



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

July 17, 2020 – 8:30 to 11:30 am
Brevard County Government Center
2725 Judge Fran Jamieson Way
On-line via Zoom Conference
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
- VI. Other Reports and Special Presentations
 - a. *Clean Waterways Act & Lagoon Funding - Senator Debbie Mayfield, District 17
 - b. A Day in the Life of the Indian River Lagoon – Missy Weiss
 - c. Lagoon Loyal Launch –MTN Advertising
 - d. My Lagoon Story Videos featuring Laurilee Thompson and Todd Swingle
 - e. Project Video for the Broadway Stormwater Pond Bio-Activated Media Addition
- VII. Old Business
- VIII. New Business
 - a. Annual Plan Update Schedule – Virginia Barker, Director
 - b. Funding Request Cost Share – Virginia Barker, Director
- IX. General Public Comments
- X. Final Comments by Chair and Committee Members
- XI. Adjournment

*10:30 Time Certain

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

May 15, 2020 – 8:30 a.m.
2725 Judge Fran Jamieson Way,
On-line Zoom Conference
Viera, FL 32940

Members Present:

Expertise	Member	Present	Alternate	Present
Science	Lorraine Koss	Yes	Charles Venuto	Yes
Technology	John Luznar	Yes	Vinnie Taranto	Yes
Education	Stephany Eley	Yes	Melissa Martin	Yes
Finance	Courtney Barker-Vice-Chair	Yes	Todd Swingle	Yes
Tourism	David Lane	Yes	Laurilee Thompson	Yes
Real Estate	Jay Moynahan	Yes	Dennis Basile	Yes
Lagoon Advocacy	John Windsor – Chair	Yes	Terry Casto	Yes

Staff Present:

Virginia Barker, Brevard County Natural Resources Management Director
Christine Valliere, Assistant County Attorney
Matt Badolato, Associate Environmental Specialist
Terri Breeden, Environmental Specialist
Walker Dawson, Engineer III
Anthony Gubler, Environmental Specialist
Jenny Hansen, Associate Environmental Specialist
Courtney Maier, Engineer I, Stormwater
Crystal Melton, Fiscal Analyst
Brandon Smith Environmental Specialist

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 Stephany Eley. Motion was unanimously approved.

IV. Approval of Minutes

Lorraine Koss moved to approve the April 17, 2020 minutes as written; Seconded by Stephany Eley. Motion was unanimously approved.

V. Monthly Progress and Fiscal Reports

a. Monthly Progress Report – Virginia Barker

The Monthly Progress Report was given by Virginia Barker.

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

b. Quarterly Performance Report – Terri Breeden, Environmental Specialist

The quarterly update of the Save Our Indian River Lagoon Project Performance Table was given. The update included: 1) Stormwater projects update by Terri Breeden and Courtney Maier; 2) Muck Dredging projects update by Walker Dawson; 3) Sewer projects update by Anthony Gubler; 4) Grass Clippings campaign, Fertilizer Education, Septic Public Education and Lagoon Loyal Program updates by Brandon Smith; 5) Living Shoreline Projects update by Jenny Hansen; and, 6) Municipalities including Cocoa Beach, Cocoa, Indian Harbour Beach, Melbourne, Merritt Island, Palm Bay, Titusville and West Melbourne project updates by Terri Breeden.

Discussion ensued. The Committee's questions were answered by Terri Breeden, Walker Dawson and Anthony Gubler.

c. Monthly Revenue Graph – Crystal Melton, Fiscal Analyst, followed by Information on Framing the Scale of Covid-19 Revenue Impacts – Virginia Barker, Director

Crystal Melton reported on the Revenue Graph.

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

Virginia Barker presented graphs with Information on Framing the Scale of Covid-19 Revenue Impacts. Slides included: 1) Brevard Tourism Data – Current Impact; 2) The Future – Polling Data of Time Between Pandemic End and Doing Activities; 3) Americans' First Trip Destination Post-Pandemic; 4) Fiscal Year 2020 Tourist Development Revenue projections; 5) Florida Chamber of Commerce Tourism Economics; 6) Industry Diversification, and; 7) Save Our Indian River Lagoon Project Plan Revenue Impacts.

d. Quarterly Financial Report – Crystal Melton, Fiscal Analyst

Crystal Melton reported on the Quarterly Financial Statement.

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

VI. Other Reports and Special Presentations

a. St. Johns River Water Management District Efforts for the Indian River Lagoon – Dr. Charles Jacoby, Supervising Environmental Scientist Estuaries Section and Lead Scientist, Indian River Lagoon Basin, Bureau of Water Resources, St. Johns River Water Management District

Dr. Charles Jacoby gave a power point presentation update on St. Johns River Water Management District Efforts. Topics included: 1) Challenges - Nutrient enrichment; 2) Regulatory and Non-Regulatory Partnerships; 3) Water Quality; 4) Seagrass; and 5) Turn-dirt projects.

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

b. IRL Clam Restoration Project Update – Dr. Todd Osborne, Assistant Professor of Estuarine Biogeochemistry, University of Florida

Dr. Todd Osborne gave a power point presentation entitled Leveraging Natural Selection in Native Clams to Improve Water Quality in the Indian River Lagoon – Indian River Lagoon Clam Restoration Project. Topics included: 1) Nutrient Sources - Fertilizer, Septic Tank and Stormwater Runoff; 2) Solutions – Stormwater control, septic to sewer conversion, fertilizer restrictions and muck removal; 3) Seagrass restoration; 4) Oyster Restoration – Filter Feeders; 5) Algal Blooms; 6) Re-introduction of variety of clams found in the lagoon; 7) Aquaculture lease partnerships; 8) Monitoring and Project Status; 9) Funding to Date and Project Needs; and 10) Goals.

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

c. Florida Fish and Wildlife Conservation Commission Efforts for the Indian River Lagoon – Jeff Beal, Florida Fish and Wildlife Conservation Commission, Marine/Estuarine Subsection

Jeff Beal gave a power point presentation entitled, Indian River Lagoon: Florida Fish and Wildlife Commission Overview. Topics included: 1) Restoration of habitat, recreational and commercial fisheries, water quality; 2) Public-private partnerships; 3) Genotypes/hybrids; 4) Statewide Shellfish Management Plan; 5) Potential Funding Sources, 6) Florida Fish and Wildlife Offices and Divisions; 6) Estuarine Restoration Teams; 7) Fish Tracking – Wading and Shore Bird Monitoring; 8) Indian River Lagoon Coastal Wetlands Restoration; 9) Spoil Island Restoration; 10) Oyster Project Funding, Recycling Programs and Living Shorelines; 11) Everglades Restoration; and 12) Indian River Lagoon South Feasibility Plan.

d. Lagoon Water Quality: Dredging, Droughts and Deposition – Matt Badolato, Associate Environmental Specialist

Matt Badolato gave power point presentation entitled Lagoon Water Quality: Dredging, Droughts and Deposition. Possible contributors to the clear water included: 1) Drought; 2) Dredging; 3) Reduced Atmospheric Deposition of Nitrogen; and 4) Nutrient Uptake by Caulerpa.

Save Our Indian River Lagoon Citizen Oversight Committee Meeting
MINUTES – May 15, 2020

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

e. My Lagoon Story Video featuring Jay Moynahan

Brandon Smith showed a My Lagoon Story Video featuring Jay Moynahan.

VII. Old Business

There was no Old Business.

VIII. New Business

There was no New Business.

IX. General Public Comment

Public Comments heard.

X. Final Comments by Chair and Committee Members

Final Comments were heard.

XI. Adjournment



Save Our Indian River Lagoon Project Plan July 2020 Progress Report

WORK COMPLETED THIS MONTH:

- Provisional Trust Fund revenue reductions due to Covid-19 were revised for this year and next year
- FY20/21 Legislative Appropriation: \$1,000,000 approved for septic to sewer
- Retail Fertilizer Signs were improved by focus groups, printed and delivered to 53 businesses
- Two experimental Inground Nitrogen Reducing Bioreactor septic drainfields installed in Titusville
- Basin 832 Broadway Pond Biosorption Activated Media– construction was completed June 2020
- Received landowner's approval to move forward with Huntington Pond stormwater project
- Derelict Vessels – 2 additional derelict vessels removed
- Marine Resources Council planted living shorelines at Fisherman's Landing and Rotary Park
- University of Central Florida monitored 1 planted shoreline and 3 oyster bar sites. The number of oysters at the new Maritime Hammock and Hog Point increased by over 400% due to spat settlement.
- Brevard Zoo monitored 2 pre-sales tax oyster bar sites
- My Lagoon Story videos for John Luznar, Melissa Martin, Laurilee Thompson and Todd Swingle
- Project videos for the Cocoa Beach Water Reclamation Facility and the Broadway Stormwater Pond
- Contracts executed for Melbourne's Roxy Ave Septic to Sewer and Aquafiber's Demonstration Project

WORK UNDERWAY THIS MONTH:

- Sykes Creek N Septic-to-Sewer – Considering vacuum sewer with mandatory connection
- Beaches Leaking Sewer Laterals – 27 repairs complete; 7 reimbursements processed
- Package prepared to prequalify plumbers to repair leaky laterals and connect septic to sewer
- Cone Road Septic-to-Sewer – 34 properties connected
- Micco Sewer Service Extension – Considering options for mandatory connection
- South Central C Septic-to-Sewer – Land acquisition proceeding. DOT permit approved.
- Septic Upgrade postcards redesigned for second notice; 1 reimbursement; 105 applications received
- Recruitment continues for Inground Nitrogen Reducing Bioreactor pilot projects; 14 potential recruits
- Basin 1304 stormwater treatment will start construction in July
- Johns Road and Flounder Creek – bid package prep while awaiting Army Corp and Public Works permits
- 319 Baffle Box Grant – COVID extension, adding a Melbourne baffle box, completing monitoring report
- Huntington Pond – Reviewing 90% plans, then applying for permits
- Cocoa Beach Phase IIb Muck Project – Dredging approximately 30% complete
- Grand Canal Muck Dredging –, awaiting federal permit for Berkeley Canal; Dredging to restart in August
- Sykes Creek Phase I Muck Dredging–Additional information from contractor is currently under review
- Cocoa Beach Golf Muck Project– Consultant selection pre-bid meeting on July 10th
- Rockledge A – Preliminary field work complete; awaiting deliverables
- NASA Causeway East, Titusville Railroad Bridge East & West – Additional field data collection underway
- Contracts out for signature for Melbourne's South Central F, Sherwood Park Stormwater Quality Project, Indialantic's Basin 5 Dry Retention, and Titusville's Draa Field Vegetation Harvesting, Draa Field Pond Managed Aquatic Plant Systems, and Osprey Plant Pond Managed Aquatic Plant Systems projects
- Video Production –Sylvan Estates Septic to Sewer interview filmed; Oyster Monitoring filmed and in editing; In Ground Nitrogen Reducing Biofilter septic upgrade video scheduled for July 13-14
- Retail fertilizer sign posting verification over half way complete.



PRESENTATIONS THIS MONTH:

May 16 – Catch a Memory Fishing Show interview – Virginia

June 2 - Marine Resources Council Brown Bag Seminar: Indian River Legacy - Laurilee Thompson

July 6 – Brevard Transportation Planning Organization considered 528 Causeway versus Bridge spans

July 22 – Florida Permitting School Conference, FL Clean Waterways Act Panel Discussion – Virginia

July 28 – Lead Brevard Facebook Live presentation on Save Our Indian River Lagoon Plan progress- Virginia

UPCOMING LAGOON SCIENCE FORUMS AND PUBLIC EVENTS: All Cancelled or postponed due to Covid-19

August 4 - Marine Resources Council Brown Bag Seminar: Dr. Robert van Woessik on Corals & Climate Change

Ongoing - Marine Resources Council Summer Camp and 3rd-6th grade Virtual Learning

UPCOMING VOLUNTEER PARTICIPATION OPPORTUNITIES: All Cancelled or postponed due to Covid-19

Brevard Zoo - Reef Build events Contact restoreourshores@brevardzoo.org

Brevard Zoo– Shoreline Planting <https://restoreourshores.org/volunteer-we-need-you/#howyoucanhelp>

Keep Brevard Beautiful - Lagoon Friendly Lawns – contact Kaylyn Palmer at 321-631-0501

Marine Resources Council – Lagoon Watch, Mangrove, or Lagoon Literacy - <https://savetheirl.org/volunteer/>

WEBSITE AND SOCIAL MEDIA LINKS:

Outreach and Engagement Landing Page: <https://lagoonloyal.com/>

Website: <http://www.brevardfl.gov/SaveOurLagoon>

Facebook: <https://www.facebook.com/BrevardCountySaveOurLagoon>

Instagram: <https://www.instagram.com/saveourlagoon/>

YouTube: <https://goo.gl/GBh6xU>

FUTURE TOPICS FOR SPECIAL PRESENTATIONS:

1. Ongoing Research on Charismatic Critters of the Lagoon – Hubbs SeaWorld Research Institute
2. Wastewater Utility Asset Management Planning – Todd Swingle
3. Re-use/Reclaimed Water – Nutrient Loading Impacts and Opportunities
4. Surface Water Remediation – AquaFiber, D.T.G., Chemical Tech, Phosphorus Free
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. Coordinating Spoil Management with Florida Inland Navigation District
10. Pollution and Algal Bloom Mapping via Satellite Imagery Interpretation - Gybe
11. Lagoon Fish and Fisheries Research – Dr. Grant Gilmore
12. Lagoon projects managed and funded by other agencies, entities or grant programs
13. Climate change impacts to the Lagoon – Randy Parkinson
14. Low Impact Development – Local examples
15. Project Monitoring Results
16. Package Plants

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

Month	State EDR 2020 Projection Straightlined *	County's 2020 Projection	Actuals 2020	State EDR 2019 Projection Straightlined *	County's 2019 Projection	Actuals 2019	State EDR 2018 Projection Straightlined *	County's Revised 2018 Projection	Actuals 2018
BOY	126,164,500	124,268,999	126,164,500	\$78,716,647	\$77,199,143	\$78,716,647	\$32,072,164	\$32,072,164	\$32,072,164
Oct	130,453,168	128,191,487	\$129,590,162	\$82,973,896	\$81,121,631	\$81,926,390	\$36,187,046	\$35,832,746	\$35,300,032
Nov	134,741,836	132,113,976	\$133,089,868	\$87,231,145	\$85,044,119	\$85,225,970	\$40,301,929	\$39,593,327	\$38,647,632
Dec	139,030,504	136,036,464	\$138,551,296	\$91,488,394	\$88,966,607	\$90,640,944	\$44,416,811	\$43,353,909	\$43,870,270
Jan	143,319,172	139,958,953	\$142,014,229	\$95,745,643	\$92,889,095	\$93,950,291	\$48,531,693	\$47,114,490	\$47,150,412
Feb	147,607,840	143,881,441	\$145,518,464	\$100,002,892	\$96,811,583	\$97,296,142	\$52,646,575	\$50,875,072	\$50,484,322
Mar	151,896,508	147,803,930	\$150,424,958	\$104,260,141	\$100,734,071	\$102,671,360	\$56,761,457	\$54,635,653	\$55,782,660
Apr	156,185,176	151,726,418	\$153,099,730	\$108,517,390	\$104,656,559	\$106,219,161	\$60,876,340	\$58,396,235	\$59,191,675
May	160,473,844	155,648,907		\$112,774,639	\$108,579,047	\$109,784,828	\$64,991,222	\$62,156,817	\$62,444,639
Jun	164,762,512	159,571,395		\$117,031,888	\$112,501,535	\$114,720,850	\$69,106,104	\$65,917,398	\$67,409,450
Jul	169,051,180	163,493,884		\$121,289,137	\$116,424,023	\$118,207,520	\$73,220,986	\$69,677,980	\$70,776,206
Aug	173,339,848	167,416,372		\$125,546,386	\$120,346,511	\$123,086,845	\$77,335,868	\$73,438,561	\$74,021,947
Sept	177,628,516	171,338,861		\$129,803,635	\$124,268,999	\$126,164,500	\$81,450,750	\$77,199,143	\$78,716,647

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

Month	State EDR 2017 Projection Straightlined *	County's Original 2017 Projection	Actuals 2017
BOY	zero	zero	zero
Oct	zero	zero	zero
Nov	zero	zero	zero
Dec	0	0	0
Jan	\$3,768,206	\$2,777,778	\$3,059,013
Feb	\$7,536,412	\$5,555,556	\$6,217,230
Mar	\$11,304,617	\$8,333,334	\$10,686,395
Apr	\$15,072,823	\$11,111,112	\$13,941,510
May	\$18,841,029	\$13,888,890	\$17,177,137
Jun	\$22,609,235	\$16,666,668	\$21,754,009
Jul	\$26,377,441	\$19,444,446	\$24,898,729
Aug	\$30,145,647	\$22,222,224	\$27,890,034
Sept	\$33,913,852	\$25,500,000	\$32,072,164



**Save Our Indian River Lagoon
Citizen Oversight Committee
July 17, 2020**

Agenda Item:

VIII. a. New Business

Title:

Schedule for the Save Our Indian River Lagoon Project Plan 2021 Update

Requested Action:

Motion to accept the proposed schedule for developing the Save Our Indian River Lagoon Project Plan 2021 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 4 weeks for county staff to review proposals, resolve questions and prepare summary tables and then 4 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 2020 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.



2021 Update of the Save Our Indian River Lagoon Project Plan Proposed Schedule

Update Cost Share Eligibility

- 7/10 Include updated cost share eligibility in Citizen Oversight Committee agenda packet
- 7/17 Citizen Oversight Committee votes on cost-share eligibility for next grant cycle
- 7/31 Post cost share eligibility and link to on-line funding applications

Stakeholder Workshop

No stakeholder workshop this year due to the cost share application process being the same as last year. Staff will be available for one-on-one conversations with applicants who have process questions, ideas or special requests.

Project Submittal and Reviews

- 10/1 Applications due (*About 2 months after application posted*)
- 10/23 Staff review completed, all revisions done, packet sent to Committee for review
- 11/20 Citizen Oversight Committee review/recommendation for submitted projects
- 12/18 *Potential to cancel December meeting*

2020 Plan Update

- 12/18 Draft 2021 Project Plan Update posted and sent to Citizen Oversight Committee
- 1/15 Citizen Oversight Committee reviews/recommends 2021 Project Plan Update
- 2/9 or 16 County Commission reviews/approves 2021 Project Plan Update



**Save Our Indian River Lagoon
Citizen Oversight Committee
July 17, 2020**

Agenda Item:

VIII. b. New Business

Title:

Proposed cost share eligibility by project type for projects proposed for the 2021 Save Our Indian River Lagoon Project Plan Update

Requested Action:

Motion to recommend offering the proposed cost shares for recruiting project proposals for the 2021 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 in 2020, with the following additional considerations:

- The 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.
- The cost shares offered for Stormwater Treatment Projects further consider the average cost by project location - \$122 on the Mainland, \$163 on Merritt Island and \$150 on the Beaches, respectively.

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