

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

September 17, 2021 – 8:30 to 11:30 am  
Brevard County Government Center  
2725 Judge Fran Jamieson Way Viera,  
Florida 32940  
On-line via Zoom Conference

- I. Call to Order
- II. Roll Call
- III. Approval of the Agenda
- IV. Approval of Minutes (postponed to October)
- 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. Tiny Bubbles: is Aeration a Viable Solution to improve Water Quality in The IRL?  
– Dr. Austin Fox, Assistant Professor, Florida Institute of Technology
  - b. Subaqueous Sand Capping to Mitigate Releases of Nitrogen and Phosphorus  
from Muck Deposits. – Dr. Austin Fox, Assistant Professor, & Abbey Gering,  
Florida Institute of Technology
  - c. Restore Lagoon Inflow Project – Dr. Jeff Eble, Research Assistant Professor, &  
Dr. Austin Fox, Assistant Professor, Florida Institute of Technology
- VII. Old Business
- VIII. New Business
- IX. General Public Comments
- X. Final Comments by Chair and Committee Members
- XI. Adjournment

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

August 20, 2021 – 8:30 a.m.  
2725 Judge Fran Jamieson Way,  
County Commission Chambers and online via zoom conference  
Viera, FL 32940

**Members Present:**

Expertise	Member	Present	Alternate	Present
Science	Lorraine Koss	No	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	No	Laurilee Thompson	Yes
Real Estate	Susan Hodgers	No	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. Acceptance of Virtual Votes**

Stephany Eley moved that the Committee accept the votes on issues considered at the meeting of any members not in the room and attending via zoom; seconded by John Windsor. Motion was unanimously approved.

**IV. Approval of the Agenda**

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

## **V. Approval of Minutes**

John Windsor moved to approve the July 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.

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

Terri Breeden and Project Managers gave an update on the Quarterly Progress Report, April 1 – June 30, 2021. The update included: 1) Baffle Box Story Map by Brandon Smith; 2) Palm Bay North Area Wastewater Reclamation Facility and Titusville Osprey Reclamation Facility by Terri Breeden; 3) County Septic Removal Projects – South Beaches Zone O, South Central Zone C, Micco Sewer Line Connections; and Septic Upgrades and Quick Connects by Anthony Gubler; and, Sylvan Estates Septic Removal Project by Terri Breeden, 4) Brevard County Stormwater Projects by Courtney Maier, 5) Municipalities Stormwater Project Updates by Terri Breeden; 6) Brevard County Muck Removal Projects by Walker Dawson, and Cocoa Beach Muck Removal Project(s) update by Terri Breeden; 7) Planted Shorelines - Brevard Zoo North IRL Project 2 by Jenny Hansen; and; 8) Project Overview by Terri Breeden.

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

## **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.**

Mark Fonseca gave a power point presentation entitled: Asking the Right Questions: Getting Ready for Shovel-Ready Projects. Topics included: 1) Sea Grass Restoration - General principals and question asking; 2) Defining and Managing (Ecological) Expectations; 3) History Lesson – Methods; 4) Limiting Factors and Ecological Chain Reactions; 5) Stable States and Extreme Events; 6) Transplanting for Acreage and Knowledge; and, 7) Take Home Message.

Discussion ensued. The Committee's questions were answered by Virginia Barker, Kimberly Newton, and Mark Fonseca.

**b. Manatee Habitat Enhancement of the Atlantic Estuaries – Julie Mitchell, Fish & Wildlife Biologist III, Florida Fish & Wildlife Conservation Commission**

Julie Mitchell gave a power point presentation entitled: Manatee Habitat Enhancement of the Atlantic Estuaries. Topics included: 1) Status of Habitat in the Indian River Lagoon; 2) Loss of Foraging Habitat; 3) Manatee Unusual Mortality Event; 4) Research and Management Activities – Contingency Response, 5) Monitoring and Research; 6) Aquatic Habitat Restoration; 7) Foraging Habitat Restoration; 8) Warm-Water Refuge Habitat Restoration; and, 9) How to Get Involved.

**c. Brevard Zoo Lagoon Restoration: Past, Present and Future – Ashley Rearden, Conservation Curator, Brevard Zoo**

Ashley Rearden gave a power point presentation entitled: Brevard Zoo Seagrass Restoration: Past, Present and Future. Topics included: 1) Pilot Seagrass Project - Environmentally Endangered Lands; 2) Seagrass Mats through Clam Project – Indian River Lagoon Wide; and, 3) Community-Based Seagrass Restoration.

Discussion ensued. The Committee's questions were answered by Ms. Rearden and Dr. Fonseca.

Discussion regarding funding sources for planting sea grass ensued. It was noted that currently there was no funding in the Save Our Indian River Lagoon Project Plan for sea grass restoration. Virginia Barker noted that there were other grant funding sources that could be used to cover sea grass planting, but not monitoring. Ms. Barker proposed using Respond funds to try and fill the gap, if the Committee agreed.

After further discussion, it was the consensus of the Committee to have staff research sea grass monitoring to see how to work with other partners and to use respond funds.

**d. Project Videos – Jackson Court Stormwater Treatment Train, Ray Bullard Stormwater Management Area and Susan Hodgers' My Lagoon Story**

A video, Jackson Court Stormwater Treatment Train Project, was shown.

A video, Ray Bullard Stormwater Management Area Project, was shown.

A My Lagoon Story video, featuring Susan Hodgers – Real Estate Member, was shown.

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

**VIII. Old Business**

**a. Proposed Cost Share Eligibility by Project Type for the 2022 Save Our Indian River Lagoon Project Plan Update.**

Virginia Barker gave a summary explanation of 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.

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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 Courtney Barker.

There were no public comments.

Motion was unanimously approved.

**IX. New Business**

**a. Contingency Funding Request of \$29,053 for the City of Titusville's Draa Field Aquatic Vegetation Harvesting Project**

Virginia Barker gave a summary explanation of the City of Titusville Draa Field Aquatic Vegetation Harvesting Project.

Discussion ensued. The Committee's questions were answered by Sandra Reller, City of Titusville.

John Windsor moved to recommend approval of a \$29,053 funding increase for the City of Titusville Draa Field Aquatic Vegetation Harvesting Project; seconded by Laurilee Thompson.

There were no public comments.

Motion was unanimously approved.

**X. General Public Comment**

Public Comments were heard.

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

Final Comments were heard.

**XII. Adjournment**



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

### WORK COMPLETED THIS MONTH:

- \$450,000 Legislative Appropriation grant contract executed for Septic Upgrades
- \$585,000 Legislative Appropriation grant contract executed for Quick Connects to Sewer
- \$2,500,000 Legislative Appropriation grant contract executed for Eau Gallie Northeast Muck Removal
- 5 Tourism + Lagoon grants were approved by the County Commission
- State Resiliency applications were submitted
- Fiscal Year 22-23 Legislative Appropriation requests were submitted
- South Beaches O Septic-to-Sewer –Permits secured
- 1 Sewer Quick Connect completed
- Cocoa Beach Golf Muck Project – Pre-Application meetings with Army Corp and US Fish & Wildlife complete; environmental resource surveys underway
- Brevard Zoo constructed 2,725 square feet of oyster bars in the Central Indian River Lagoon
- Living Shoreline Performance - University of Central Florida conducted 12-month monitoring at MacNeill-Pitner and found an average of 26 live oysters/bag. Density decreased from January but there are new recruits and more oysters have grown through the bag and are forming bridges.
- Shellfish Aquaculture Grant Program launched and first application processed
- Derelict Vessels – 3 removed

### WORK UNDERWAY THIS MONTH:

- Brevard County Smoke Testing – Contractor on standby; awaiting code enforcement software update
- South Central C Septic-to-Sewer –Contract execution in progress
- Micco Septic-to-Sewer –Reviewing final bid documents and coordinating with FDOT resurfacing project
- Sykes Creek M Septic-to-Sewer – appraisals underway for Land acquisition
- Sykes Creek T Septic-to-Sewer – contracting for property acquisition in progress
- Sykes Creek N Septic-to-Sewer – planning vacuum house and landscaping details
- South Beaches P Septic-to-Sewer –Preliminary design underway
- Septic Upgrades – processed 2 more reimbursements for a total of 33; 74 sites in progress
- INRB Study – Second quarterly sampling scheduled for this month
- Sunset Road/Serenity Park/Basin 26 and Johns Rd/Basin 62 – Construction underway
- Angel Avenue/Basin 1066 – design work has begun
- Grand Canal Muck Dredging – Approximately 126,000 cubic yards of muck dredged through August
- Sykes Creek Phase I Muck Dredging – Reviewing additional information provided by the contractor
- Eau Gallie Northeast Muck Dredging – Awaiting permit modifications from regulatory agencies
- Contracts - Melbourne Tillman Aquatic Harvesting, Cocoa Beach McNabb Oysters and Plants in draft
- Amendments – MRC Grass Clipping Campaign and Titusville Osprey Water Reclamation Facility Upgrade in draft; Titusville High School Baffle Box out for signature
- Videos Underway - Convair Cove Low Impact Development scheduled to film in September
- Grants – State Innovative Technology pre-proposals approved for full submittals
- Grant-funded Remote Sensing of Algae Blooms 1-year pilot project fully approved for launch
- Homeowner Grant Portal – Training and testing of application



#### **PRESENTATIONS THIS MONTH:**

August 23 – Catalina Isles Association – Anthony  
August 24 – Sewalls Point City Council – Virginia  
September 30 – Junior Achievement-Women in STEM – Matt

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

October 5 – Marine Resources Lunch & Learn on the Statewide Stormwater Rule Revisions – Virginia  
October 21-22 – [Marine Resources Council Low Impact Development Conference](#)  
November 9 – Marine Resources Lunch & Learn on Frog Watch

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

September 18 – [International Coastal Cleanup](#)  
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](#)

#### **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:**

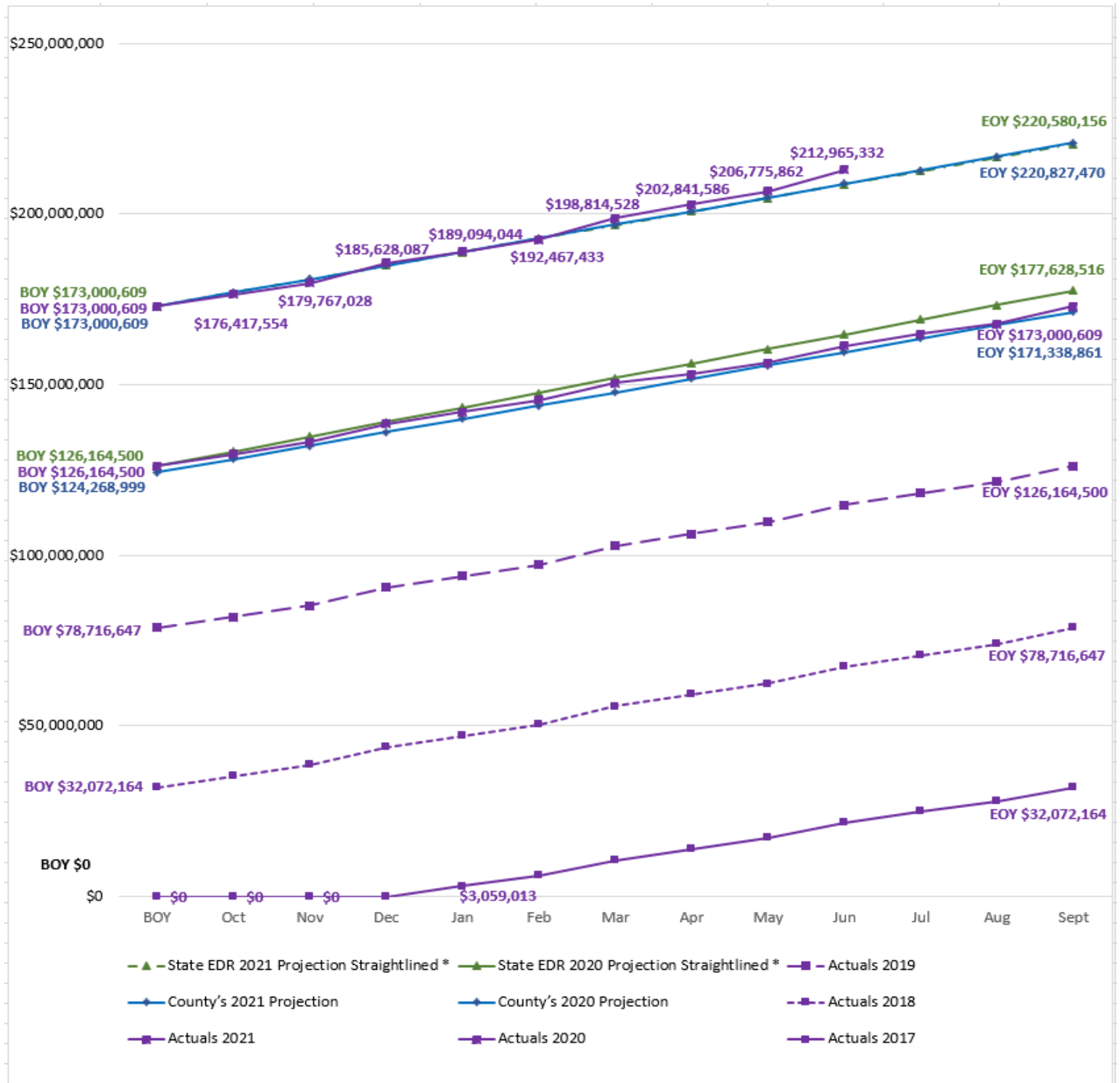
1. Pollution and Algal Bloom Mapping via Satellite Imagery Interpretation
2. Lagoon projects managed and funded by other agencies, entities or grant programs
3. Low Impact Development/Resilience – Local examples, efforts and potential opportunities
4. Surface Water Remediation – Phosphorus Free, S.W.I.G., 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
<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	\$206,775,862	\$160,473,844	\$155,648,907	\$156,326,096
Jun	\$208,685,269	\$208,870,754	\$212,965,332	\$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