

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

September 21, 2018 – 8:30 to 11:30 am
Brevard County Government Center
2725 Judge Fran Jamieson Way
Building C, 1st Floor, Commission Room
Viera Florida 32940

- I. Call to Order
- II. Roll Call
- III. Approval of the Agenda
- IV. Approval of Minutes
- V. Monthly Progress and Fiscal Reports – Virginia Barker, Director
 - a. September 2018 Progress Report
 - i. Save Our Indian River Lagoon Project Performance Table
 - ii. Save Our Indian River Lagoon Project Process Timeline
 - b. Financial Statement and Revenue Graph
- VI. Other Reports and Special Presentations
 - a. Nitrification/ Denitrification 101 – Marty Wanielista, PhD, University of Central Florida Stormwater Academy
 - b. Using Bioactive Media to Solve Real World Problems in Stormwater and Wastewater Applications – Antony Rios, E.I., Environmental Conservation Solutions, LLC
 - c. Nutrient Removal with Solar Filtration – Randy Burden, EcoSense and Leesa Souto, PhD, Marine Resources Council
 - d. Engaging Emerging Technology – Duane De Freese, PhD, Indian River Lagoon National Estuary Program
 - e. Proposed Septic Ordinance – Anthony Gubler and Virginia Barker
- VII. New Business
 - a. Meeting Frequency and Proposed By Laws Change - John Byron
 - b. Proposed 2019 Cost-share Eligibility by Project Type - Virginia Barker
 - i. Update on Private Sewer Lateral Smoke Testing – Anthony Gubler
 - c. Survey to Gather Recommendations to Consider for the 2019 Plan Update
- VIII. General Public Comment
- IX. Final Comments by Chair and Committee Members
- X. Adjournment

**Save Our Indian River Lagoon
Citizen Oversight Committee Meeting Minutes**

August 17, 2018 – 8:30 a.m. – 11:30 a.m.
2725 Judge Fran Jamieson Way,
Bldg. C, 3rd Floor, Florida Room
Viera, FL 32940

Members Present:

Expertise	Member	Present	Alternate	Present
Science	Lorraine Koss	Yes	Charles Venuto	Yes
Technology	John Byron	Yes	Vinnie Taranto	Yes
Education	Stephany Eley - Chair	Yes	John Durkee	Yes
Finance	Courtney Barker	No	Todd Swingle	Yes
Tourism	David Lane – Vice-Chair	Yes	Karen McLaughlin	No
Real Estate	Gene Artusa	Yes	Danielle Bowden	Yes
Lagoon Advocacy	John Windsor	No	Terry Casto	No

Staff Present:

Virginia Barker, Brevard County Natural Resources Management Director
Christine Valliere, Brevard County Assistant County Attorney
Carol Gerundo, Executive Secretary
Walker Dawson, Engineer III, Muck Dredging
Courtney Maier, Engineer I, Stormwater
Anthony Gubler, Associate Environmental Specialist
Brandon Smith, Environmental Specialist
Crystal Melton, Fiscal Analyst
Matt Culver, Brevard County Boating & Waterways Program Coordinator

I. Call to Order

II. Roll Call

A quorum was established.

III. Approval of the Agenda

Lorraine Koss moved to approve the Agenda as written; Seconded by John Byron. Motion was unanimously approved.

IV. Approval of Minutes

Lorraine Koss moved to approve the July 20, 2018 Minutes as written; Seconded by John Byron. Motion was unanimously approved.

V. Monthly Progress and Fiscal Reports – Virginia Barker, Director

a. August 2018 Progress Report

The Monthly Progress and Fiscal Reports were given by Virginia Barker. Discussion ensued.

A video of the Mims Muck Dredging project was shown. Walker Dawson gave an update on the project. Discussion ensued.

The Committee's questions were answered by Virginia Barker and Walker Dawson.

i. Save Our Indian River Lagoon Project Performance Table

Virginia Barker mentioned that the Save Our Indian River Lagoon Project Performance Table that was presented to the Committee at the July meeting had been updated to include a summary section as requested. Discussion ensued.

The Committee's questions were answered by Virginia Barker and Brandon Smith.

ii. Save Our Indian River Lagoon Project Process Timeline

Item was discussed under Item V.a.i., Save Our Indian River Lagoon Project Performance Table.

b. Financial Statement and Revenue Graph

Virginia Barker gave an update on the Financial Statement and Revenue Graph. Discussion ensued.

The Committee's questions were answered by Virginia Barker.

VI. Other Reports and Special Presentations

a. A Day in the Life of the Indian River Lagoon, County-wide Public School Data Collection Event – Missy Weiss – S.E.A. a Difference Environmental Services Florida Coordinator for “A Day in the Life Program”

Missy Weiss gave a power point presentation on the S.E.A. a Difference Environmental Services “A Day in the Life Program”. Ms. Weiss informed the Committee about the event, “A Day in the Life of the Indian River Lagoon” which will take place on October 4, 2018. Discussion ensued.

The Committee's questions were answered by Missy Weiss.

b. Making Muck Pollution Visible in Sykes Creek – Dr. Beth Falls, Research Scientist, Ocean Research Conservation Association (ORCA)

Dr. Beth Falls, Research Scientist, gave a power point presentation on Making Muck Pollution Visible in Sykes Creek. Dr. Falls explained the process used for collecting samples to identify where pollution is accumulating, what it was, and identifying where it comes from so that it could be stopped at the source. Topics included study sites, field methods, compositing, laboratory analysis, statistical analysis and communication. Discussion ensued.

The Committee's questions were answered by Dr. Falls.

- c. **Mass Spectrometry Signatures in Indian River Lagoon Muck – Dr. Drew Palmer, Associate Professor, Florida Institute of Technology**
Dr. Drew Palmer, gave a power point presentation on Mass Spectrometry Signatures in Indian River Lagoon Muck. Discussion ensued.

The Committee's questions were answered by Dr. Palmer.

VII. New Business

- a. **Meeting Frequency and Proposed By Laws Change – John Byron**
John Byron submitted a document with proposed amendments to the Bylaws regarding meeting frequency, to be kept on file with the minutes and placed on the Agenda of the September Citizens Oversight Committee Meeting. Mr. Byron was proposing two motions which included a motion to change the Bylaws in September and a motion to be made if proposed Bylaws change is adopted in September.
- b. **Proposed 2019 Cost-share Eligibility by Project Type – Virginia Barker**
Virginia Barker informed the Committee about updates to the Eligible Cost Share per Pound of Total Nitrogen Removed by Project Type document. Virginia Barker explained the changes in cost for each project type which included: 1) Waste Water Treatment Facility Upgraded for Reclaimed Water; 2) Sewer Lateral Rehab Pilot; 3) Septic System Removal by Sewer Extension; 4) Septic System Removal by Sewer Connection; 5) Septic Systems Upgrades; 6) Muck Dredging; 7) Treatment of Muck Interstitial Water; 8) Oyster Reef/Living Shorelines; and 9) Planted Shorelines.

Changes in Stormwater Eligible Cost Share per Pound of Total Nitrogen Removed by Area were explained by Ms. Barker for the: 1) Mainland; 2) Merritt Island; and, 3) Barrier Island. Discussion ensued.

The Committee's questions were answered by Virginia Barker.

VIII. General Public Comment

Public comments were heard.

IX. Final Comments by Chair and Committee Members

Comments by Committee Members were heard.

X. Adjournment



Save Our Indian River Lagoon Project Plan September 2018 Progress Report

WORK COMPLETED THIS MONTH:

- Septic Ordinance Drafted, Public Forums held, “OSTDS Pollution Potential Analysis: Final Report”
- Brevard Zoo – Completed the Bomalaski Oyster Reef Construction completed
- Marine Resources Council –Completed the Lagoon House Living Shoreline Planting
- Executed contract with University of Central Florida for Oyster and Planted Shoreline Monitoring Services
- Muck Finders – Mullet Creek and Sykes Creek Phase II maps complete
- Post-Irma Turkey Creek dredging experimental ‘vacuum’ – sediment analysis completed, organics reduced
- Contract Performance Table and Project Process Timeline was updated
- Provided contracts, invoices and payment verification documents for internal financial audit

WORK UNDERWAY THIS MONTH:

- Permanent Septic Ordinance public hearings: Building Contractors Advisory Committee September 12th; Planning & Zoning Sept 17th; County Commission hearings on Sept 25th and October 9th
- Checking septic to sewer and septic upgrade priorities using model results from septic ordinance study
- Mims Muck Dredging and Outflow Treatment - dredging resumed, Florida Tech research underway
- Cocoa Beach - Muck Dredging contract is 40% complete
- Sykes Creek Muck Dredging – Negotiating Scope of Work for “Phase 1” using Kiwanis Island spoil site
- Muck Dredging Master Permit - initial seagrass and bathymetric survey work underway for Titusville
- Grand Canal Muck Dredging – Temporary Use Authorization Public Hearing on September 18th
- Mathers Bridge Area Muck Dredging – scoping expansion of data collection and project area
- Palm Bay - North Region Water Reclamation Facility – upgrade design is underway
- Titusville - St. Teresa & La Paloma – 90% design underway
- Titusville - South Street has entered procurement process
- Sykes Creek Zones M & T – Soil & groundwater surveying in progress
- Sykes N Septic-to-Sewer – Received 90% design; returned edits to engineer for amendments
- South Central C Septic-to-Sewer – Locations of lift stations approved by HOA; design underway
- Homeowner Grant Program – refining templates for septic to sewer, lateral repairs and septic upgrades
- Church Street Baffle Box contract under review
- Crane Creek M-1 Flow Restoration contract under review
- Huntington Pond, Flounder and Johns Rd Stormwater Projects - design underway
- Kingsmill-Aurora – appraisals complete, preparing Board request for approval of land purchase
- Grass Clippings Outreach Study underway
- Developing a Story Map of all Save Our Indian River Lagoon Project Plan projects to post on the website
- Assisting with “A Day in the Life of the Indian River Lagoon” event for Brevard Public Schools
- Creating Frequently Asked Questions document for website and social media responses
- “My Lagoon Story” videos with Citizens Oversight Committee members
- Living shoreline demonstration site video with Brevard Zoo
- Turkey Creek Collaborative video with Melbourne Tillman Water Control District and Palm Bay
- County Resolution Requesting State Assistance Investigating Per and Poly Fluoroalkyl Substance Pollution
- Working on fiscal year close out and preparing for new fiscal year start up



MEETINGS THIS MONTH:

August 17 – University of Central Florida Launch of its National Center for Integrated Coastal Research: Team
September 5 – A Day In the Life of the Indian River Lagoon Planning Meeting: Brandon
September 7 – Florida Stormwater Association Low Impact Development Seminar: Courtney
September 9 – Space Coast Progressive Alliance Presentation: Brandon
September 13 – Riverwalk Park Homeschool Supply Swap: Brandon
September 25 – Friends of St. Sebastian Presentation: Brandon

WEBSITE AND SOCIAL MEDIA LINKS:

Website: <http://www.brevardfl.gov/SaveOurLagoon>
Facebook: <https://www.facebook.com/BrevardCountySaveOurLagoon>;
Instagram: <https://www.instagram.com/saveourlagoon/>
YouTube: <https://goo.gl/GBh6xU>

UPCOMING LAGOON SCIENCE FORUMS AND PUBLIC EVENTS:

Coastal Cleanup – September 15, <https://oceanconservancy.org/trash-free-seas/international-coastal-cleanup/>
National Estuaries Week – September 15-22, <https://www.estuaries.org/national-estuaries-week>
Florida Institute of Technology – Indian River Lagoon Research Institute TechCon 2018, September 28, All Day
Marine Resources Council – Sea Grass Nursery Project Brown Bag Lunch, October 2, 2018, 12:00 pm – 1:00pm
2018 Lionfish Summit – October 2-4, Cocoa Beach; contact lionfish@myfwc.com
Sea A Difference – A Day In the Life of the Indian River Lagoon, October 4, <https://seadifference.org>
Sharing Our Research with Everyone (ShORE) Symposium, November 30, <http://www.daytonastate.edu/shore/>

UPCOMING VOLUNTEER PARTICIPATION OPPORTUNITIES:

Brevard Zoo Restore Our Shores – Adopt a Mangrove, September 26, October 9, 2018, Various Times
Marine Resources Council - Mangrove Workshop, October 6 & November 3, 2018, 9:30 am – 11:00 am
Lagoon Friendly Lawns – contact Kaylyn Palmer of Keep Brevard Beautiful at 321-631-0501
Fish Kill Response Cleanup: contact Desiree Lesko of Keep Brevard Beautiful at 321-631-0501
Muck Finders - contact Jared McNally, jared@mrcl.org, at the Marine Resources Council

FUTURE TOPICS FOR SPECIAL PRESENTATIONS:

1. Circulation Enhancement Opportunities for the Indian River Lagoon – Dr. Duane DeFreese, and Dr. Gary Zarillo
2. Collaboration with Tourism Development Tax Indian River Lagoon Grant Program
3. Re-use/Reclaimed Water – Nutrient Loading Impacts and Opportunities
4. Innovative Stormwater Treatment and Harvesting of Aquatic Weeds
5. Scientific Peer Review of the Save Our Indian River Lagoon Project Plan and Recommended Updates
6. Coordinating 10 years of Dredging and Spoil Management – Florida Inland Navigation District
7. Mechanical Dewatering of Muck
8. Indian River Lagoon Research News/TechCon, ShORE, and Harbor Branch Symposium Highlights
9. Lagoon Fish and Fisheries

Save Our Indian River Lagoon Performance Table

Responsible Entity	Project Name	Project Type	Grant Confirmation Notice Sent	Scope of Work Received	Contract Prepared	Executed By County	Executed By Grantee	Project Complete	Reimbursement Requested	Reimbursement Sent
Brevard County	Long Point Park Upgrade	Septic Upgrade							100.00%	100.00%
Brevard County	Denitrification Retrofit of Johns Rd Pond (Engineering)	Stormwater Traditional							15.21%	15.21%
Brevard County	Denitrification Retrofit of Johns Rd Pond (Construction)	Stormwater Traditional		Expected Fiscal Year 2018/19						
Brevard County	Kingsmill-Aurora Phase 2 of 2 (Land Acquisition)	Stormwater Traditional								
Brevard County	Kingsmill-Aurora Phase 2 of 2 (Engineering)	Stormwater Traditional								
Brevard County	Kingsmill-Aurora Phase 2 of 2 (Construction)	Stormwater Traditional		Expected Fiscal Year 2020/21						
Brevard County	Denitrification Retrofit of Huntington Pond (Engineering)	Stormwater Traditional							3.54%	3.54%
Brevard County	Denitrification Retrofit of Huntington Pond (Construction)	Stormwater Traditional		Expected Fiscal Year 2018/19						
Brevard County	Denitrification Retrofit of Flounder Creek Pond (Engineering)	Stormwater Traditional							26.45%	26.45%
Brevard County	Denitrification Retrofit of Flounder Creek Pond (Construction)	Stormwater Traditional		Expected Fiscal Year 2018/19						
Brevard County	Mims Muck Removal: Outflow Water Nutrient Removal (Engineering)	Muck Removal & Interstitial Treatment								
Brevard County	Mims Muck Removal: Outflow Water Nutrient Removal (Construction)	Muck Removal & Interstitial Treatment		Expected Fiscal Year 2018/19						

Responsible Entity	Project Name	Project Type	Grant Confirmation Notice Sent	Scope of Work Received	Contract Prepared	Executed By County	Executed By Grantee	Project Complete	Reimbursement Requested	Reimbursement Sent
Brevard County	Grand Canal Muck Dredging (Engineering)	Muck Removal & Interstitial Treatment								
Brevard County	Grand Canal Muck Dredging (Construction)	Muck Removal & Interstitial Treatment		Expected Fiscal Year 2018/19						
Brevard County	Sykes Creek Muck Dredging (Engineering)	Muck Removal & Interstitial Treatment								
Brevard County	Sykes Creek Muck Dredging (Construction)	Muck Removal & Interstitial Treatment		Expected Fiscal Year 2019/20						
Brevard County	Muck Re-dredging in Turkey Creek (Engineering)	Muck Removal & Interstitial Treatment							included below	included below
Brevard County	Muck Re-dredging in Turkey Creek (Construction)	Muck Removal & Interstitial Treatment							60.38%	60.38%
Brevard County	Muck Interstitial Water Treatment for Turkey Creek	Muck Removal & Interstitial Treatment							included above	included above
Brevard County	Merritt Island Muck Removal, Phase 1 of 2 (Engineering)	Muck Removal & Interstitial Treatment		Expected Fiscal Year 2018/19						
Brevard County	Merritt Island Muck Removal, Ph 1 of 2 (Construction)	Muck Removal & Interstitial Treatment		Expected Fiscal Year 2018/19						
Brevard County	Titusville Area Muck Removal, (Engineering)	Muck Removal & Interstitial Treatment							0.14%	0.14%
Brevard County	Titusville Area Muck Removal (Construction)	Muck Removal & Interstitial Treatment		Expected Fiscal Year 2018/19						

Responsible Entity	Project Name	Project Type	Grant Confirmation Notice Sent	Scope of Work Received	Contract Prepared	Executed By County	Executed By Grantee	Project Complete	Reimbursement Requested	Reimbursement Sent
Brevard County	Eau Gallie Area Muck Dredging (Engineering)	Muck Removal & Interstitial Treatment							0.15%	0.15%
Brevard County	Eau Gallie Area Muck Dredging (Construction)	Muck Removal & Interstitial Treatment		Expected Fiscal Year 2018/19						
Brevard County	Sewer Lateral Replacement Repair - Sat. Bch Pilot (Engineering)	Sewer Upgrades								
Brevard County	Sewer Lateral Replacement Repair - Sat. Bch Pilot (Construction)	Sewer Upgrades		Expected Fiscal Year 2018/19						
Brevard County	Sykes Creek - Zone N (Engineering)	Septic Removal							1.12%	1.12%
Brevard County	Sykes Creek - Zone N (Construction)	Septic Removal		Expected Fiscal Year 2018/19						
Brevard County	Sykes Creek - Zone M (Engineering)	Septic Removal							0.55%	0.55%
Brevard County	Sykes Creek - Zone M (Construction)	Septic Removal		Expected Fiscal Year 2019/20						
Brevard County	Sykes Creek - Zone T (Engineering)	Septic Removal							0.47%	0.47%
Brevard County	South Central - Zone C (Engineering)	Septic Removal								
Brevard County	Micco Sewer Line Extension (Engineering)	Septic Removal							10.56%	10.56%
Brevard County	Micco Sewer Line Extension (Construction)	Septic Removal		Expected Fiscal Year 2018/19						
Brevard County	Riverview Senior Resort (Engineering)	Living Shoreline - Oyster							included below	included below
Brevard County	Riverview Senior Resort (Construction)	Living Shoreline - Oyster							50.00%	50.00%
Brevard County	Marsh Harbor (Engineering)	Living Shoreline - Oyster		Expected Fiscal Year 2018/19						

Responsible Entity	Project Name	Project Type	Grant Confirmation Notice Sent	Scope of Work Received	Contract Prepared	Executed By County	Executed By Grantee	Project Complete	Reimbursement Requested	Reimbursement Sent
Brevard County	Marsh Harbor (Construction)	Living Shoreline - Oyster		Expected Fiscal Year 2018/19						
Brevard County	Indian River Drive (Engineering)	Living Shoreline - Oyster		Expected Fiscal Year 2018/19						
Brevard County	Indian River Drive (Construction)	Living Shoreline - Oyster		Expected Fiscal Year 2018/19						
Brevard Zoo	Eden Isles Lane	Living Shoreline - Oyster		Expected Fiscal Year 2018/19						
Brevard Zoo	Marina Isles	Living Shoreline - Oyster		Expected Fiscal Year 2018/19						
Brevard Zoo	Bettinger	Living Shoreline - Oyster		Expected Fiscal Year 2018/19						
Brevard Zoo	Gitlin	Living Shoreline - Oyster		Expected Fiscal Year 2018/19						
Brevard Zoo	Coconut Pt/EELS	Living Shoreline - Oyster		Expected Fiscal Year 2018/19						
Brevard Zoo	Wexford	Living Shoreline - Oyster		Expected Fiscal Year 2018/19						
Brevard Zoo	Bomalaski	Living Shoreline - Oyster								
Brevard Zoo	Oliver	Living Shoreline - Oyster		Expected Fiscal Year 2018/19						
Cape Canaveral	Cocoa Palms LID	Stormwater Traditional		Expected Fiscal Year 2017/2018						
Cape Canaveral	Carver Cover Swales	Stormwater Traditional		Expected Fiscal Year 2017/2018						
Cape Canaveral	Central Blvd Baffle Box	Stormwater Traditional							100.00%	100.00%
Cape Canaveral	Cape Shores Swales	Stormwater Traditional		Expected Fiscal Year 2018/19						
Cape Canaveral	Justamere Rd. Swale	Stormwater Traditional		Expected Fiscal Year 2018/19						

Responsible Entity	Project Name	Project Type	Grant Confirmation Notice Sent	Scope of Work Received	Contract Prepared	Executed By County	Executed By Grantee	Project Complete	Reimbursement Requested	Reimbursement Sent
Cape Canaveral	Hitching Post Berms	Stormwater Traditional		Expected Fiscal Year 2018/19						
Cocoa	Church Street Type II Baffle Box	Stormwater Traditional								
Cocoa Beach	Stormwater LID Convair Cove 1 Blakey Blvd	Stormwater Traditional		Expected Fiscal Year 2018/19						
Cocoa Beach	Stormwater LID Convair Cove 2 Demsey Drive	Stormwater Traditional		Expected Fiscal Year 2018/19						
Cocoa Beach	Cocoa Beach Muck Dredging-Phase III	Muck Removal & Interstitial Treatment							12.82%	12.82%
Cocoa Beach	Cocoa Beach Muck Dredging-Phase III Interstitial	Muck Removal & Interstitial Treatment		Expected Fiscal Year 2018/19						
Cocoa Beach	McNabb Park	Living Shoreline - Oyster		Expected Fiscal Year 2018/19						
Cocoa Beach	McNabb Park - Plants	Living Shoreline - Plants		Expected Fiscal Year 2018/19						
Indian Harbour Beach	Gleason Park Reuse	Stormwater Traditional							100.00%	100.00%
Indian Harbour Beach	Muck Removal of IHB Canals	Muck Removal & Interstitial Treatment		Expected Fiscal Year 2018/19						
Indian Harbour Beach	Muck Interstitial Water Treatment for IHB Canals	Muck Removal & Interstitial Treatment		Expected Fiscal Year 2018/19						
Indian Harbour Beach	Big Muddy @ Cynthia Baffle Box	Stormwater Traditional		Expected Fiscal Year 2018/19						
Marine Resources Council	Grass Clippings Campaign	Education Outreach								

Responsible Entity	Project Name	Project Type	Grant Confirmation Notice Sent	Scope of Work Received	Contract Prepared	Executed By County	Executed By Grantee	Project Complete	Reimbursement Requested	Reimbursement Sent
Marine Resources Council	Cocoa Beach Country Club	Living Shoreline - Plants							100.00%	100.00%
Marine Resources Council	Lagoon House Shoreline Restoration Planting	Living Shoreline - Plants								
Melbourne	Hoag Sewer Conversion	Septic Removal								
Melbourne	Pennwood Sewer Conversion	Septic Removal								
Melbourne	Cliff Creek Baffle Box	Stormwater Traditional								
Melbourne	Thrush Drive Baffle Box	Stormwater Traditional								
Melbourne	Stewart Road Dry Retrofit	Stormwater Traditional		Expected Fiscal Year 2018/19						
Melbourne	Riverside Drive Septic Removal Conversion	Septic Removal		Expected Fiscal Year 2018/19						
Melbourne	Riverview Park	Living Shoreline - Oyster		Expected Fiscal Year 2018/19						
Melbourne	Riverview Park	Living Shoreline - Plants		Expected Fiscal Year 2018/19						
Melbourne	Septic Removal Melbourne	Septic Removal		Expected Fiscal Year 2019/20						
Merritt Island	Merritt Island Septic Removal Phase 1 of 2	Septic Removal							5.61%	5.61%
Merritt Island	Merritt Island Septic Removal Phase 2 of 2	Septic Removal								
Palm Bay	Bayfront Stormwater Project	Stormwater Traditional							100.00%	100.00%
Palm Bay	Turkey Creek Shoreline Restoration	Living Shoreline		Expected Fiscal Year 2018/19						

Responsible Entity	Project Name	Project Type	Grant Confirmation Notice Sent	Scope of Work Received	Contract Prepared	Executed By County	Executed By Grantee	Project Complete	Reimbursement Requested	Reimbursement Sent
Palm Bay	North Region WRF	WWTF Upgrades							0.24%	0.24%
Palm Bay	Septic Removal - Palm Bay near sewer	Septic Removal		Expected Fiscal Year 2018/19						
Palm Bay	Septic Removal - Palm Bay B	Septic Removal		Expected Fiscal Year 2018/19						
Rockledge	Breeze Swept Septic Removal	Septic Removal							100.00%	100.00%
SJRWMD	Crane Creek/M-1 Canal Flow Restoration	Stormwater Traditional		Expected Fiscal Year 2018/19						
Titusville	St. Teresa Basin Treatment	Stormwater Traditional								
Titusville	South St. Basin Treatment	Stormwater Traditional								
Titusville	La Paloma Basin Treatment	Stormwater Traditional								
Titusville	Osprey WWTF	WWTF Upgrades								
West Melbourne	Sylvan Estates Septic Removal Conversion	Septic Removal								

Previous Month Grant Confirmation Notice Sent Total	Previous Month Scope of Work Received Total	Previous Month Contract Prepared Total	Previous Month Executed By County Total	Previous Month Executed by Grantee Total	Previous Month Project Complete Total	Previous Month Reimbursement Requested Total	Previous Month Reimbursement Sent Total
137	59	57	56	55	14	11	9

Current Month Grant Confirmation Notice Sent Total	Current Month Scope of Work Received Total	Current Month Contract Prepared Total	Current Month Executed By County Total	Current Month Executed by Grantee Total	Current Month Project Complete Total	Current Month Reimbursement Requested Total	Current Month Reimbursement Sent Total
137	62	61	59	59	16	23	23

Save Our Indian River Lagoon - FY 2018

Financial Statement as of 13 September 2018

Fund 1260

*Total Assigned YTD-Year to Date, includes all stages of accounting for expenditures, with data derived from Systems, Applications and Products program; **Contracted with Municipalities data is derived from Contract Management System; ***Reimbursement requests expected in later fiscal years; SOIRL-Save Our Indian River Lagoon; CM-Contract Management System; BRL-Banana River Lagoon; NIRL-North Indian River Lagoon; CIRL-Central Indian River Lagoon

Revenues

Commodity	Budget	Total Assigned YTD*	% Earned
Taxes	\$ 45,126,979	\$ 35,337,287	78.31%
Interest Earned	\$ 401,251	\$ 543,159	135.37%
Insurance Claims		\$ 224	
Federal Grants	\$ 1,357,269	\$ -	
State Grants	\$ 226,212	\$ -	
Cost Sharing - SJRWMD	\$ 678,730	\$ -	
Statutory Reduction	\$ (2,389,524)	\$ -	
Balance Forward	\$ 31,883,823	\$ 31,883,823	
Total	\$ 77,284,740	\$ 67,764,492	

Expenditures (Roll-Up)

Commodity	Budget	Total Assigned YTD*	Actuals
Compensation & Benefits	\$ 456,636	\$ 377,653	\$ 342,362
Operating Expenses	\$ 98,944	\$ 53,840	\$ 69,615
Operating Expenses - Available now for YEAR 2 & 3 Design & Permitting	\$ 2,827,037	\$ -	\$ -
Capital Outlay	\$ 5,600	\$ 5,467	\$ 5,467
Transfers	\$ -	\$ -	\$ -
SOIRL Projects funded under Operating Expenses	\$ 3,883,000	\$ 553,058	\$ 105,526
SOIRL Projects funded under Capital Improvement	\$ 23,757,735	\$ 3,231,538	\$ 1,363,087
SOIRL Projects funded under Aid to Gov't Agencies	\$ 25,016,643	\$ 2,111,019	\$ 1,145,154
SOIRL Projects funded under Aid to Private Organizations	\$ 716,905	\$ 48,980	\$ 16,080
A1-Contingency	\$ 2,997,322	\$ -	\$ -
Reserves	\$ 17,524,918	\$ -	\$ -
Total	\$ 77,284,740	\$ 6,381,556	\$ 3,047,292

*Total Assigned YTD-Year to Date, includes all stages of accounting for expenditures, with data derived from Systems, Applications and Products program; **Contracted with Municipalities data is derived from Contract Management System; ***Reimbursement requests expected in later fiscal years; SOIRL-Save Our Indian River Lagoon; CM-Contract Management System; BRL-Banana River Lagoon; NIRL-North Indian River Lagoon; CIRL-Central Indian River Lagoon

SOIRL Projects

Project Title SOIRL Projects funded under Operating Expenses	Contracted**	Budget	Total Assigned YTD*	Actuals
1-Project Monitoring (Respond) CM's: 3972, 3971, 3959, 3690, 3979, 3973, 4047	\$ 402,097	\$ 1,000,000	\$ 522,658	\$ 101,670
1-Community Awareness Initiatives	\$ 10,400	\$ 25,000	\$ 10,400	\$ 3,856
1-Fertilizer Management Public Education	\$ -	\$ 125,000	\$ -	\$ -
A1-Grass Clippings Public Education CM-3969	\$ 20,000	\$ 20,000	\$ 20,000	\$ -
A1-Excess Irrigation Public Education	\$ -	\$ 75,000	\$ -	\$ -
A1-Stormwater Pond Maintenance Public Education	\$ -	\$ 75,000	\$ -	\$ -
A1-Septic System Maintenance Public Education	\$ -	\$ 75,000	\$ -	\$ -
1-Septic Upgrades-BRL-24 Upgrades	\$ -	\$ 384,000	\$ -	\$ -
1-Septic Upgrades-NIRL-35 Upgrades	\$ -	\$ 560,000	\$ -	\$ -
1-Septic Upgrades-CIRL- 44 Upgrades	\$ -	\$ 704,000	\$ -	\$ -
A1-Sewer Laterals Pilot Project	\$ -	\$ 840,000	\$ -	\$ -
<i>SOIRL Projects funded under Operating Expenses Subtotal</i>	<i>\$ 432,497</i>	<i>\$ 3,883,000</i>	<i>\$ 553,058</i>	<i>\$ 105,526</i>

*Total Assigned YTD-Year to Date, includes all stages of accounting for expenditures, with data derived from Systems, Applications and Products program; **Contracted with Municipalities data is derived from Contract Management System; ***Reimbursement requests expected in later fiscal years; SOIRL-Save Our Indian River Lagoon; CM-Contract Management System; BRL-Banana River Lagoon; NIRL-North Indian River Lagoon; CIRL-Central Indian River Lagoon

SOIRL Projects

Project Title SOIRL Projects funded under Capital Improvement	Contracted**	Budget	Total Assigned YTD*	Actuals
0-Septic Removal-BRL-Sykes Creek M CM-3838	\$ 200,000	\$ 200,000	\$ 200,000	\$ 6,400
0-Septic Removal-BRL-Sykes Creek T CM-3839	\$ 300,000	\$ 300,000	\$ 300,000	\$ 13,000
0/1-Septic Removal-NIRL-South Central C CM-3840	\$ 450,000	\$ 2,640,000	\$ 420,755	\$ -
S0-Septic Removal-CIRL-Micco Sewer Line Extension CM-3831, CM-3709	\$ 196,980	\$ 1,391,316	\$ 196,980	\$ 124,280
S0-Septic Removal-CIRL-Micco Sewer Line Extension SJRWMD CM-3678	\$ 644,793	\$ 644,793	\$ -	\$ -
1-Septic Removal-BRL-Sykes Creek N CM-3830	\$ 38,529	\$ 1,720,000	\$ 38,592	\$ 19,318
0-Muck Removal-NIRL-Mims Outflow CM-3832 ***	\$ 100,000	\$ 100,000	\$ 100,000	\$ -
1-Muck Removal-NIRL-Grand Canal Muck Dredging	\$ -	\$ 4,000,000	\$ -	\$ -
1-Muck Removal-NIRL-Eau Gallie Muck Dredging CM-3975	\$ 52,055	\$ 3,640,000	\$ 52,055	\$ 35,586
1-Muck Removal-BRL-Sykes Creek Muck Dredging CM-3833	\$ 200,000	\$ 4,000,000	\$ -	\$ -
A1-Muck Removal-CIRL-Turkey Creek Muck Dredging CM-3966, 3967	\$ 1,719,207	\$ 1,719,207	\$ 1,719,207	\$ 1,038,510
A1-Muck Removal-BRL-Merritt Island Muck Dredging Phase I	\$ -	\$ 1,936,415	\$ -	\$ -
A1-Muck Removal-NIRL-Titusville Muck Dredging CM-3975	\$ 52,055	\$ 200,000	\$ 52,055	\$ 35,586
A1-Muck Removal-IRL-Melbourne Causeway Muck Dredging CM-3975	\$ 52,055	\$ 200,000	\$ 52,055	\$ 35,586
S0-Stormwater Projects-NIRL-Huntington Pond Denitrification CM-4015	\$ 18,205	\$ 104,720	\$ 18,205	\$ 3,702
S0-Stormwater Projects-NIRL-Flounder Creek Pond CM-3907	\$ 27,040	\$ 75,328	\$ 27,040	\$ 19,923
S0-Stormwater Projects-NIRL-John Roads Pond CM-3906	\$ 24,290	\$ 105,512	\$ 24,290	\$ 16,045
S0-Kingsmill-Aurora Phase II ***	\$ -	\$ -	\$ -	\$ -

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SOIRL Projects

Project Title SOIRL Projects funded under Capital Improvement Cont'd	Contracted**	Budget	Total Assigned YTD*	Actuals
1-Basin 989 Denitrification	\$ -	\$ 100,000	\$ -	\$ -
1-Basin 1071 Denitrification	\$ -	\$ 100,000	\$ -	\$ -
1-Basin 1172 Denitrification	\$ -	\$ 100,000	\$ -	\$ -
1-Basin 1222 Denitrification	\$ -	\$ 100,000	\$ -	\$ -
1-Basin 1318 Denitrification	\$ -	\$ 100,000	\$ -	\$ -
1-Oyster Reef Living Shoreline-BRL-Marsh Harbor	\$ -	\$ 47,350	\$ -	\$ -
1-Oyster Reef Living Shoreline-CIRL-Riverview Senior Resort CM-3806	\$ 30,400	\$ 30,304	\$ 30,304	\$ 15,152
1-Oyster Reef Living Shoreline-NIRL-Indian River Drive	\$ -	\$ 179,930	\$ -	\$ -
A1-Plants Living Shoreline-NIRL-Indian River Drive	\$ -	\$ 22,860	\$ -	\$ -
<i>SOIRL Projects funded under Capital Improvement Subtotal</i>	<i>\$ 4,105,609</i>	<i>\$ 23,757,735</i>	<i>\$ 3,231,538</i>	<i>\$ 1,363,087</i>

SOIRL Projects

Project Title SOIRL Projects funded under Aid to Gov't Agencies	Contracted**	Budget	Total Assigned YTD*	Actuals
0-Waste Water Treatment Facility Upgrades-NIRL-Titusville Osprey CM-3627	\$ 300,000	\$ 2,000,000	\$ 300,000	\$ -
1-Waste Water Treatment Upgrade-CIRL-Palm Bay CM-3934	\$ 200,000	\$ 200,000	\$ 200,000	\$ 3,348
A1-Muck Removal-BLR-Cocoa Beach Phase III Muck Dredging & Interstitial CM-3986	\$ 490,653	\$ 1,496,114	\$ 490,653	\$ 191,728
A1-Muck Removal-BLR-Indian Harbour Beach Muck Dredging & Interstitial	\$ -	\$ 5,707,768	\$ -	\$ -
S0-Septic Removal-NIRL-Rockledge Breeze Swept CM-3690	\$ 880,530	\$ 880,530	\$ 880,530	\$ 880,530
S0-Septic Removal-NIRL-MIRA	\$ 211,438	\$ 211,438	\$ -	\$ -
S0-Septic Removal-CIRL-Melbourne-Hoag Sewer Conversion CM-3932 ***	\$ 86,061	\$ 86,031	\$ -	\$ -

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SOIRL Projects

Project Title SOIRL Projects funded under Aid to Gov't Agencies Cont'd	Contracted**	Budget	Total Assigned YTD*	Actuals
S0-Septic Removal-CIRL-Melbourne-Penwood Sewer Conversion CM-3789	\$ 40,632	\$ 40,632	\$ 40,632	\$ -
1-Septic Removal-CIRL-Palm Bay B	\$ -	\$ 4,700,000	\$ -	\$ -
1-Septic Removal-CIRL-Palm Bay Sewer Hook-Ups	\$ -	\$ 7,764,000	\$ -	\$ -
A1-Septic to Sewer-CIRL-Melbourne-Riverside Drive	\$ -	\$ 265,960	\$ -	\$ -
S0-Stormwater Project-BRL-Cape Canaveral-Cocoa Palms LID	\$ -	\$ 1,144	\$ -	\$ -
S0-Stormwater Project-BRL-Cape Canaveral-Carver Cove Swale	\$ -	\$ 2,816	\$ -	\$ -
S0-Stormwater Project-BRL-Cape Canaveral-Central Blvd Baffle Box CM-3683	\$ 34,700	\$ 34,700	\$ 34,700	\$ 34,700
S0-Stormwater Project-BRL-Indian Harbor-Gleason Park Reuse CM-3751	\$ 4,224	\$ 4,224	\$ 4,224	\$ 4,224
S0-Stormwater Project-NIRL-Cocoa-Church St Type II Baffle Box	\$ -	\$ 20,856	\$ -	\$ -
S0-Stormwater Project-CIRL-Palm Bay-Bayfront CM- 3784	\$ 30,624	\$ 30,624	\$ 30,624	\$ 30,624
S0-Stormwater Projects-BRL-Cape Canaveral Projects-Cape Shores Swale	\$ -	\$ 2,746	\$ -	\$ -
S0-Stormwater Projects-BRL-Cape Canaveral Projects-Justamere Road Swale	\$ -	\$ 528	\$ -	\$ -
S0-Stormwater Projects-BRL-Cape Canaveral Projects-Hitching Post Berms Swale	\$ -	\$ 2,552	\$ -	\$ -
S0-Stormwater Projects-NIRL-Titusville-St Teresa Basin CM-3929	\$ 322,200	\$ 272,800	\$ 42,800	\$ -
S0-Stormwater Projects-NIRL-Titusville-South Street Basin CM-3908	\$ 86,856	\$ 86,856	\$ 86,856	\$ -
S0-Stormwater Projects-NIRL-Titusville-La Paloma Basin CM-3933 ***	\$ 208,296	\$ 208,296	\$ -	\$ -
S0-Stormwater Projects-NIRL-Melbourne-Cliff Creek Baffle Box CM-3931 ***	\$ 347,781	\$ 347,781	\$ -	\$ -
S0-Stormwater Projects-NIRL-Melbourne-Thrush Drive Baffle Box CM-3930 ***	\$ 322,200	\$ 322,200	\$ -	\$ -

*Total Assigned YTD-Year to Date, includes all stages of accounting for expenditures, with data derived from Systems, Applications and Products program; **Contracted with Municipalities data is derived from Contract Management System; ***Reimbursement requests expected in later fiscal years; SOIRL-Save Our Indian River Lagoon; CM-Contract Management System; BRL-Banana River Lagoon; NIRL-North Indian River Lagoon; CIRL-Central Indian River Lagoon

SOIRL Projects

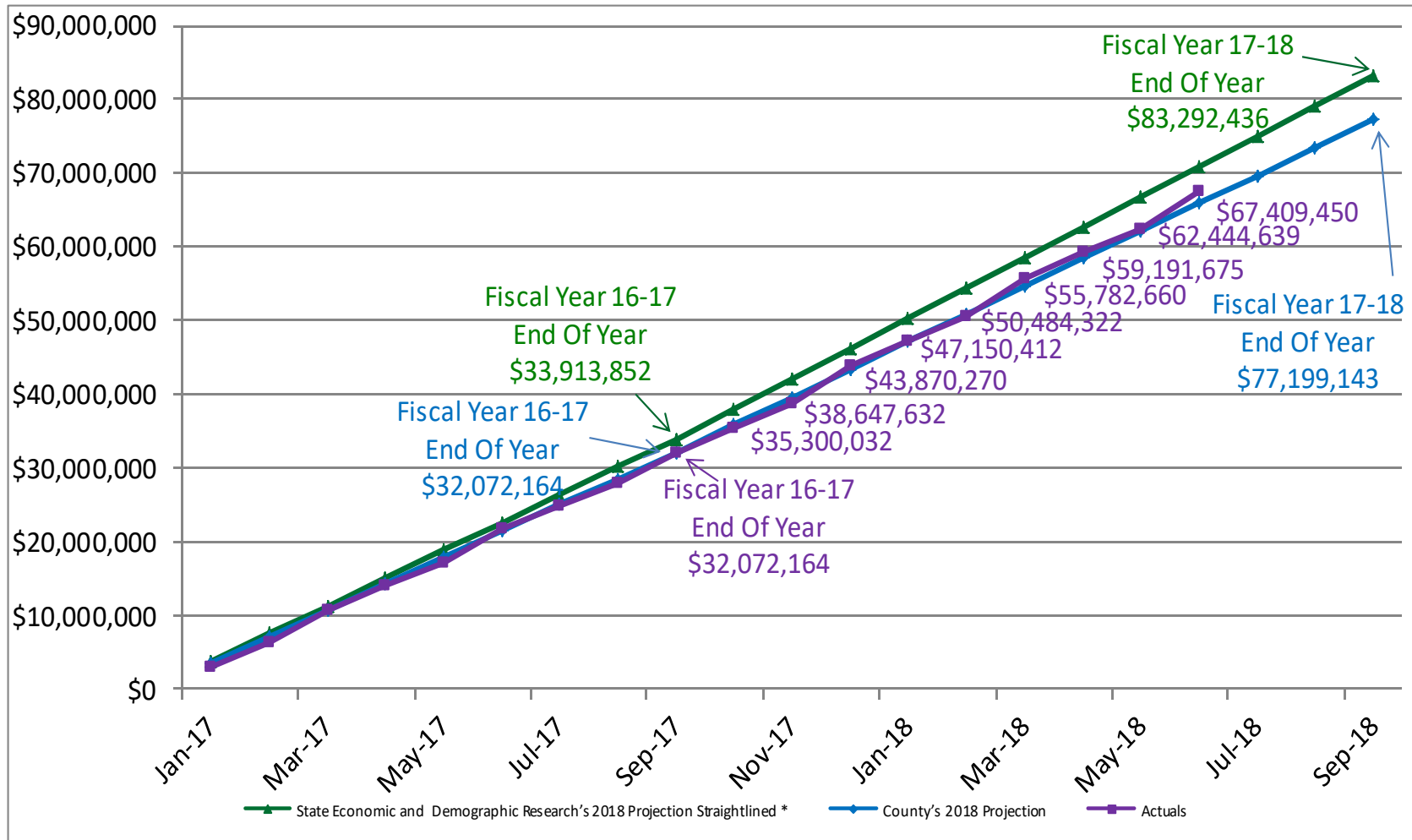
Project Title SOIRL Projects funded under Aid to Gov't Agencies Cont'd	Contracted**	Budget	Total Assigned YTD*	Actuals
S0-Stormwater Projects-CIRL-Melbourne-Stewart Rd Dry Retrofit	\$ -	\$ 18,344	\$ -	\$ -
A1-Stormwater Project-BRL-Indian Harbour Beach-Big Muddy Baffle Box	\$ -	\$ 26,637	\$ -	\$ -
S0-Oyster/Living Shorelines-CIRL-Palm Bay-Turkey Creek Shoreline Restoration	\$ -	\$ 113,500	\$ -	\$ -
A1-Oyster/Living Shorelines-BRL-Cocoa Beach-McNabb	\$ -	\$ 34,056	\$ -	\$ -
A1-Plants/Living Shorelines-BRL-Cocoa Beach-McNabb	\$ -	\$ 5,760	\$ -	\$ -
A1-Oyster/Living Shorelines-NIRL-Melbourne-Riverview Park	\$ -	\$ 108,970	\$ -	\$ -
A1-Plants/Living Shorelines-NIRL-Melbourne-Riverview Park	\$ -	\$ 18,480	\$ -	\$ -
<i>SOIRL Projects funded under Aid to Gov't Agencies Subtotal</i>	<i>\$ 3,566,195</i>	<i>\$ 25,016,343</i>	<i>\$ 2,111,019</i>	<i>\$ 1,145,154</i>

*Total Assigned YTD-Year to Date, includes all stages of accounting for expenditures, with data derived from Systems, Applications and Products program; **Contracted with Municipalities data is derived from Contract Management System; ***Reimbursement requests expected in later fiscal years; SOIRL-Save Our Indian River Lagoon; CM-Contract Management System; BRL-Banana River Lagoon; NIRL-North Indian River Lagoon; CIRL-Central Indian River Lagoon

SOIRL Projects

Project Title SOIRL Projects funded under Aid to Private Organizations	Contracted**	Budget	Total Assigned YTD*	Actuals
A1-Oyster/Living Shorelines-BRL-Zoo-Merritt Island-Eden Isles Lane	\$ -	\$ 21,805	\$ -	\$ -
A1-Oyster/Living Shorelines-BRL-Zoo-Indian Harbour Beach-Marina Isles	\$ -	\$ 26,700	\$ -	\$ -
A1-Oyster/Living Shorelines-BRL-Zoo-Cocoa Beach-Bettinger	\$ -	\$ 10,680	\$ -	\$ -
A1-Oyster/Living Shorelines-BRL-Zoo-Gitlin	\$ -	\$ 16,020	\$ -	\$ -
A1-Oyster/Living Shorelines-NIRL-Zoo-Merritt Island-Bomalaski CM-4005	\$ 8,900	\$ 8,900	\$ 8,900	\$ -
A1-Oyster/Living Shorelines-NIRL-Zoo-Merritt Island-Oliver	\$ -	\$ 51,620	\$ -	\$ -
A1-Oyster/Living Shorelines-CIRL-Zoo-Coconut Point/EELS	\$ -	\$ 509,950	\$ -	\$ -
A1-Oyster/Living Shorelines-CIRL-Zoo-Melbourne Beach-Wexford	\$ -	\$ 31,150	\$ -	\$ -
A1-Plants/Living Shorelines-BRL-MRC-Cocoa Beach Country Club CM-4002	\$ 16,080	\$ 16,080	\$ 16,080	\$ 16,080
A1-Plants/Living Shorelines-CIRL-MRC-Lagoon House CM-4003	\$ 24,000	\$ 24,000	\$ 24,000	\$ -
<i>SOIRL Projects funded under Aid to Private Organizations</i>	\$ 48,980	\$ 716,905	\$ 48,980	\$ 16,080
SOIRL Projects Total	\$ 8,153,281	\$ 53,373,983	\$ 5,944,595	\$ 2,629,848

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



* 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

- For Screen Readers use the Save Our Indian River Lagoon Revenues Cumulative Fiscal Year 16-17 to Current Fiscal Year Table

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

Date	State Economic and Demographic Research's 2018 Projection Straightlined *	County's 2018 Projection	Actuals
17-Jan	\$3,768,206	\$3,563,574	\$3,059,013
17-Feb	\$7,536,412	\$7,127,148	\$6,217,230
17-Mar	\$11,304,617	\$10,690,721	\$10,686,395
17-Apr	\$15,072,823	\$14,254,295	\$13,941,510
17-May	\$18,841,029	\$17,817,869	\$17,177,137
17-Jun	\$22,609,235	\$21,381,443	\$21,754,009
17-Jul	\$26,377,441	\$24,945,016	\$24,898,729
17-Aug	\$30,145,647	\$28,508,590	\$27,890,034
17-Sep	\$33,913,852	\$32,072,164	\$32,072,164
17-Oct	\$38,028,734	\$35,832,746	\$35,300,032
17-Nov	\$42,143,616	\$39,593,327	\$38,647,632
17-Dec	\$46,258,498	\$43,353,909	\$43,870,270
18-Jan	\$50,373,380	\$47,114,490	\$47,150,412
18-Feb	\$54,488,262	\$50,875,072	\$50,484,322
18-Mar	\$58,603,144	\$54,635,653	\$55,782,660
18-Apr	\$62,718,026	\$58,396,235	\$59,191,675
18-May	\$66,832,908	\$62,156,817	\$62,444,639
18-Jun	\$70,947,790	\$65,917,398	\$67,409,450
18-Jul	\$75,062,672	\$69,677,980	
18-Aug	\$79,177,554	\$73,438,561	
18-Sep	\$83,292,436	\$77,199,143	

*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

Motion to change the Bylaws (September)

I move to amend the Bylaws to state that the Committee holds regular meetings at least every two months, the Bylaws language to be modified as follows:

ARTICLE V. OVERSIGHT COMMITTEE MEETINGS

Section 1. The Oversight Committee holds regular ~~monthly~~ meetings ~~at least every two months~~ on dates it sets in coordination with the Natural Resources Management Director. Special meetings may be held at the call of the Natural Resources Management Director or upon request of the Chair plus two members of the Oversight Committee. Meetings may be extended beyond three hours' duration only by vote of the Oversight Committee at that meeting.

Motion to be made if proposed Bylaws change is adopted (September)

I move that the Committee adopt the following schedule of meetings:

- Regular meetings every month
 - January, March, May, July, September, and November
 - Agenda as specified in Bylaws
- Special meetings per Bylaws
- Tentative meeting themes (Chair & staff may adjust themes):
 - January – Recommend Annual Plan Update
 - March – Election of Officers; final details on annual Lagoon Project Plan Update (if needed)
 - May – Special Topics & Presentations (potential to expand to a full-day workshop)
 - July – Cost Effectiveness Performance Review & Cost Share Update
 - September – Approval of topics to be addressed in the next Lagoon Project Plan Update
 - November – Review and Recommendation of Project Funding Requests
- Monthly Progress & Fiscal Reports
 - Posted online, emailed to Committee in off-months

Eligible Cost Share per Pound of Total Nitrogen Removed by Project Type

Project Type	2018 Eligible Cost/lb/yr of Total Nitrogen	2019 Eligible Cost/lb/yr of Total Nitrogen
Waste Water Treatment Facility Upgrades for Reclaimed Water	\$231	\$300
Sewer Lateral Rehab Pilot		\$850
Septic System Removal by Sewer Extension	\$872	\$1,455
Septic System Removal by Sewer Connection	\$443	\$443
Septic System Upgrades	\$802	\$802
Muck Removal	\$403	\$1,609
Treatment of Muck Interstitial Water	\$175	\$200
Oyster Reef/Living Shorelines	\$473	\$395
Planted Shorelines		\$240

Stormwater Eligible Cost Share per Pound of Total Nitrogen Removed by Area

Area	2018 Eligible Cost/lb/yr of Total Nitrogen	2019 Eligible Cost/lb/yr of Total Nitrogen
Mainland	\$88	\$94
Merritt Island	\$89	\$177
Barrier Island	\$99	\$155



TO: Save Our Indian River Lagoon Citizen Oversight Committee

THROUGH: Virginia Barker, Director, Brevard County Natural Resources Management

FROM: Anthony Gubler, Associate Environmental Specialist

DATE: 9/21/18

SUBJECT: Update on Private Sewer Lateral Smoke Testing

The final South Beaches Phase 1 Smoke Testing Report, which encompasses the City of Satellite Beach, has been released. This is the first of many phases of smoke testing to occur in the Brevard County Utilities service area. The upcoming second phase will report on testing within South Patrick Shores and Indian Harbour Beach. Future phases of smoke testing are scheduled to continue during the dry season.

Phase 1 found 99 deficiencies within the 5,165 properties tested. The report also recommends adding 364 manhole inserts to prevent additional inflow. The contractor estimates repair costs at \$387,500 for all deficiencies and the recommended inserts.

Deficiency Type	Number	Cost	Million Gallons in 1-hour	Million Gallons in 24-hours
Manhole Inserts	364	\$91,000	0.007	0.157
Cleanout	87	\$174,000	0.036	0.853
Lateral	9	\$90,000	0.003	0.070
Gravity Sewer	2	\$30,000	0.003	0.068
Damaged Manhole	1	\$2,500	0.002	0.045
Total	99	\$387,500	0.051	1.193

During four weeks in September and October of 2017, approximately 20 million gallons of combined stormwater and sewage were released due to inflow and infiltration of rain and groundwater from Hurricane Irma and other severe rain events. This resulted in 1,835 lbs of Total Nitrogen entering the Indian River Lagoon. In the past 13 years, there have been 7 major discharges to the Indian River Lagoon with an estimated average discharge of 988 lbs of TN per year.

This Phase 1 report gives us a snapshot of the efficacy of smoke testing as a potential SOIRL project type with an estimated cost share value of \$392/lb TN/year. [\$387,500/988 lbs TN/year]