatment*	Titusville	\$208,296	\$208,296	\$0	\$0	\$0	\$208,296	\$0	\$208,296
97	Titusville High School Baffle Box	Titusville	\$111,813	\$111,813	\$0	\$0	\$0	\$0	\$0	\$0
98	Coleman Pond Managed Aquatic Plant System*	Titusville	\$11,438	\$35 <i>,</i> 000	\$0	\$0	\$0	\$11,438	\$0	\$11,438
110	Osprey Plant Pond Managed Aquatic Plant Systems*	Titusville	\$60,000	\$60,000	\$0	\$0	\$0	\$0	\$37,500	\$37,500
120	Draa Field Pond Managed Aquatic Plant Systems	Titusville	\$31,281	\$31,281	\$0	\$0	\$0	\$0	\$0	\$0
174	St. Johns 2 Baffle Box	Titusville	\$243,070	\$243,070	\$0	\$0	\$0	\$0	\$0	\$0
178	Marina B Managed Aquatic Plant Systems*	Titusville	\$6,670	\$6 <i>,</i> 670	\$0	\$0	\$0	\$0	\$6,670	\$6 <i>,</i> 670
123	Ray Bullard Water Reclamation Facility Stormwater Management Area	West Melbourne	\$160,674	\$160,674	\$0	\$0	\$0	\$0	\$0	\$0
	Stormwater Projects Total		\$47,453,793	\$5,932,632	\$0	\$115,717	\$93,125	\$1,276,271	\$560,854	\$2,045,966
	Vegetation Harvesting									
112	County Wide Stormwater Pond Harvesting*	Brevard County	\$14,000	\$14,000	\$0	\$0	\$0	\$0	\$14,000	\$14,000
172	Horseshoe Pond Vegetative Harvesting	Brevard County	\$8,140	\$0	\$0	\$0	\$0	\$0	\$0	\$0
173	North and South Lakemont Ponds Vegetation Harvesting	Сосоа	\$1,980	\$0	\$0	\$0	\$0	\$0	\$0	\$0

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171	Mechanical Aquatic Vegetation Harvesting	Melbourne Tillman Water Control District	\$1,011,976	\$0	\$0	\$0	\$0	\$0	\$0	\$0
111	Draa Field Vegetation Harvesting	Titusville	\$50,000	\$50,000	\$0	\$0	\$0	\$0	\$0	\$0
	Vegetation Harvesting Total		\$1,086,096	\$64,000	\$0	\$0	\$0	\$0	\$14,000	\$14,000
	Muck Removal & Interstitial Treatment									
2016-3a & b	Muck Re-dredging in Turkey Creek & Interstitial Treatment (pending FEMA reimbursement)*	Brevard County	\$137,329	\$215,000	\$0	\$1,092,823	\$5 <i>,</i> 807	\$0	\$0	\$1,098,631
2016-04a & b	Rockledge A Muck & Interstitial Treatment	Brevard County	\$5,010,244	\$175,340	\$0	\$0	\$9 <i>,</i> 949	\$116,417	\$16,965	\$143,331
2016-05a & b	Pineda Banana River Lagoon & Interstitial Treatment	Brevard County	\$7,815,980	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2016-06a & b	Titusville Railroad West	Brevard County	\$3,607,375	\$146,361	\$0	\$0	\$24,209	\$91,146	\$27,752	\$143,107
2016-07a & b	National Aeronautics and Space Administration Causeway East & Interstitial Treatment	Brevard County	\$11,423,355	\$209 <i>,</i> 255	\$0	\$0	\$41,009	\$137,935	\$3,115	\$182,059
2016-08a &b	Titusville Railroad East & Interstitial Treatment	Brevard County	\$4,609,424	\$318,457	\$0	\$62,449	\$29,410	\$53,221	\$123,419	\$268,499
2016-10a & b	Port Canaveral South & Interstitial Treatment	Brevard County	\$16,834,419	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2016-11a & b	Patrick Air Force Base & Interstitial Treatment	Brevard County	\$8,216,800	\$0	\$0	\$0	\$0	\$0	\$0	\$0
40	Mims Muck Removal Outflow Water Nutrient Removal*	Brevard County	\$400,000	\$400,000	\$0	\$0	\$0	\$0	\$0	\$0
41a & b	Grand Canal Muck & Interstitial Treatment	Brevard County	\$18,020,368	\$18,020,368	\$0	\$0	\$1,060,449	\$793 <i>,</i> 450	\$1,127,970	\$2,981,870
42a & b	Sykes Creek Muck & Interstitial Treatment	Brevard County	\$15,954,132	\$948,508	\$0	\$0	\$6 <i>,</i> 900	\$814 <i>,</i> 428	\$17,643	\$838,971
54a & b	Eau Gallie Northeast Muck & Interstitial Treatment	Brevard County	\$10,020,487	\$112,601	\$0	\$62,449	\$0	\$0	\$50,152	\$112,601
71	Merritt Island Muck Removal – Phase 1	Brevard County	\$7,733,517	\$0	\$0	\$0	\$0	\$0	\$0	\$0
70a	Cocoa Beach Muck Dredging – Phase III*	Cocoa Beach	\$1,376,305	\$1,376,305	\$0	\$359 <i>,</i> 660	\$708 <i>,</i> 458	\$308,187	\$0	\$1,376,305
101	Cocoa Beach Muck Dredging Phase II-B	Cocoa Beach	\$5,917,650	\$5,917,650	\$0	\$0	\$339 <i>,</i> 340	\$2,320,973	\$1,054,706	\$3,715,019
168a & b	Cocoa Beach Golf Muck & Interstitial Treatment	Cocoa Beach	\$24,363,100	\$24,363,100	\$0	\$0	\$0	\$0	\$278,185	\$278,185
72a & b	Muck Removal of Indian Harbour Beach Canals & Interstitial Treatment	Indian Harbour Beach	\$9,115,415	\$9,115,415	\$0	\$0	\$0	\$0	\$0	\$0
144 & 113	Satellite Beach Muck Dredging & Interstitial Treatment	Satellite Beach	\$4,941,981	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Muck Removal & Interstitial Treatment Total		\$155,497,881	\$61,318,360	\$0	\$1,577,382	\$2,225,533	\$4,635,757	\$2,699,908	\$11,138,579
	Oyster Bars									
2016-55	Banana River Lagoon County Oyster Bars	Brevard County	\$3,151,051	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2016-56	North IRL County Oyster Bars	Brevard County	\$2,935,159	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2016-57	Central IRL County Oyster Bars	Brevard County	\$471,137	\$0	\$0	\$0	\$0	\$0	\$0	\$0
73	RiverView Senior Resort Oyster Bar*	Brevard County	\$30,304	\$30,304	\$0	\$30,304	\$0	\$0	\$0	\$30,304
75	Marina Isles Oyster Bar*	Brevard Zoo	\$26,700	\$26,700	\$0	\$0	\$0	\$26,700	\$0	\$26,700
76	Bettinger Oyster Bar*	Brevard Zoo	\$10,680	\$10,680	\$0	\$0	\$10,680	\$0	\$0	\$10,680
79	Gitlin Oyster Bar*	Brevard Zoo	\$16,020	\$16,020	\$0	\$0	\$16,020	\$0	\$0	\$16,020
80	Coconut Point/Environmentally Endangered Lands Oyster Bar*	Brevard Zoo	\$45,120	\$45,120	\$0	\$0	\$0	\$45,120	\$0	\$45,120
81	Wexford Oyster Bar*	Brevard Zoo	\$31,150	\$31,150	\$0	\$0	\$0	\$0	\$31,150	\$31,150
83	Bomalaski Oyster Bar*	Brevard Zoo	\$8,900	\$8,900	\$0	\$8,900	\$0	\$0	\$0	\$8,900

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104	Brevard Zoo Banana River Oyster Project	Brevard Zoo	\$583,020	\$583,020	\$0	\$0	\$0	\$0	\$18,692	\$18,692
105	Brevard Zoo Central IRL Oyster Project	Brevard Zoo	\$161,160	\$161,160	\$0	\$0	\$0	\$0	\$5,294	\$5,294
106	Brevard Zoo North IRL Oyster Project	Brevard Zoo	\$341,280	\$341,280	\$0	\$0	\$0	\$164,994	\$4,194	\$169,188
139	Brevard Zoo North IRL Oyster Project 2	Brevard Zoo	\$336,400	\$336,400	\$0	\$0	\$0	\$0	\$36,478	\$36,478
140	Brevard Zoo Central IRL Oyster Project 2	Brevard Zoo	\$270,800	\$270,800	\$0	\$0	\$0	\$34,969	\$11,825	\$46,794
141	Brevard Zoo Banana River Oyster Project 2	Brevard Zoo	\$264,800	\$0	\$0	\$0	\$0	\$0	\$0	\$0
142	Brevard Zoo Oyster Reef Adjustments North IRL	Brevard Zoo	\$27,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0
143	Brevard Zoo Oyster Reef Adjustments Banana River	Brevard Zoo	\$12,800	\$0	\$0	\$0	\$0	\$0	\$0	\$0
184	Brevard Zoo North Indian River Lagoon Oyster Project 3	Brevard Zoo	\$419,232	\$419,232	\$0	\$0	\$0	\$0	\$0	\$0
185	Brevard Zoo Central Indian River Lagoon Tributary Pilot Oyster Project	Brevard Zoo	\$230,657	\$0	\$0	\$0	\$0	\$0	\$0	\$0
186	Brevard Zoo North Indian River Lagoon Individual Oyster Project	Brevard Zoo	\$173,092	\$0	\$0	\$0	\$0	\$0	\$0	\$0
187	Brevard Zoo Central Indian River Lagoon Oyster Project 3	Brevard Zoo	\$86 <i>,</i> 546	\$0	\$0	\$0	\$0	\$0	\$0	\$0
188	Brevard Zoo Banana River Oyster Project 3	Brevard Zoo	\$56,771	\$0	\$0	\$0	\$0	\$0	\$0	\$0
78a	McNabb Park Oyster Bar	Cocoa Beach	\$34,056	\$0	\$0	\$0	\$0	\$0	\$0	\$0
82a	Riverview Park Oyster Bar	Melbourne	\$108,790	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Oyster Bars Total		\$9,832,825	\$2,280,766	\$0	\$39,204	\$26,700	\$271,783	\$107,633	\$445,320
	Planted Shorelines									
102	Brevard Zoo Banana River Plant Project WITHDRAW	Brevard Zoo	\$3,120	\$3,120	\$0	\$0	\$0	\$0	\$0	\$0
103	Brevard Zoo North IRL Plant Project*	Brevard Zoo	\$720	\$720	\$0	\$0	\$0	\$720	\$0	\$720
130	Brevard Zoo North IRL Plant Project 2*	Brevard Zoo	\$9 <i>,</i> 840	\$9,840	\$0	\$0	\$0	\$0	\$9,840	\$9 <i>,</i> 840
131	Brevard Zoo Central IRL Plant Project WITHDRAW	Brevard Zoo	\$1,920	\$1,920	\$0	\$0	\$0	\$0	\$0	\$0
132	Brevard Zoo Banana River Plant Project 2 WITHDRAW	Brevard Zoo	\$480	\$480	\$0	\$0	\$0	\$0	\$0	\$0
183	Brevard Zoo North Indian River Lagoon Plant Project 3 WITHDRAW	Brevard Zoo	\$960	\$0	\$0	\$0	\$0	\$0	\$0	\$0
78b	McNabb Park Planted Shoreline	Cocoa Beach	\$5,760	\$0	\$0	\$0	\$0	\$0	\$0	\$0
77a	Cocoa Beach Country Club Planted Shoreline**	Marine Resources Council	\$16,014	\$16,014	\$0	\$16,014	\$0	\$0	\$0	\$16,014
77b	Lagoon House Shoreline Restoration Planting**	Marine Resources Council	\$23,961	\$23,961	\$0	\$23,961	\$0	\$0	\$0	\$23,961
133	Fisherman's Landing *	Marine Resources Council	\$4,800	\$4,800	\$0	\$0	\$0	\$4,800	\$0	\$4,800
135	Rotary Park*	Marine Resources Council	\$4,800	\$4,800	\$0	\$0	\$0	\$4,800	\$0	\$4,800
180	Scottsmoor Impoundment	Marine Resources Council	\$10,560	\$0	\$0	\$0	\$0	\$0	\$0	\$0
181	Riveredge	Marine Resources Council	\$4,080	\$4,080	\$0	\$0	\$0	\$0	\$0	\$0

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182	Newfound Harbor Drive	Marine Resources Council	\$1,680	\$1,680	\$0	\$0	\$0	\$0	\$0	\$0
82b	Riverview Park Planted Shoreline	Melbourne	\$18,480	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Planted Shorelines Total		\$107,175	\$71,415	\$0	\$39,975	\$0	\$10,320	\$9,840	\$60,135
	Clam Restoration									
194	Aquaculture Stimulus Program	Private Citizens	\$60,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Clam Restoration Total		\$60,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Monitoring & Respond Projects									
	Living Shoreline Monitoring	Brevard County		\$333,480	\$0	\$15,529	\$66,352	\$86,116	\$61,525	\$229,522
	Groundwater/Water Quality Monitoring	Brevard County		\$1,459,729	\$0	\$92,308	\$119,031	\$350,621	\$270,573	\$832 <i>,</i> 532
	Stormwater Monitoring	Brevard County		\$40,756	\$0	\$0	\$256	\$40,500	\$0	\$40,756
	Sewer/Septic Monitoring	Brevard County		\$642,015	\$0	\$31,313	\$116,099	\$7,977	\$15,443	\$170,832
	Muck Dredging Monitoring	Brevard County		\$417,335	\$0	\$5,204	\$38,997	\$233,562	\$34,305	\$312,067
	Plan Updates	Brevard County		\$130,371	\$17,105	\$20,682	\$23,067	\$16,779	\$16,100	\$93,733
	Monitoring & Respond Projects Total		\$10,000,000	\$3,023,686	\$17,105	\$165,036	\$363,802	\$735,554	\$397,945	\$1,679,442
	Contingency		\$20,258,580							
2016-2	City of Titusville Osprey WWTF <sup>+</sup>	Titusville		\$800,000	\$0	\$0	\$0	\$0	\$0	\$0
77a	Cocoa Beach Country Club Planted Shoreline**	Marine Resources Council		\$66	\$0	\$66	\$0	\$0	\$0	\$66
77b	Lagoon House Shoreline Restoration Planting**	Marine Resources Council		\$39	\$0	\$39	\$0	\$0	\$0	\$39
169	Sherwood Park Stormwater Quality Project <sup>+</sup>	Melbourne		\$99,708	\$0	\$0	\$0	\$0	\$0	\$0
2	Merritt Island Septic Phase Out Project**	Merritt Island Redevelopment Agency		\$268	\$0	\$0	\$0	\$0	\$268	\$268
	Pennwood Sewer Conversion <sup>+</sup>	Melbourne		\$40,368	\$0	\$0	\$0	\$0	\$0	\$0
	Contingency Projects Total			\$940,449	\$0	\$105	\$0	\$0	\$268	\$373
	Inflation		\$57,065,372							
-	Total		\$488,647,760	\$126,096,365	\$190,686	\$3,225,298	\$3,797,742	\$10,132,589	\$8,656,996	\$26,017,311

# Save Our Indian River Lagoon Performance Tables – Fiscal Year 20/21 Quarter 3

# Table 1. Project Performance Table

\*Projects Completed; TBD = To Be Determined; WWTF = Waste Water Treatment Facility

Project Number	Project	Responsible Entity	TN Reductions (lbs/yr)	TP Reductions (lbs/yr)	Scope of Work Received	Contract Review Status	Design	Construction
	Public Education							
58a	Expanded Fertilizer Education	Brevard County	6,613	813	Complete	Complete	100%	43%
58b	Grass Clippings Campaign	Brevard County	17,800	1,200	Complete	Complete	100%	37%
58c	Septic System Maintenance Education	Brevard County	4,466	TBD	Complete	Complete	100%	43%
193	Oyster Gardening	Brevard Zoo	N/A	N/A	Complete	Complete	100%	75%
	Public Education Total		28,879	2,013				
	WWTF Upgrades for Reclaimed Water							
99	Cocoa Beach Water Reclamation Facility Upgrade*	Cocoa Beach	2,520	685	Complete	Complete	100%	100%
59	City of Melbourne Grant Street Water Reclamation Facility	Melbourne	18,052	9,671	Complete	Complete	95%	
2016-17	City of Palm Bay Water Reclamation Facility	Palm Bay	20,240	102	Complete	Complete	100%	75%
2016-2	City of Titusville Osprey WWTF <sup>+</sup>	Titusville	12,286	TBD	Complete	Complete	100%	1%
138	Ray Bullard Water Reclamation Facility Biological Nutrient Removal Upgrades	West Melbourne	11,360	3,302	Complete	Complete	22%	
	WWTF Upgrades for Reclaimed Water Total		64,458	13,760				
	Sewer Laterals							
63	Satellite Beach Pilot Project (63 repairs completed)	Brevard County	988	188	Complete	Complete	100%	23%
114	Barefoot Bay Lateral Smoke Testing	Brevard County	864	TBD	Complete	Complete	100%	
115	South Beaches Lateral Smoke Testing	Brevard County	1,662	TBD	Complete	Complete	100%	
116	Merritt Island Lateral Smoke Testing	Brevard County	2,042	TBD	Complete	Complete	100%	
100	Osprey Basin Lateral Repair Project	Titusville	640	TBD	Complete	Under Review		
	Sewer Laterals Total		6,196	188				
	Rapid Infiltration Basin/Sprayfield Upgrades							
2016-51	Port St John Wastewater Treatment Plant	Brevard County	4,116	915				
6	Long Point Park Upgrade*	Brevard County	163	TBD	Complete	Complete	100%	100%
2016-20	Canebreaker Condo	Property Owner	61	TBD				
204	Cape Canaveral Air Force Station Regional WWTF	Air Force	4,625	1,226				
	Rapid Infiltration Basin/Sprayfield Upgrades Total		8,965	2,141				
	Package Plant Connection							
197	South Shores Utility Connection	Property Owner	929	TBD				
199	River Grove I & II Mobile Home Park Connection	Property Owner	697	TBD				
192	Oak Point Wastewater Treatment Facility Improvements	Property Owner	186	TBD	Complete	Complete	5%	
	Package Plant Connection Total		1,812	TBD				
	Septic System Removal by Sewer Extension							
2016-27	Sharpes - Zone A (0 of 186 connected)	Brevard County	5,248	TBD				
2016-29	South Banana - Zone B (0 of 41 connected)	Brevard County	915	TBD				

Project Number	Project	Responsible Entity	TN Reductions (lbs/yr)	TP Reductions (Ibs/yr)	Scope of Work Received	Contract Review Status	Design	Construction
2016-35	South Beaches - Zone A (1 of 37 connected)	Brevard County	1,306	TBD				
2016-36	South Beaches - Zone O (0 of 4 connected)	Brevard County	136	TBD	Complete	Complete	90%	
2016-37	South Beaches - Zone P (0 of 15 connected)	Brevard County	489	TBD	Complete	Complete	30%	
2016-50	South Central - Zone C (0 of 140 connected)	Brevard County	5,146	TBD	Complete	Complete	100%	
3	Micco Sewer Line Extension (Phase I and II) (0 of 18 connected)	Brevard County	1,493	TBD	Complete	Complete	100%	
47	Sykes Creek - Zone N (0 of 78 connected)	Brevard County	2,784	TBD	Complete	Complete	25%	
48	Sykes Creek - Zone M (0 of 56 connected)	Brevard County	1,798	TBD	Complete	Complete	30%	
49	Sykes Creek - Zone T (0 of 148 connected)	Brevard County	3,360	TBD	Complete	Complete	30%	
136	Micco - Zone B (0 of 540 connected)	Brevard County	8,687	TBD				
145	Merritt Island - Zone F (0 of 71 connected)	Brevard County	1,292	TBD				
146	Merritt Island - Zone C (0 of 43 connected)	Brevard County	1,419	TBD				
147	Sykes Creek - Zone R (0 of 192 connected)	Brevard County	2,925	TBD				
148	North Merritt Island - Zone E (0 of 195 connected)	Brevard County	2,541	TBD				
150	South Central - Zone D (0 of 94 connected)	Brevard County	3,387	TBD				
151	Merritt Island - Zone G (0 of 1,146 connected)	Brevard County	11,078	TBD				
152	Sharpes - Zone B (0 of 136 connected)	Brevard County	2,692	TBD				
153	Cocoa - Zone C (0 of 273 connected)	Brevard County	3,499	TBD				
203	South Central - Zone A (0 of 37 connected)	Brevard County	3,655	TBD				
2016-31	City of Cocoa - Zone K (0 of 36 connected)	Сосоа	1,663	TBD				
2016-32	City of Cocoa - Zone J (0 of 94 connected)	Сосоа	3,259	TBD				
2016-28	South Central - Zone D (Melbourne) (0 of 28 connected)	Melbourne	177	TBD				
2016-33	City of Melbourne (0 of 26 connected)	Melbourne	878	TBD				
2020-34	South Central - Zone F (1 of 51 connected)	Melbourne	1,688	TBD	Complete	Complete	100%	5%
4	Hoag Sewer Conversion (1 of 5 connected)	Melbourne	101	TBD	Complete	Complete	100%	60%
5	Pennwood Sewer Conversion (1 of 5 connected)	Melbourne	48	TBD	Complete	Complete	100%	60%
61	Riverside Drive Septic-to-Sewer Conversion (1 of 12 connected)	Melbourne	305	TBD	Complete	Complete	100%	54%
62	Roxy Avenue Septic-to-Sewer Conversion (1 of 6 connected)	Melbourne	102	TBD	Complete	Complete	100%	58%
189	Avendia del Rio Septic to Sewer (0 of 3 connected)	Melbourne	71	TBD				
190	Bowers Septic to Sewer (0 of 6 connected)	Melbourne	120	TBD				
191	Kent and Villa Espana Septic to Sewer Conversion (0 of 37 connected)	Melbourne	542	TBD				
2	Merritt Island Septic Phase Out Project (74 connected)*	Merritt Island Redevelopment Agency	2,492	TBD	Complete	Complete	100%	100%
2016-39	City of Palm Bay – Zone A (0 of 77 connected)	Palm Bay	2,136	TBD				
2016-46	City of Palm Bay – Zone B (0 of 249 connected)	Palm Bay	6,809	TBD				
2016-30	City of Rockledge (0 of 15 connected)	Rockledge	712	TBD				
2016-40	Rockledge - Zone B (0 of 160 connected)	Rockledge	4,037	TBD				
1	Breeze Swept Septic to Sewer Connection (143 connected)*	Rockledge	2,002	TBD	Complete	Complete	100%	100%
2016-38	City of Titusville - Zone H (0 of 35 connected)	Titusville	910	TBD				
109	City of Titusville - Zones A-G (0 of 18 connected)	Titusville	642	TBD	Complete	Complete	90%	
60	Sylvan Estates Septic-to-Sewer Conversion (59 connected)*	West Melbourne	1,073	TBD	Complete	Complete	100%	100%

Project Number	Project	Responsible Entity	TN Reductions (lbs/yr)	TP Reductions (lbs/yr)	Scope of Work Received	Contract Review Status	Design	Construction
	Septic System Removal by Sewer Extension Total		93,617	TBD				
	Septic System Removal by Sewer Connection							
2016-16	Banana Septic System 144 Quick Connections	Property Owners	3,224	TBD	See Table 2			
2016-18	North IRL Septic System 463 Quick Connections	Property Owners	11,339	TBD	See Table 2			
2016-19	Central IRL Septic System 269 Quick Connections	Property Owners	6,883	TBD	See Table 2			
	Septic System Removal by Sewer Connection Total		21,446	TBD				
	Septic System Upgrades							
51	Banana River Lagoon 100 Septic System Upgrades	Private Citizens	1,934	TBD	See Table 2			
52	North IRL 586 Septic System Upgrades	Private Citizens	13,857	TBD	See Table 2			
53	Central IRL 939 Septic System Upgrades	Private Citizens	22,190	TBD	See Table 2			
	Septic System Upgrades Total		37,981	TBD				
	Stormwater Projects							
2016-41	Banana River Lagoon 68 Basin Projects	Brevard County	63,789	8,421				
2016-42	North IRL 98 Basin Projects	Brevard County	118,696	15,673				
2016-43	Central IRL 10 Basin Projects	Brevard County	19,832	2,617				
18	Basin 62 Denitrification Retrofit of Johns Road Pond	Brevard County	1,199	TBD	Complete	Complete	100%	
22	Basin 1387 Kingsmill-Aurora Phase Two	Brevard County	4,176	814	Complete	Complete	30%	
23	Basin 41 Denitrification Retrofit of Huntington Pond	Brevard County	1,190	TBD	Complete	Complete	1%	
24	Basin 71 Denitrification Retrofit of Flounder Creek Pond	Brevard County	856	TBD	Complete	Complete	100%	
85	Basin 1304 Bioreactor*	Brevard County	958	127	Complete	Complete	100%	100%
87	Basin 2134 Fleming Grant Biosorption Activated Media*	Brevard County	602	91	Complete	Complete	100%	100%
89	Basin 1298 Bioreactor*	Brevard County	917	116	Complete	Complete	100%	100%
90	Basin 51 Johns Road Pond Biosorption Activated Media*	Brevard County	245	37	Complete	Complete	100%	100%
91	Basin 100 Burkholm Road Biosorption Activated Media*	Brevard County	685	104	Complete	Complete	100%	100%
92	Basin 115 Carter Road Biosorption Activated Media*	Brevard County	665	101	Complete	Complete	100%	100%
93	Basin 193 Wiley Ave Biosorption Activated Media*	Brevard County	954	144	Complete	Complete	100%	100%
94	Basin 832 Broadway Pond Biosorption Activated Media*	Brevard County	456	69	Complete	Complete	100%	100%
117	Basin 10 County Line Road Woodchip Bioreactor*	Brevard County	597	90	Complete	Complete	100%	100%
118	Basin 26 Sunset Road Serenity Park Woodchip Bioreactor	Brevard County	605	92	Complete	Complete	100%	
119	Basin 141 Irwin Avenue Woodchip Bioreactor*	Brevard County	567	86	Complete	Complete	100%	100%
121	Basin 2258 Babcock Road Woodchip Bioreactor	Brevard County	412	62	Complete	Complete	50%	
122	Basin 22 Huntington Road Serenity Park Woodchip Bioreactor*	Brevard County	329	50	Complete	Complete	100%	100%
205	Basin 998 Hampton Homes	Brevard County	TBD	TBD	Complete	Under Review		
206	Basin 1066 Angel Ave	Brevard County	TBD	TBD	Complete	Under Review		
207	Basin 1124	Brevard County	TBD	TBD	Under Review			
13	Central Boulevard Baffle Box*	Cape Canaveral	481	14	Complete	Complete	100%	100%
14	Church Street Type II Baffle Box*	Сосоа	937	135	Complete	Complete	100%	100%
124	Floating Wetlands to Existing Stormwater Ponds*	Сосоа	12	3	Complete	Complete	100%	100%
125	Diamond Square Stormwater Pond	Сосоа	85	23				
129	Forrest Avenue 72-inch Outfall Baseflow Capture/Treatment	Сосоа	94	12				

Project Number	Project	Responsible Entity	TN Reductions (lbs/yr)	TP Reductions (Ibs/yr)	Scope of Work Received	Contract Review Status	Design	Construction
177	North and South Lakemont Ponds Floating Wetlands	Сосоа	107	25				
64	Stormwater Low Impact Development Convair Cove 1 – Blakey Boulevard	Cocoa Beach	30	3	Complete	Complete	100%	4%
65	Stormwater Low Impact Development Convair Cove 2 – Dempsey Drive	Cocoa Beach	29	3	Complete	Complete	100%	4%
127	Basin 5 Dry Retention*	Indialantic	113	18	Complete	Complete	100%	100%
16	Gleason Park Reuse*	Indian Harbour Beach	48	9	Complete	Complete	100%	100%
66	Big Muddy at Cynthia Baffle Box*	Indian Harbour Beach	436	58	Complete	Complete	100%	100%
34	Cliff Creek Baffle Box*	Melbourne	3,952	797	Complete	Complete	100%	100%
35	Thrush Drive Baffle Box*	Melbourne	3,661	773	Complete	Complete	100%	100%
67	Grant Place Baffle Box	Melbourne	937	193				
69	Apollo/GA Baffle Box	Melbourne	3,381	479				
95	Cherry Street Baffle Box	Melbourne	980	174				
96	Spring Creek Baffle Box	Melbourne	1,057	232				
88	Espanola Baffle Box	Melbourne	1,119	148				
169	Sherwood Park Stormwater Quality Project*	Melbourne	3,214	879	Complete	Complete	100%	100%
175	High School Baffle Box	Melbourne	1,183	319				
176	Funeral Home Baffle Box	Melbourne	481	129				
15	Bayfront Stormwater Project*	Palm Bay	348	83	Complete	Complete	100%	100%
128	Jackson Court Stormwater Treatment Facility	Satellite Beach	56	8	Complete	Complete	100%	75%
179	Lori Laine Basin Pipe Improvement Project	Satellite Beach	117	21				
68	Crane Creek/M-1 Canal Flow Restoration	St. Johns Water Management District	23,113	2,719	Complete	Complete	80%	
19	St. Teresa Basin Treatment*	Titusville	3,100	459	Complete	Complete	100%	100%
20	South Street Basin Treatment*	Titusville	987	156	Complete	Complete	100%	100%
21	La Paloma Basin Treatment*	Titusville	2,367	346	Complete	Complete	100%	100%
97	Titusville High School Baffle Box	Titusville	1,190	166	Complete	Complete	100%	50%
98	Coleman Pond Managed Aquatic Plant System*	Titusville	1,240	198	Complete	Complete	100%	100%
110	Osprey Plant Pond Managed Aquatic Plant Systems*	Titusville	606	88	Complete	Complete	100%	100%
120	Draa Field Pond Managed Aquatic Plant Systems*	Titusville	256	38	Complete	Complete	100%	100%
174	St. Johns 2 Baffle Box	Titusville	1,992	611	Complete	Complete	1%	
178	Marina B Managed Aquatic Plant Systems*	Titusville	55	7	Complete	Complete	100%	100%
123	Ray Bullard Water Reclamation Facility Stormwater Management Area	West Melbourne	1,317	400	Complete	Complete	100%	5%
	Stormwater Projects Total		276,811	38,420				
	Vegetation Harvesting							
112	County Wide Stormwater Pond Harvesting*	Brevard County	140	28	Complete	Complete	100%	100%
172	Horseshoe Pond Vegetative Harvesting	Brevard County	74	7				
173	North and South Lakemont Ponds Vegetation Harvesting	Сосоа	18	4				

Project Number	Project	Responsible Entity	TN Reductions (lbs/yr)	TP Reductions (lbs/yr)	Scope of Work Received	Contract Review Status	Design	Construction
171	Mechanical Aquatic Vegetation Harvesting	Melbourne Tillman Water Control District	16,636	1,664	Under Review			
111	Draa Field Vegetation Harvesting*	Titusville	574	TBD	Complete	Complete	100%	100%
	Vegetation Harvesting Total		17,442	1,703				
	Muck Removal & Interstitial Treatment							
2016-3a & b	Muck Re-dredging in Turkey Creek & Interstitial Treatment*	Brevard County	5,691	221	Complete	Complete	100%	100%
2016-04a & b	Rockledge A Muck & Interstitial Treatment	Brevard County	20,286	1,982	Complete	Complete	30%	
2016-05a & b	Pineda Banana River Lagoon & Interstitial Treatment	Brevard County	34,853	2,490				
2016-06a & b	Titusville Railroad West	Brevard County	23,554	1,421	Complete	Complete	30%	
2016-07a & b	National Aeronautics and Space Administration Causeway East & Interstitial Treatment	Brevard County	50,839	3,684	Complete	Complete	30%	
2016-08a &b	Titusville Railroad East & Interstitial Treatment	Brevard County	17,081	1,291	Complete	Complete	30%	
2016-10a & b	Port Canaveral South & Interstitial Treatment	Brevard County	78,070	5,812				
2016-11a & b	Patrick Air Force Base & Interstitial Treatment	Brevard County	27,333	2,279				
40	Mims Muck Removal Outflow Water Nutrient Removal*	Brevard County	2,803	244	Complete	Complete	100%	100%
41a & b	Grand Canal Muck & Interstitial Treatment	Brevard County	99,210	1,358	Complete	Complete	100%	22%
42a & b	Sykes Creek Muck & Interstitial Treatment	Brevard County	83,913	2,618	Complete	Complete	100%	
54a & b	Eau Gallie Northeast Muck & Interstitial Treatment	Brevard County	35,886	3,795	Complete	Complete	98%	
71	Merritt Island Muck Removal – Phase 1	Brevard County	8,085	1,540	Complete	Complete	60%	
70a	Cocoa Beach Muck Dredging – Phase III*	Cocoa Beach	4,095	780	Complete	Complete	100%	100%
101	Cocoa Beach Muck Dredging Phase II-B	Cocoa Beach	6,300	840	Complete	Complete	100%	80%
168a & b	Cocoa Beach Golf Muck & Interstitial Treatment	Cocoa Beach	128,792	11,080	Complete	Complete	17%	
72a & b	Muck Removal of Indian Harbour Beach Canals & Interstitial Treatment	Indian Harbour Beach	31,198	720	Complete	Complete	40%	
144 & 113	Satellite Beach Muck Dredging & Interstitial Treatment	Satellite Beach	33 <i>,</i> 863	3,577				
	Muck Removal & Interstitial Treatment Total		691,852	45,732				
	Oyster Bars							
2016-55	Banana River Lagoon County Oyster Bars (199,652 Square Feet)	Brevard County	7,986	200				
2016-56	North IRL County Oyster Bars (185,972 Square Feet)	Brevard County	7,439	186				
2016-57	Central IRL County Oyster Bars (68,234 Square Feet)	Brevard County	1,194	30				
73	RiverView Senior Resort Oyster Bar* (1,920 Square Feet)	Brevard County	77	2	Complete	Complete	100%	100%
75	Marina Isles Oyster Bar* (1,800 Square Feet)	Brevard Zoo	60	20	Complete	Complete	100%	100%
76	Bettinger Oyster Bar* (720 Square Feet)	Brevard Zoo	24	8	Complete	Complete	100%	100%
79	Gitlin Oyster Bar* (1,080 Square Feet)	Brevard Zoo	36	12	Complete	Complete	100%	100%
80	Coconut Point/Environmentally Endangered Lands Oyster Bar* (2,400 Square Feet)	Brevard Zoo	96	2	Complete	Complete	100%	100%
81	Wexford Oyster Bar* (1,750 Square Feet)	Brevard Zoo	70	24	Complete	Complete	100%	100%
83	Bomalaski Oyster Bar* (600 Square Feet)	Brevard Zoo	20	7	Complete	Complete	100%	100%

Project Number	Project	Responsible Entity	TN Reductions (Ibs/yr)	TP Reductions (Ibs/yr)	Scope of Work Received	Contract Review Status	Design	Construction
104	Brevard Zoo Banana River Oyster Project (36,894 Square Feet)	Brevard Zoo	1,476	37	Complete	Complete	5%	2%
105	Brevard Zoo Central IRL Oyster Project (7,270 of 10,200 Square Feet)	Brevard Zoo	408	10	Complete	Complete	100%	88%
106	Brevard Zoo North IRL Oyster Project (2,670 of 21,600 Square Feet)	Brevard Zoo	864	22	Complete	Complete	83%	54%
139	Brevard Zoo North IRL Oyster Project 2 (450 of 21,030 Square Feet)	Brevard Zoo	841	21	Complete	Complete	20%	19%
140	Brevard Zoo Central IRL Oyster Project 2 (2,574 of 16,932 Square Feet)	Brevard Zoo	677	17	Complete	Complete	20%	29%
141	Brevard Zoo Banana River Oyster Project 2 (16,560 Square Feet)	Brevard Zoo	662	17				
142	Brevard Zoo Oyster Reef Adjustments North IRL (1,700 Square Feet)	Brevard Zoo	68	2				
143	Brevard Zoo Oyster Reef Adjustments Banana River (800 Square Feet)	Brevard Zoo	32	1				
184	Brevard Zoo North Indian River Lagoon Oyster Project 3 (26,388 Square Feet)	Brevard Zoo	1,056	26	Complete	Complete	20%	
185	Brevard Zoo Central Indian River Lagoon Tributary Pilot Oyster Project	Brevard Zoo	581	15				
186	Brevard Zoo North Indian River Lagoon Individual Oyster Project	Brevard Zoo	436	11				
187	Brevard Zoo Central Indian River Lagoon Oyster Project 3	Brevard Zoo	218	5				
188	Brevard Zoo Banana River Oyster Project 3	Brevard Zoo	143	4				
78a	McNabb Park Oyster Bar (1,800 Square Feet)	Cocoa Beach	72	24				
82a	Riverview Park Oyster Bar (5,750 Square Feet)	Melbourne	230	78				
	Oyster Bars Total		24,766	781				
	Planted Shorelines							
102	Brevard Zoo Banana River Plant Project WITHDRAW	Brevard Zoo	13	4	Complete	Complete		
103	Brevard Zoo North IRL Plant Project* (50 Linear Feet)	Brevard Zoo	3	1	Complete	Complete	100%	100%
130	Brevard Zoo North IRL Plant Project 2 (610 Linear Feet)	Brevard Zoo	41	14	Complete	Complete	100%	100%
131	Brevard Zoo Central IRL Plant Project (124 Linear Feet) WITHDRAW	Brevard Zoo	8	3	Complete	Complete		
132	Brevard Zoo Banana River Plant Project 2 (25 Linear Feet) WITHDRAW	Brevard Zoo	2	1	Complete	Complete		
183	Brevard Zoo North Indian River Lagoon Plant Project 3 (60 Linear Feet) WITHDRAW	Brevard Zoo	4	1				
78b	McNabb Park Planted Shoreline (360 Linear Feet)	Cocoa Beach	24	8				
77a	Cocoa Beach Country Club Planted Shoreline* (1,000 Linear Feet)	Marine Resources Council	67	23	Complete	Complete	100%	100%
77b	Lagoon House Shoreline Restoration Planting* (1,493 Linear Feet)	Marine Resources Council	100	34	Complete	Complete	100%	100%
133	Fisherman's Landing* (300 Linear Feet)	Marine Resources Council	20	7	Complete	Complete	100%	100%
135	Rotary Park* (300 Linear Feet)	Marine Resources Council	20	7	Complete	Complete	100%	100%
180	Scottsmoor Impoundment (650 Linear Feet)	Marine Resources Council	44	15				
181	Riveredge (250 Linear Feet)	Marine Resources Council	17	6	Complete	Complete	1%	

Project Number	Project	Responsible Entity	TN Reductions (Ibs/yr)	TP Reductions (Ibs/yr)	Scope of Work Received	Contract Review Status	Design	Construction
182	Newfound Harbor Drive (100 Linear Feet)	Marine Resources Council	7	2	Complete	Complete	1%	
82b	Riverview Park Planted Shoreline (1,150 Linear Feet)	Melbourne	77	26				
	Planted Shorelines Total		434	148				
	Clam Restoration							
194	Aquaculture Stimulus Program	Private Citizens	1,000	TBD				
	Clam Restoration Total		1,000	TBD				

# Table 2. Septic Upgrade and Quick Connect Tracking

Project Number	Project	Applications Contracted	Contracts Completed	Total TN Reduction (lbs/yr)
51	Banana River Lagoon 100 Septic System Upgrades	2	0	0
52	North IRL 586 Septic System Upgrades	23	14	331
53	Central IRL 939 Septic System Upgrades	45	23	544
2016-16	Banana Septic System 144 Quick Connections	0	0	0
2016-18	North IRL Septic System 463 Quick Connections	36	24	588
2016-19	Central IRL Septic System 269 Quick Connections	0	0	0

# Table 3. Overview

Totals	Total TN Reduction (lbs/yr)	Total TP Reduction (lbs/yr)	Scopes of Work Received	Contracts Executed	Projects in Design	Projects Under Construction	Projects Complete
Total as of Previous Quarter	72,097	6,598	113	112	100	66	43
Total as of This Quarter	83,388	8,464	115	112	109	75	51



# Save Our Indian River Lagoon Citizen Oversight Committee August 20, 2021

# Agenda Item:

VIII. a. Old Business

# Title:

Proposed cost share eligibility by project type for projects proposed for the 2022 Save Our Indian River Lagoon Project Plan Update

# **Requested Action:**

Motion to recommend offering the proposed cost shares for recruiting project proposals for the 2022 Save Our Indian River Lagoon Project Plan Update

# Summary Explanation and Background:

Draft cost shares are based on the average cost of each project type approved in the Save Our Indian River Lagoon Project Plan, as amended, with the following exceptions:

- The maximum cost share for Septic System Removal by Sewer Extension reflects the Board of County Commissioner's approved rate of up to <u>\$1500</u> per pound of nitrogen load reduction for septic to sewer projects.
- The maximum cost share for Package Plant Removal by Connection to Central Sewer matches the Board of County Commissioner's approved rate of up to <u>\$1500</u> per pound of nitrogen load reduction for septic to sewer projects.
- The cost shares offered for Stormwater Treatment Projects reflect increasing actual project costs and further consider the average cost by project location as follows: <u>\$313</u> on the Mainland, <u>\$370</u> on Merritt Island and <u>\$446</u> on the Beaches

The 2021 Plan Update expanded grant options for all septic owners by offering a prorated cost-share amount based on the load reduction benefit of the requested action and the modeled loading estimate for the specific site. The pro-rata cost share was initially set at \$700/pound of reduced nitrogen loading to the lagoon. This cost-share resulted in low participation rates. Staff analyzed the numbers of parcels eligible for grants large enough to incentivize connection to sewer or upgrade to advanced septic and recommend increasing the pro-rata share to \$1200 per pound of nitrogen load reduction. Pro-rated grants would still be capped at the following maximum amounts:

- \$12,000 for connection to an adjacent gravity line
- \$18,000 for connection to an adjacent force main
- \$18,000 for upgrade from conventional septic to advanced septic

These maximum grant amounts are the same as the prior year caps and are consistent with current actual costs.



Proposed cost share eligibility by project type for new projects funding requests submitted for consideration in the 2022 Save Our Indian River Lagoon Project Plan Update

Project Type	2021 Plan Estimated Total Project Costs	2021 Plan Nitrogen Reductions (lbs/yr)	2021 Plan Average Cost/Pound/Year	2022 Proposed Maximum Cost/Pound/Year
Treatment Plant Upgrades for Reclaimed Water	\$24,711,400	64,458	\$383	\$383
Sewer Lateral Smoke Testing for Rehabilitation	\$1,580,000	6,196	\$255	\$255
Septic System Removal by Sewer Extension	\$110,990,852	94,547	\$1,174	<u>\$1500</u>
Package Plant Connection to Central Sewer	<u>\$2,584,794</u>	<u>1,812</u>	<u>\$1,426</u>	<u>\$1500</u>
Stormwater Projects	\$47,261,101	275,359	\$172	Average of \$350
Vegetation Harvesting	<u>\$1,086,096</u>	<u>17,442</u>	<u>\$62</u>	<u>\$110</u>
Muck Removal	\$108,152,240	207,990	\$520	\$520
Treatment of Muck Interstitial Water	\$46,945,641	481,059	\$98	\$98
Oyster Bars	\$9,832,825	24,766	\$397	\$397
Planted Shorelines	\$107,280	447	\$240	\$240



Save Our Indian River Lagoon Citizen Oversight Committee August 20, 2021

# Agenda Item:

IX. a. New Business

#### Title:

Contingency Funding Request for the City of Titusville Draa Field Aquatic Vegetation Harvesting Project

#### **Requested Action:**

Motion to recommend approval of a \$29,053 funding increase for the City of Titusville Draa Field Aquatic Vegetation Harvesting Project

# Summary Explanation and Background:

The City of Titusville Draa Field Vegetation Harvesting Project, completed in June 2021, consisted of harvesting aquatic vegetation from the Draa Field Pond. Harvesting aquatic vegetation removes nutrients and avoids decomposition.

The city's request for \$57,360 was approved for including in the 2020 Plan Update based on an anticipated Total Nitrogen reduction of 574 pounds. However, final project costs totaled \$115,261.40 and removed 785.57 pounds of Total Nitrogen and 98.68 pounds of Total Phosphorus, based on certified lab reports. The City of Titusville now plans to purchase their own aquatic vegetation harvesting equipment to maintain their ponds on a routine, and more cost effective, basis.

Section 5.1 of the Save Our Indian River Lagoon Project Plan allows the Contingency Fund Reserve to be used to increase funding for approved projects that can be *"expanded or altered to provide greater nutrient reduction benefits than planned... Contingency funds can be allocated at the rate for that project type established in the most recently adopted plan update."* 

In this case, the cost-share rate from the most recent plan update is \$110 per pound of nitrogen load reduction. Based on an actual nitrogen load reduction of 785.57 pounds, the project is eligible for a maximum of \$86,413, equating to an increase of \$29,053. In contrast, the City of Titusville Osprey Pond Managed Aquatic Plant Systems (MAPS) project was approved for \$60,000 but came in at a total cost of \$37,500. The remaining cost share of \$22,500 is available to offset the Draa Field cost increase.

Staff seeks a recommendation from the Citizen Oversight Committee on expanding the funding for the City of Titusville Draa Field Vegetation Harvesting Project by \$29,053 due to higher nutrient removal than initially anticipated.

City of Titusville

"Gateway to Nature and Space"

555 S. WASHINGTON AVENUE TITUSVILLE, FLORIDA 32796



PUBLIC WORKS DEPARTMENT (321)-567-3846 Fax (321)-383-5705 www.titusville.com

Brevard County Save Our Lagoon Citizen Oversight Committee Brevard Natural Resources Management Office 2725 Judge Fran Jamieson Way, Building A Viera, FL 32940

RE: Request for Save Our Indian River Lagoon (SOIRL) Funding Increase for the City of Titusville Draa Field Vegetation Harvesting Project (20-111)

The City of Titusville's Draa Field Vegetation Harvesting Project was approved for \$57,360 in funding in the 2020 SOIRL plan update. The project consisted of removal of nuisance aquatic vegetation within a City-owned 3.5-acre stormwater detention pond. The pond was constructed in 2016 and was originally planted with littoral zone vegetation, but since then nuisance aquatic vegetation had thrived and chocked out most of the desirable vegetation. Additionally, the decomposition of excessive nuisance aquatic vegetation within the pond results in the internal loading of nutrients. This process of nutrient loading is particularly undesirable within the pond due to its close connection with the Indian River Lagoon.

There was concern for the wildlife around and in the pond during harvesting due to the large amount of vegetation that needed to be removed, so the City contracted with an environmental consultant, Environmental Consulting & Technology, Inc. (ECT), to provide oversight of the process. ECT obtained bids from harvesting contractors and the lowest bid was accepted. Final project costs totaled \$115,261.40, more than \$55,000 over the original project estimate and over \$60,000 more than grant funding. The City used this as a learning experience and due to the high cost of contracting the service out the City has moved forward with purchasing our own harvesting boat in order to create a mechanic harvesting program for City maintained ponds and ditches.

Once the vegetation was removed from the pond it was allowed time to dry out and was taken to the disposal facility and weighed. Plant samples were taken and analyzed to determine the Total Nitrogen (TN) and Total Phosphorus (TP) removed. The original funding amount was based on an anticipated TN reduction of 574 pounds. Based on certified lab reports. the harvesting actually resulted in 785.57 pounds of TN removed. Based on the actual TN removal the cost share funding amount would be \$86,413.

The City requests the SOIRL Committee to approve additional funding in the amount of \$29,053 for the Draa Field Vegetation Project to correspond with the actual TN removed. The City appreciates this opportunity to help restore the Indian River Lagoon. This project would not have been possible without the assistance of the County and the

Save Our Indian River Lagoon Program.

Sincerely, Sandra Reller

(signed copy on file)

Public Works Deputy Director City of Titusville