

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

July 16, 2021 – 8:30 to 11:30 am  
Brevard County Government Center  
2725 Judge Fran Jamieson Way  
Building C, 3<sup>rd</sup> Floor, Florida Room  
Viera, Florida 32940

- I. Call to Order
- II. Roll Call
- III. Approval of the Agenda
- IV. Approval of Minutes
- V. Progress and Fiscal Reports
  - a. Monthly Progress Report – Virginia Barker, Director
  - b. Monthly Revenue Graph – Crystal Melton, Finance Manager
- VI. Other Reports and Special Presentations
  - a. 2021 Audit Report – Jill Reyes and Laura Manlove, Directors at RSM US LPP
  - b. Wastewater Asset Management Overview – Todd Swingle, P.E., Executive Director, Toho Water Authority
  - c. City of Melbourne Baffle Box Program – Danielle Straub, P.E., Engineering Project Manager
  - d. Project Video – Oak Point Package Plant Conversion to Central Sewer
  - e. My Lagoon Story Video – David Sherrer
- VII. Old Business
- VIII. New Business
  - a. 2022 Plan Update Schedule
  - b. 2022 Cost Share Eligibility by Project Type
- IX. General Public Comments
- X. Final Comments by Chair and Committee Members
- XI. Adjournment

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

May 21, 2021 – 8:30 a.m.  
2725 Judge Fran Jamieson Way,  
Building C, 3<sup>rd</sup> Floor, Florida Room and On-line Zoom Conference  
Viera, FL 32940

**Members Present:**

Expertise	Member	Present	Alternate	Present
Science	Lorraine Koss	Yes	Charles Venuto	Yes
Technology	Vinnie Taranto - Chair	Yes	David Sherrer	Yes
Education	Stephany Eley – Vice Chair	Yes	Kimberly Newton	Yes
Finance	Courtney Barker	Yes	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	Yes

**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  
Beb Sebastian, 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.

Stephany Eley moved that the Committee accept the votes of any members not in the room and attending via zoom due to extenuating circumstances; Seconded by David Lane. Motion was unanimously approved.

**III. Approval of the Agenda**

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

#### **IV. Introduction of New Committee Members**

##### **a. David Sherrer, Technology Alternate**

David Sherrer, newly appointed Technology Alternate of the Citizen Oversight Committee, introduced himself briefly to the committee.

#### **V. Approval of Minutes (March and April, 2021)**

John Windsor moved to approve the January 15, 2021, and April 16, 2021 minutes as written; Seconded by Stephany Eley. Motion was unanimously approved.

#### **VI. 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.

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

##### **c. Quarterly Save Our Indian River Lagoon Finance & Project Performance Table Update – Crystal Melton, Department Finance Manager & Terri Breeden, Associate Environmental Specialist and Project Managers**

Terri Breeden and Project Managers gave an update on the revamped Quarterly Project Performance Table, Fiscal Year 20/21 Quarter 2. The update included: 1) Grass Clippings campaign, Fertilizer Education, and Septic Public Education updates by Brandon Smith; 2) City of Melbourne Wastewater Treatment Facility Upgrades for reclaimed water, Palm Bay Water Reclamation Facility project, Titusville Osprey Wastewater Facility upgrade, and the Ray Bullard Water Reclamation Facility, West Melbourne, by Terri Breeden; 3) Lateral Smoke Testing, Septic to Sewer, and Septic Quick Connects project updates by Anthony Gubler; 4) Municipality Septic to Sewer Projects and Merritt Island Redevelopment Agency Septic Phase Out Project updates by Terri Breeden; 5) Stormwater project(s) updates by Terri Breeden and Courtney Maier; and, 6) Muck Dredging Project(s), and Micco Septic to Sewer Conversion Project updates by Walker Dawson.

Discussion ensued. The Committee's questions were answered by Virginia Barker, Brandon Smith, Terri Breeden, Courtney Maier, Anthony Gubler and Walker Dawson.

#### **VII. Other Reports and Special Presentations**

##### **a. Project Video – Draa Pond Floating Wetlands, City of Titusville**

The City of Titusville's, Draa Pond Floating Wetlands Project, video was shown.

Save Our Indian River Lagoon Citizen Oversight Committee Meeting  
MINUTES – May 21, 2021

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

**b. Drift Macroalgae in the Indian River Lagoon – Lauren Hall, Environmental Scientist, St. Johns River Water Management District**

Lauren Hall gave a power point presentation entitled: Drift Macroalgae in the Indian River Lagoon. Topics included: 1) Phytoplankton, Sea Grass Losses, and Drift Algae; 2) Transect Monitoring; 3) Fisheries Independent Monitoring; 4) Nova Southeastern University Hydroacoustic Monitoring; and, 5) Monitoring Results in Reaches 2 through 5.

Discussion ensued. The Committee's questions were answered by Lauren Hall.

**c. What is a Climate Ready Estuary – Randall W. Parkinson, Ph.D., P.G., RWParkinson Consulting, Inc.**

Dr. Parkinson gave a power point presentation entitled: What is a Climate Ready Estuary? Topics included: 1) Technical Report No. 003 – February 2021 – Indian River Lagoon: Climate Ready Estuary; 2) National Estuary Plan's 10-Year Comprehensive Conservation and Management Plan for the Indian River Lagoon; 3) Analysis Focused on elements of the Vital Signs Wheel; 4) Climate Change Challenges; 5) Critical Categories and Vital Signs – Water Quality, Habitats, and Living Resources; 6) Climate Change Stressors and Levels of Risk; 7) Focus on Wastewater, Stormwater and Surface Water; 8) Climate Stressors – Precipitation, Storminess, and Sea-level rise; and, 9) Pollutant Reduction Benefits – Living Shorelines, Muck Removal, and Infrastructure.

Discussion ensued. The Committee's questions were answered by Dr. Parkinson.

John Windsor moved to extend the meeting for 15 minutes; Seconded by David Lane. Motion was unanimously approved.

**d. An Introduction to ORCA's One Health Fish Monitoring Citizen Science Project – Hannah Atsma, One Health Fish Monitoring Project Coordinator and Research Assistance, Ocean Research Conservation Association (ORCA).**

Hannah Atsma, gave a power point presentation entitled: An Introduction to ORCA's One Health Fish Monitoring Citizen Science Project. Topics included; 1) ORCA's Mission; 2) Innovative Technology, Applied Science Research, Education and Citizen Science; 2) One Health Fish Monitoring Project; 3) One Health concept; 4) Monitoring Fish for Microcystin, Mercury, Microplastics, PFAS and PFOS, Biotoxins, Pharmaceuticals & Controlled Substances and Toxoplasma gondii; and, 5) Preliminary Data; 6) Citizen Science - Ways to get involved and next steps.

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

**XIII. Old Business**

None

Save Our Indian River Lagoon Citizen Oversight Committee Meeting  
MINUTES – May 21, 2021

**IX. New Business**

**a. 2021 Florida Legislative Session – Open Discussion**

Virginia Barker gave a brief update on the 2021 Florida Legislative Session.

**X. General Public Comment**

None.

John Windsor moved to extend the meeting for 5 minutes; Seconded by Susan Hodgers. Motion was unanimously approved.

**XI. Final Comments by Chair and Committee Members**

Final Comments were heard.

**XII. Adjournment**



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

### WORK COMPLETED THIS MONTH:

- Revenues are nearly \$2 million ahead of the forecast used for the 2021 Plan Update
- South Beaches O Septic-to-Sewer –Design complete; In permitting
- Micco Septic-to-Sewer – All necessary permits received, final bid documents under review
- INRB Study – First quarterly sampling complete
- Septic Upgrades – 4 reimbursements processed
- Big Muddy Baffle Box – construction complete
- Sunset Road/Serenity Park/Basin 26 and Johns Rd/Basin 62 – Bids have been awarded to Contractor
- Eau Gallie Northeast Muck Project – Additional information submitted to regulatory agencies
- Cocoa Beach Golf Muck Project – Additional vibracore field collection complete
- Living Shoreline Performance - University of Central Florida conducted 3-month monitoring at Wexford and found a 92.5% increase in live oysters since May while 24-month monitoring at Marina Isles found an 18.6% decrease from December, though still 55.6% above original deployment density. 1-year monitoring at Fisherman’s Landing and Suntree Rotary Park found poor survival of spartina and mangroves, most likely due to shoreline erosion.
- Derelict Vessels – 3 removed
- Fiscal Year 2020 audit found revenue and expense accounting to be in full compliance, no exceptions
- Video - Oak Point Package Plant to Central Sewer and David Sherrer’s My Lagoon Story complete

### WORK UNDERWAY THIS MONTH:

- Brevard County Smoke Testing – expected to start this fall and finish in December; finalizing code enforcement mechanism
- Beaches Leaking Sewer Laterals – 63 of 280 repairs complete; 10 reimbursements processed to date
- Sylvan Estates Septic to Sewer –all homes connected to sewer; all septic abandoned, replacing sod
- South Central C Septic-to-Sewer – bid price reduced with value engineering but still over budget
- Sykes Creek T Septic-to-Sewer – awaiting approve from the Girl’s Scouts for property acquisition
- Sykes Creek N Septic-to-Sewer –60% design underway
- South Beaches P Septic-to-Sewer –corridor study complete; moving forward with preliminary design
- Septic Upgrades – 75 in progress; 28 reimbursements completed
- Grand Canal Muck Dredging – Approximately 87,000 cubic yards of muck dredged through May
- Sykes Creek Phase I – Awaiting prequalification documents from contractor
- Contracts - Melbourne Pennwood Septic to Sewer was executed, Oak Point Conversion to Sewer was amended to incorporate a grant, and Cocoa Beach Phase IIb Muck and Sherwood Park Stormwater improvements were extended
- Videos Underway - Ray Bullard Stormwater Project, Jackson Court Stormwater Project, Convair Cove Low Impact Development and Susan Hodgers’ My Lagoon Story
- Grants – Seeking Tourism + Lagoon, state Wastewater Improvements and state Innovative funds



### **PRESENTATIONS THIS MONTH:**

- May 26 – Thinking Bigger for Brevard – Virginia
- June 1 – Fly Fishing Club – Virginia
- June 29 – Marine Resources Council Social Marketing Collaboration – Becky Clarkson
- July 14 – Brevard Soil and Water Board Presentation – Brandon
- July 21 – Permitting Summer School - Virginia
- August 24 – Sewalls Point City Council - Virginia

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

- July 6 – Marine Resources Council Lunch and Learn Webinar: [FIT Bottle Cap Water Filtration Project](#)
- July 27 & 29 – Florida Fish and Wildlife Commission’s Aquatic Habitat Workshop
- August 3 – Marine Resources Council Lunch and Learn Webinar: [Low Impact Development](#)
- October 21-22 – [Marine Resources Council Low Impact Development Conference](#)

### **UPCOMING VOLUNTEER PARTICIPATION OPPORTUNITIES:**

- July 10 & 28 – Brevard Zoo [Restore Our Shores Oyster Gardening Training Workshop](#)
- July 11 – Keep Brevard Beautiful: Banana River/Kelly Park Cleanup – [email Amanda Muzaurieta for details](#)
- July 26 – Brevard Zoo [Restore Our Shores Oyster Reef Build](#)
- Brevard Zoo Restore Our Shores [Clam Restoration Project seeking volunteers](#)
- Rotary Park rain garden maintenance – [Email Carlos Cuevas for opportunities](#)
- Storm drain marking in Cocoa – [Email Carlos Cuevas for opportunities](#)
- Storm drain marking in Melbourne – [Email Nicole Broquet for opportunities](#)
- Merritt Island National Wildlife Refuge Trash Cleanups Tuesday & Saturdays – [Email Micah Thomas](#)

### **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:**

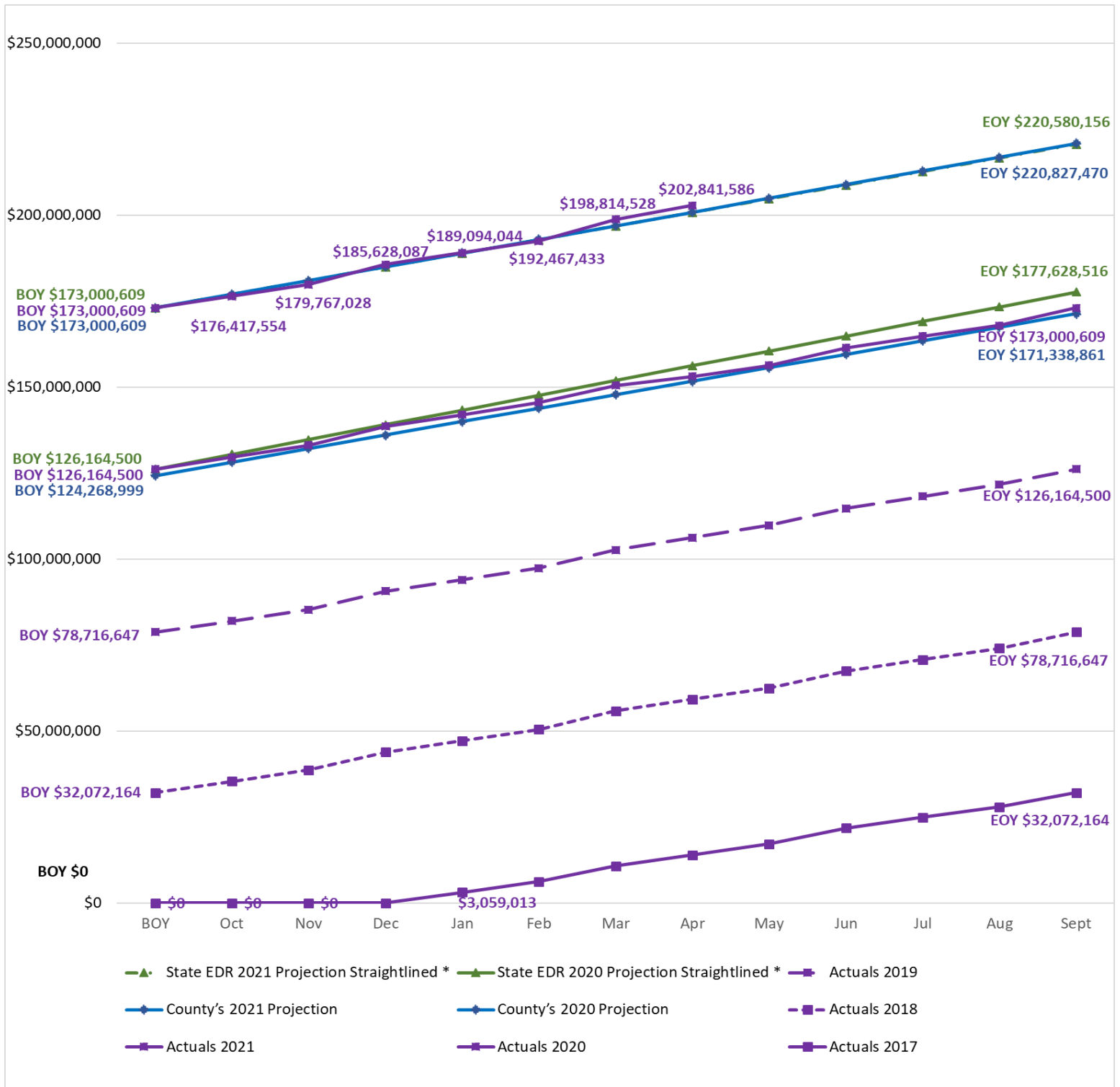
1. Pollution and Algal Bloom Mapping via Satellite Imagery Interpretation
2. Lagoon projects managed and funded by other agencies, entities or grant programs
3. Low Impact Development/Resilience – Local examples, efforts and potential opportunities
4. Wastewater Utility Asset Management Planning – Todd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

# 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
<b>BOY</b>	<b>\$173,000,609</b>	<b>\$173,000,609</b>	<b>\$173,000,609</b>	<b>\$126,164,500</b>	<b>\$124,268,999</b>	<b>\$126,164,500</b>
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		\$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
<b>BOY</b>	<b>\$78,716,647</b>	<b>\$32,072,164</b>	<b>zero</b>
Oct	\$81,926,390	\$35,300,032	<b>zero</b>
Nov	\$85,225,970	\$38,647,632	<b>zero</b>
Dec	\$90,640,944	\$43,870,270	<b>zero</b>
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  
Citizen Oversight Committee  
July 16, 2021**

**Agenda Item:**

VIII. a. New Business

**Title:**

Schedule for the Save Our Indian River Lagoon Project Plan 2022 Update

**Requested Action:**

Motion to accept the proposed schedule for developing the Save Our Indian River Lagoon Project Plan 2022 Update

**Summary Explanation and Background:**

Each year, the Save Our Indian River Lagoon Project Plan is updated. Annual updates allow new information, project opportunities and technologies to be considered and incorporated into the plan.

The process begins by examining updated information on project costs and benefits and determining the cost per pound of nitrogen pollution load reduction that will be offered to recruit new project proposals. This decision is posted on the Save Our Lagoon website and shared with the community.

New project proposals are submitted to county staff who review them for completeness and work with the applicants to resolve any issues. Summary tables are prepared and provided to the Citizen Oversight Committee and published on the website. The proposed schedule provides 3 weeks for county staff to review proposals, resolve questions and prepare summary tables and then 3 weeks for the Committee to review the proposals.

Once the Committee makes recommendations on which proposed projects to include, the draft Plan Update is assembled for the Committee to review. The proposed schedule provides 4 weeks for county staff and its consultant to incorporate the Committee's recommendations into the 2022 draft Plan Update and balance the 10-year costs with 10-year revenue projections. This draft update is posted on the website and brought to the Committee for review. After Committee changes are incorporated, the Committee's recommended Plan Update must be posted and available for public review for a minimum of 15 days prior to the plan's consideration by the County Commission.



## **2022 Update of the Save Our Indian River Lagoon Project Plan Proposed Schedule**

### **Update Cost Share Eligibility**

- 7/9 Include updated cost share eligibility in Citizen Oversight Committee agenda packet
- 7/16 Citizen Oversight Committee votes on cost-share eligibility for next grant cycle
- 7/23 Post cost share eligibility and link to on-line funding applications

### **Stakeholder Workshop**

- 7/27 Stakeholder workshop to discuss the cost share application process and Basin Management Action Plan credits

### **Project Submittal and Reviews**

- 10/4 Applications due (*About 2 months after application posted*)
- 10/29 Staff review completed, all revisions done, packet sent to Committee for review
- 11/19 Citizen Oversight Committee review/recommendation for submitted projects
- 12/17 *Potential to cancel December meeting*

### **2022 Plan Update**

- 12/17 Draft 2022 Project Plan Update posted and sent to Citizen Oversight Committee
- 1/21 Citizen Oversight Committee reviews/recommends 2022 Project Plan Update
- 2/8 or 15 County Commission reviews/approves 2022 Project Plan Update



**Save Our Indian River Lagoon  
Citizen Oversight Committee  
July 16, 2021**

**Agenda Item:**

VIII. b. New 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 \$1500 per pound of nitrogen load reduction for septic to sewer projects.
- Increasing the maximum cost share for septic upgrades to \$1200 per pound of nitrogen load reduction will grow the number of sites eligible for the \$18,000 cap.
- The cost shares offered for Stormwater Treatment Projects reflect increasing actual project costs and further consider the average cost by project location as follows: \$313 on the Mainland, \$370 on Merritt Island and \$446 on the Beaches.

Project Category	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
Reduce	Treatment Plant Upgrades for Reclaimed Water	\$24,711,400	72,033	\$343	\$343
Reduce	Sewer Lateral Smoke Testing for Rehabilitation	\$1,580,000	6,196	\$255	\$255
Reduce	Rapid Infiltration Basin/Sprayfield Upgrades	\$6,660,414	49,136	\$136	\$136
Reduce	Septic System Removal by Sewer Extension	\$110,572,597	94,298	\$1,173	<u>\$1500</u>
Reduce	Septic System Removal by Sewer Connection	\$11,280,000	21,446	\$487	\$487
Reduce	Septic System Upgrades	\$29,351,854	38,108	\$770	<u>\$1200</u>
Reduce	Stormwater Projects	\$48,107,860	277,534	\$173	<u>Average of \$350</u>
Remove	Muck Removal	\$108,229,911	207,990	\$520	\$520
Remove	Treatment of Muck Interstitial Water	\$46,945,641	481,059	\$98	\$98
Restore	Oyster Bars	\$9,887,876	24,921	\$397	\$397
Restore	Planted Shorelines	\$92,135	384	\$240	\$240
<b>Total</b>	<b>Total</b>	<b>\$428,971,922</b>	<b>1,303,528</b>	<b>\$329 (average)</b>	<b>To be determined</b>