



CITY COUNCIL JOINT SPECIAL MEETING (w/ Satellite Beach)

City of Indian Harbour Beach, Florida

Wednesday, March 11, 2026, at 6:00 PM

Satellite Beach Civic Center | 565 Cassia Blvd., Satellite Beach

AGENDA

Mayor and City Council

Scott Nickle, Mayor

Adam Dyer, Deputy Mayor

Susan Ruimy, Council Member

David Nutt, Council Member

Neil Yorio, Council Member

Administration

John W. Coffey, ICMA-CM -City Manager

Karl Bohne — City Attorney

Nikki Gold — City Clerk

- 1. CALL TO ORDER**
- 2. PLEDGE OF ALLEGIANCE FOLLOWED BY A MOMENT OF SILENT MEDITATION**
- 3. ROLL CALL**
- 4. EXCUSAL OF COUNCIL MEMBERS / AUTHORIZATION FOR REMOTE PARTICIPATION**
- 5. PUBLIC COMMENTS**
- 6. NEW BUSINESS**
 - a. Discussion of future Muck Removal project and direction to staff (action item)**
- 7. ADJOURN**

DUE TO THE LOCATION, THE MEETING WILL NOT BE LIVE STREAMED. IT WILL BE AVAILABLE ON THE CITY OF INDIAN HARBOUR BEACH'S YOUTUBE PAGE FOLLOWING THE MEETING.

ALL PERSONS WISHING TO BE HEARD SHOULD APPEAR IN PERSON AT THESE HEARINGS OR SEND WRITTEN COMMENTS TO THE CITY CLERK. ALL PERSONS AND PARTIES ARE HEREBY ADVISED THAT IF THEY SHOULD DECIDE TO APPEAL ANY DECISION MADE BY THE CITY COUNCIL WITH RESPECT TO ANY

MATTER CONSIDERED AT THE PUBLIC MEETING, HE OR SHE WILL NEED A RECORD OF THE PROCEEDINGS, AND FOR SUCH PURPOSE, HE OR SHE MAY NEED TO ENSURE THAT A VERBATIM RECORD OF THE PROCEEDINGS IS MADE, WHICH RECORD INCLUDES THE TESTIMONY AND EVIDENCE UPON WHICH THE APPEAL IS TO BE BASED. FSS 286.0105. IN COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA), ANYONE WHO NEEDS SPECIAL ACCOMMODATION FOR THIS MEETING SHOULD CONTACT THE CITY CLERK AT 321-773-3181 AT LEAST 48 HOURS IN ADVANCE OF THIS MEETING.



CITY COUNCIL
City of Indian Harbour Beach, Florida
Wednesday, March 11, 2026

AGENDA ITEM

Discussion of future Muck Removal project and direction to staff (action item)

Cost: TPB

Attachments: IHB Muck Dredging Project Update

Staff Recommendation:

Consider discussing the muck removal project with the City of Satellite Beach City Council and providing direction to staff.

Background Information:

The muck project (the Grand Canal and the finger canals) began approximately 10 years ago, with the following milestones:

- In 2016, a Bathymetric and muck survey began
- In 2019, the Brevard County Board of County Commissioners awarded a \$9.1 million Save Our Indian River Lagoon (SOIRL) grant with a local match of \$1,004,585.
- Circa 2019-2022, design, engineering, and supplemental investigation occurred.
- In 2019, the Cities of Satellite Beach and Indian Harbour Beach received a combined \$1,000,000 state appropriation for the two cities' muck removal projects.
- On October 6, 2023, FDEP Permit No. 421328-001-EI was issued, with an expiration date of October 6, 2028.
- In 2023, the U.S. Army Corps of Engineers issued permit No. SAJ-2021-00510 (NW – JDP) with the verification being valid until March 14, 2026.
- In 2023, the Brevard County Board of County Commissioners extended the SOIRL Grant agreement through 2032. In 2024, the Cities of Indian Harbour Beach and Satellite Beach informally agreed to jointly bid out the two projects, with each City paying for its respective portions, with the City of Satellite Beach offering to allow the contractor to use Satellite Beach property for mobilization

and store needs during the IHB portion of the project.

- In 2024, Brevard County bid out a project along Eau Gallie causeway that received one bid at a cost of \$48 Million (original budget was \$32 Million). Based on the estimated cubic yards of muck to be removed, this equated to a \$29.5 million price tag for the City's muck removal project. No work will be permitted during manatee season from November 15th to March 15th. Dredging of muck in the finger canals will stay 10 feet away from seawalls and docks and 30 feet away from the ends of the canals. The City of Satellite Beach offered to allow the eventual contractor to use its old Fire Department site for mobilization during Indian Harbour Beach's portion of the project.
- The Approved FY26-30 Five-Year Financial Model and Capital Improvement Plan contained a total of \$12,650,000 in funding in FY 29 and FY30, of which \$3,534,585 is the projected local match (future years' revenues). However, if significant property tax reform is passed by the voters in November, this local match will likely not be available. Likewise, if the project occurs sooner, the City will likely have only approximately \$1,000,000 in local match unless other planned projects are canceled or deferred.

On February 10, 2026, representatives from the Brevard County Natural Resources Management Department presented the attached information to the City Council and responded to questions.

Staff recommends that the City Council discuss the merits of different scopes of work (the entire project versus just the finger canals) and of the two cities working jointly on the project's administrative aspects.

Due to the estimated short timeframe until a contract needs to be signed for the work (autumn 2026), staff requests the following issues be discussed and decided:

1. Joint Satellite Beach and Indian Harbour Beach project (with each city paying its costs) or an IHB stand-alone project
2. Verify if the City of Satellite Beach is still willing to allow the muck removal contractor to use Satellite Beach property for mobilization and storage during the IHB portion of the project?
3. Authorization to proceed with soliciting a bid for engineering services.

Brevard County's
Save
our
LAGOON

**Indian Harbour Beach Muck Removal Project
Update**

Abbey Gering & Jeanne Allen
Environmental Specialist and Engineer
Brevard County

SOIRL Program Overview

MISSION: *RESTORING* the Indian River Lagoon through collaborative, science-based projects which *REDUCE* and *REMOVE* pollution to benefit our community, economy, and natural resources.



Save Our Indian River Lagoon Project Plan

Public Education & Engagement



Budget: \$3,530,000
TN Reduction: 33,709 lbs/year
Average Cost/lb TN: \$105
Projects Completed: 1
Projects Underway: 4
Projects in the Plan: 7

WWTF Upgrades for Reclaimed Water



Budget: \$27,537,049
TN Reduction: 74,139 lbs/year
Average Cost/lb TN: \$371
Projects Completed: 3
Projects in Construction: 1
Projects in the Plan: 7

Rapid Infiltration Basin/ Sprayfield Upgrades



Budget: \$82,207
TN Reduction: 317 lbs/year
Average Cost/lb TN: \$259
Projects Completed: 1
Projects in Construction: 0
Projects in the Plan: 2

Package Plant Connections



Budget: \$2,016,627
TN Reduction: 1,442 lbs/year
Average Cost/lb TN: \$1,398
Projects Completed: 1
Projects in Construction: 0
Projects in the Plan: 4

Smoke Testing/ Sewer Lateral Repairs



Budget: \$1,454,498
TN Reduction: 6,196 lbs/year
Average Cost/lb TN: \$235
Miles Smoke Tested: 276
842 of 1,247 Leaks Repaired
Miles in the Plan: 299

Septic to Sewer



Budget: \$135,374,605
TN Reduction: 114,440 lbs/year
Average Cost/lb TN: \$1,196
Homes Connected: 513
Homes in Construction: 256
Homes in the Plan: 4,822

Septic System Upgrades



Budget: \$29,250,000
TN Reduction: 37,981 lbs/year
Average Cost/lb TN: \$770
Homes Upgraded: 229
Homes Contracted: 394
Homes in the Plan: 1,625

Stormwater Projects



Budget: \$71,559,345
TN Reduction: 249,781 lbs/year
Average Cost/lb TN: \$286
Projects Completed: 43
Projects in Construction: 1
Projects in the Plan: 269

Aquatic Vegetation Harvesting



Budget: \$2,243,689
TN Reduction: 33,111 lbs
Average Cost/lb TN: \$68
Projects Completed: 6
Projects in Construction: 1
Projects in the Plan: 10

Muck Removal



Budget: \$133,749,381
TN Reduction: 355,868 lbs/year
Average Cost/lb TN: \$376
Projects Completed: 3
Projects in Construction: 2
Projects in the Plan: 21

Interstitial Water Treatment



Budget: \$38,761,200
TN Reduction: 519,439 lbs
Average Cost/lb TN: \$75
Projects Completed: 2
Projects in Construction: 2
Projects in the Plan: 16

Oyster Bars



Budget: \$9,813,625
TN Reduction: 24,747 lbs/year
Average Cost/lb TN: \$397
Projects Completed: 9
Projects in Construction: 5
Projects in the Plan: 28

Planted Shorelines



Budget: \$126,480
TN Reduction: 527 lbs/year
Average Cost/lb TN: \$240
Projects Completed: 8
Projects in Construction: 0
Projects in the Plan: 11

Clam Restoration



Budget: \$60,000
TN Reduction: 1,000 lbs
Average Cost/lb TN: \$60
Projects Completed: 4
Projects Underway: 1
Projects in the Plan: 10

2017–2023 Revenue = \$361.8M

10-Year Revenue Estimate = \$585.7M

Save
OUR
LAGOON

2017–2023 Expenditures = \$73.7M

Projects Underway = \$324.8M

IRL Muck

- Fine-grained, organic-rich sediment
- Roughly 6,000 acres in our portion of the lagoon

IRL muck:

- (1) Easily resuspended → blocks light from seagrass
- (2) Consumes oxygen
- (3) Characterized by the death of biota
- (4) Continually releases large quantities of dissolved nitrogen (N) and phosphorus (P)
- (5) Favors deeper, low-energy areas
- (6) Produces toxic hydrogen sulfide



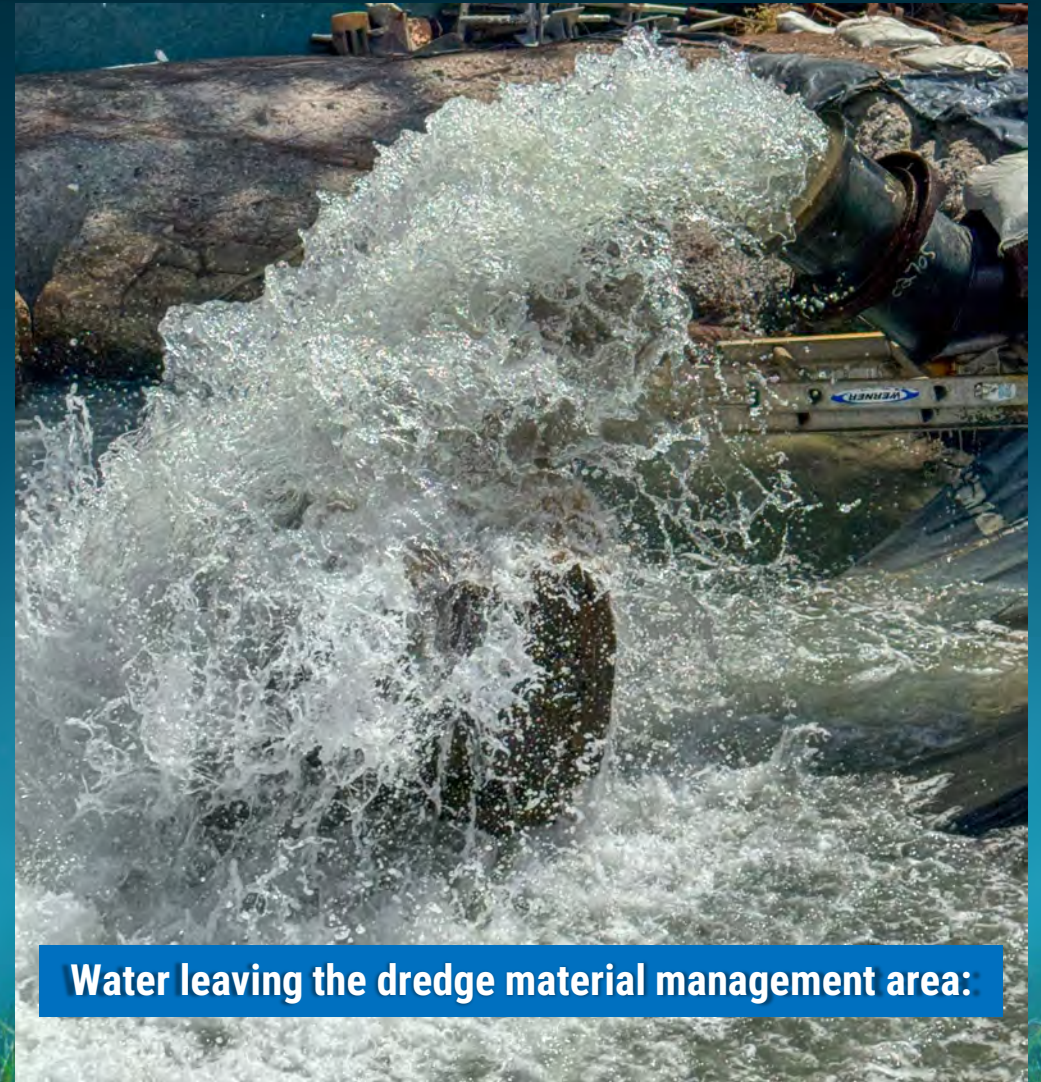
Benefits of Muck Removal

Dredging reduces internal nutrient loading, restores oxygen, and improves water clarity

Water and muck entering the dredge material management area:

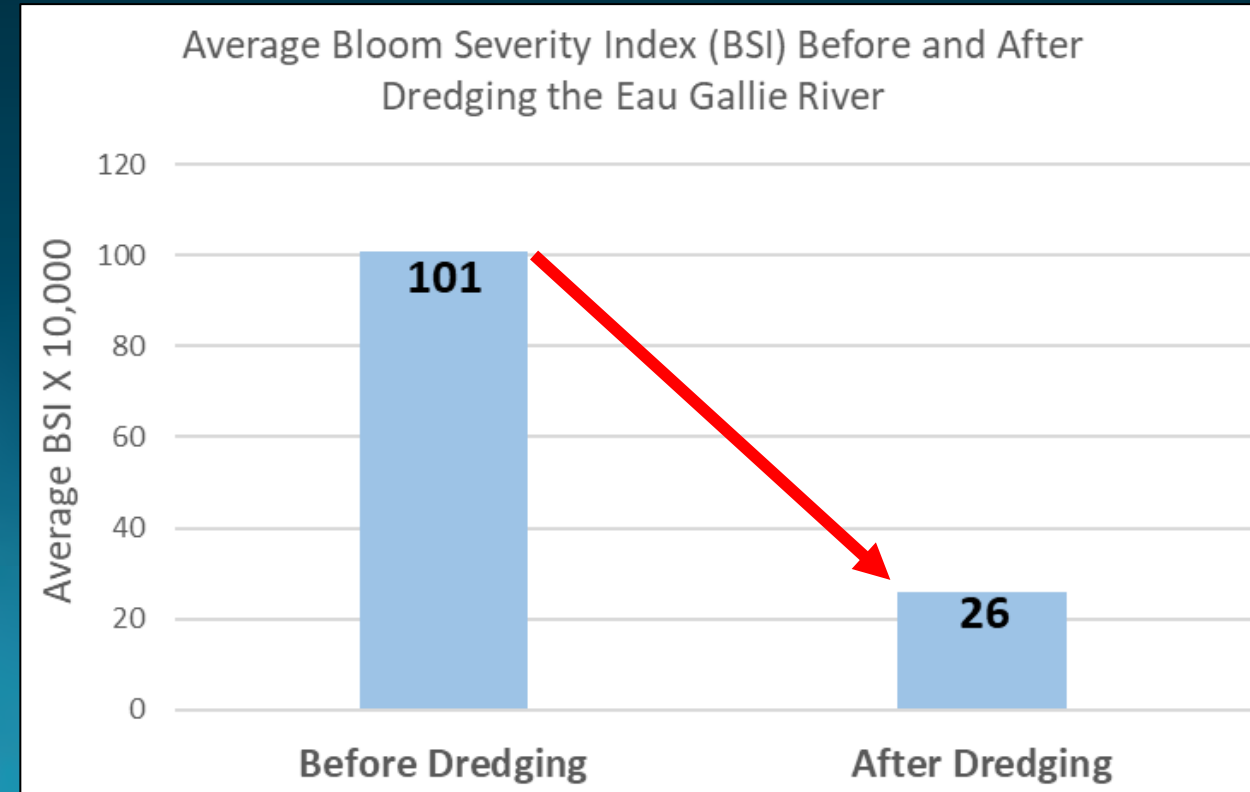


Water leaving the dredge material management area:



Decreasing Algae Blooms

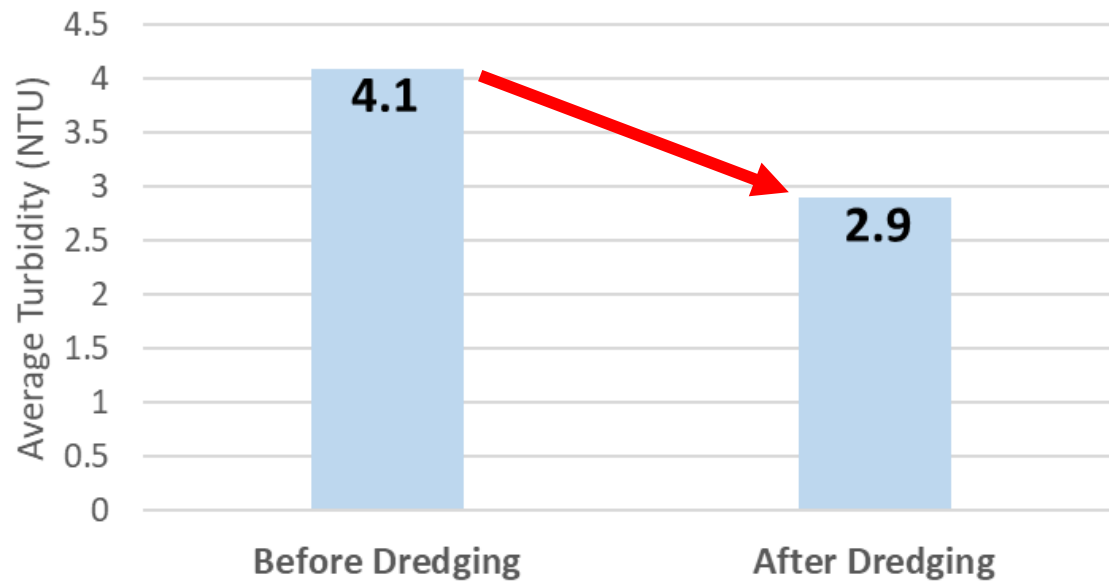
- **Bloom severity index (BSI)**
 - A simple number that shows how intense and widespread a harmful algal bloom is in a specific area.
 - High numbers = worse blooms
 - After dredging the Eau Gallie River, the BSI decreased by approximately 74%.



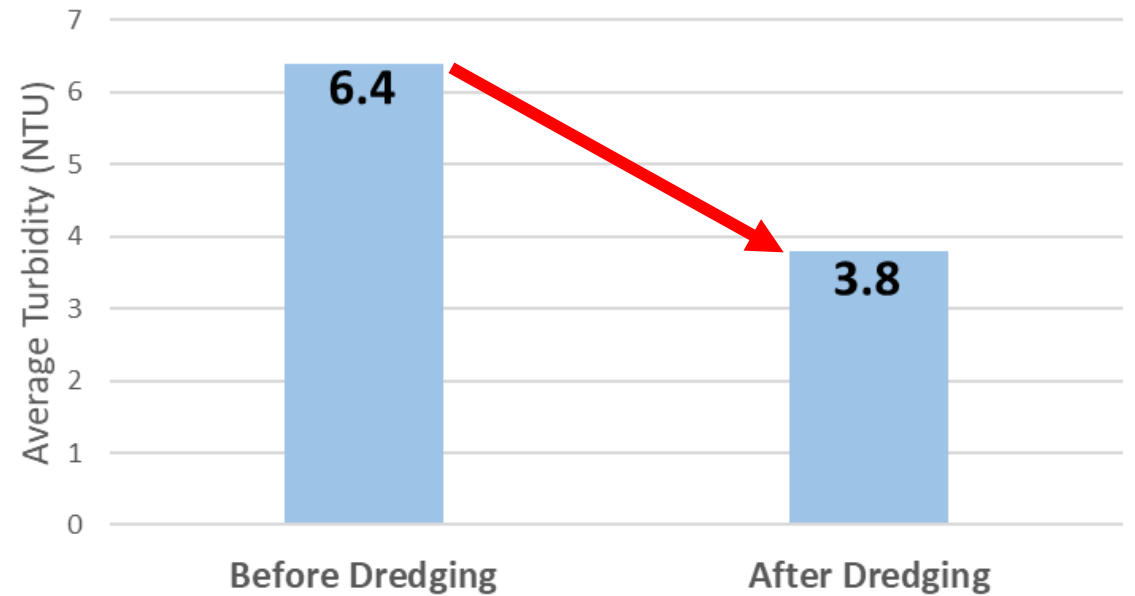
* Based on satellite data collected by the European Space Agency and processed by Applied Ecology

Long-Term Turbidity Monitoring Data

Average Turbidity Before and After Dredging at Turkey Creek



Average Turbidity Before and After Dredging the Eau Gallie River



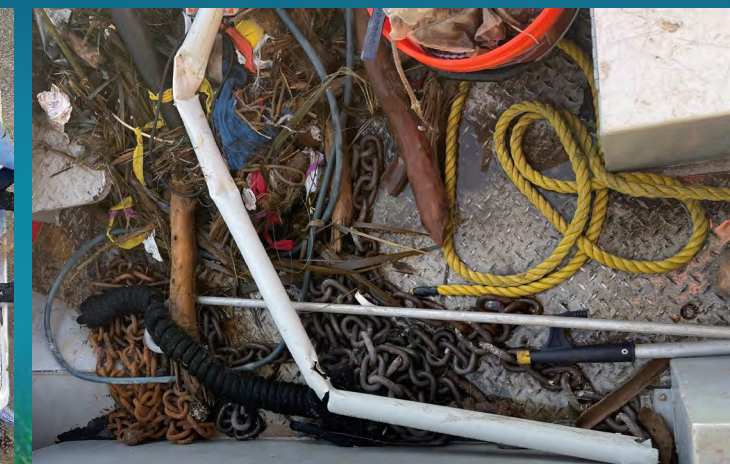
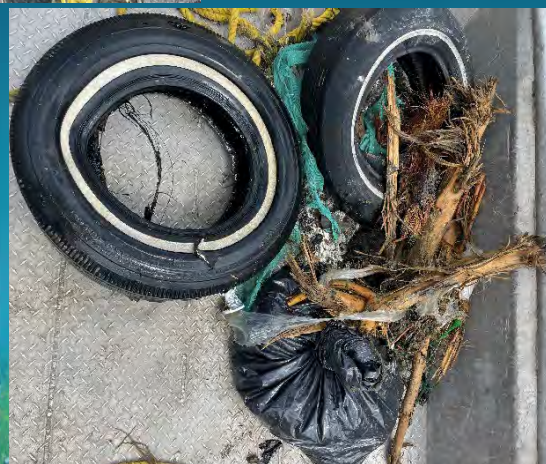
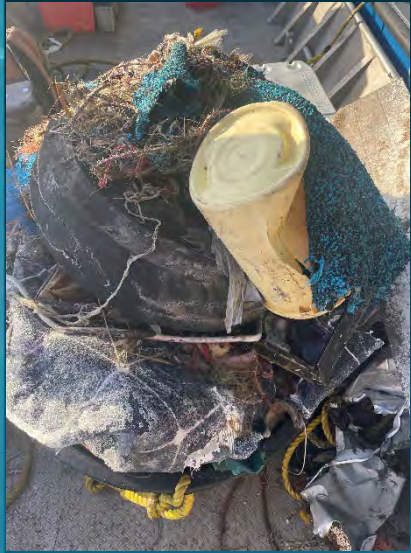
* St. John's River Water Management District (SJRWMD) – Station IRLTUS

* St. John's River Water Management District (SJRWMD) – Station IRLEGU

Six and five years after dredging, the turbidity remains lower in Turkey Creek and the Eau Gallie River compared to measurements before muck was removed

Trash Removed Along the Way

Not only is muck removed, but trash that clogs the dredge is also pulled daily from the lagoon!



History of the Project

Project Details

- **Satellite Beach City Limits:**
 - 5,300 linear feet of Grand Canal (~34 acres)
 - 12 finger canals
- **Indian Harbor Beach**
 - 7,100 linear feet of Grand Canal (~33 acres)
 - 10 finger canals

Work Performed

- **Data Collection**
 - (Hydrographic Survey, Environmental Survey, and Geotechnical work)
- **Permitting**
- **Conceptual and Permitting Design**



History of the Project (Data Collection)

Hydrographic Survey

- Surveyor – Morgan and Eklund
- Top of Muck – Multibeam
- Bottom of Muck – Probing at 100-ft intervals
- IHB Findings:
 - Average muck thickness: 5-6 feet with some pockets up to 15 feet
 - Current estimated volume: 219,971 cubic yards
- SB Findings
 - Average muck thickness: 5 feet with some pockets up to 9 feet
 - Current estimated volume: 297,150 cubic yards



History of the Project (Data Collection)

Environmental Surveys

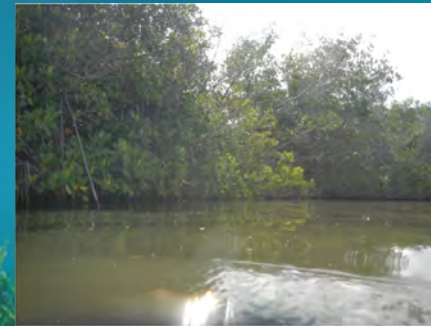
• Seagrass

- Focused on areas with historic seagrass + areas with potential for seagrass habitat
- Reviewed aerial imagery, bathymetric data, & historical seagrass databases
- Findings: No seagrass within project limits



Mangroves

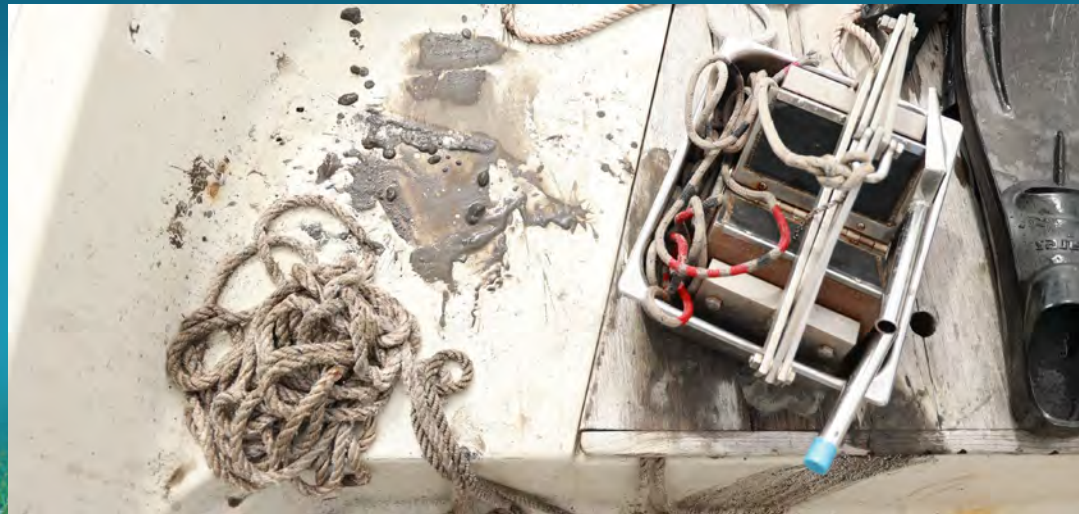
- Field-verified aerial interpretation
- IHB Findings: All mangroves are outside dredge template with some limited dripline areas in southern canals
- SB Findings: All mangroves were identified along with the mangrove-associated buttonwood species



History of the Project (Data Collection)

Geotechnical Work

- **Samples collected and analyzed for physical and chemical properties**
 - IHB - 9 sample locations (4 samples in GC, 5 in finger canals)
 - SB - 10 sample locations (3 samples in GC, 7 in finger canals)
- **Material will be handled and disposed of per the permit conditions**



History of the Project (Permitting)

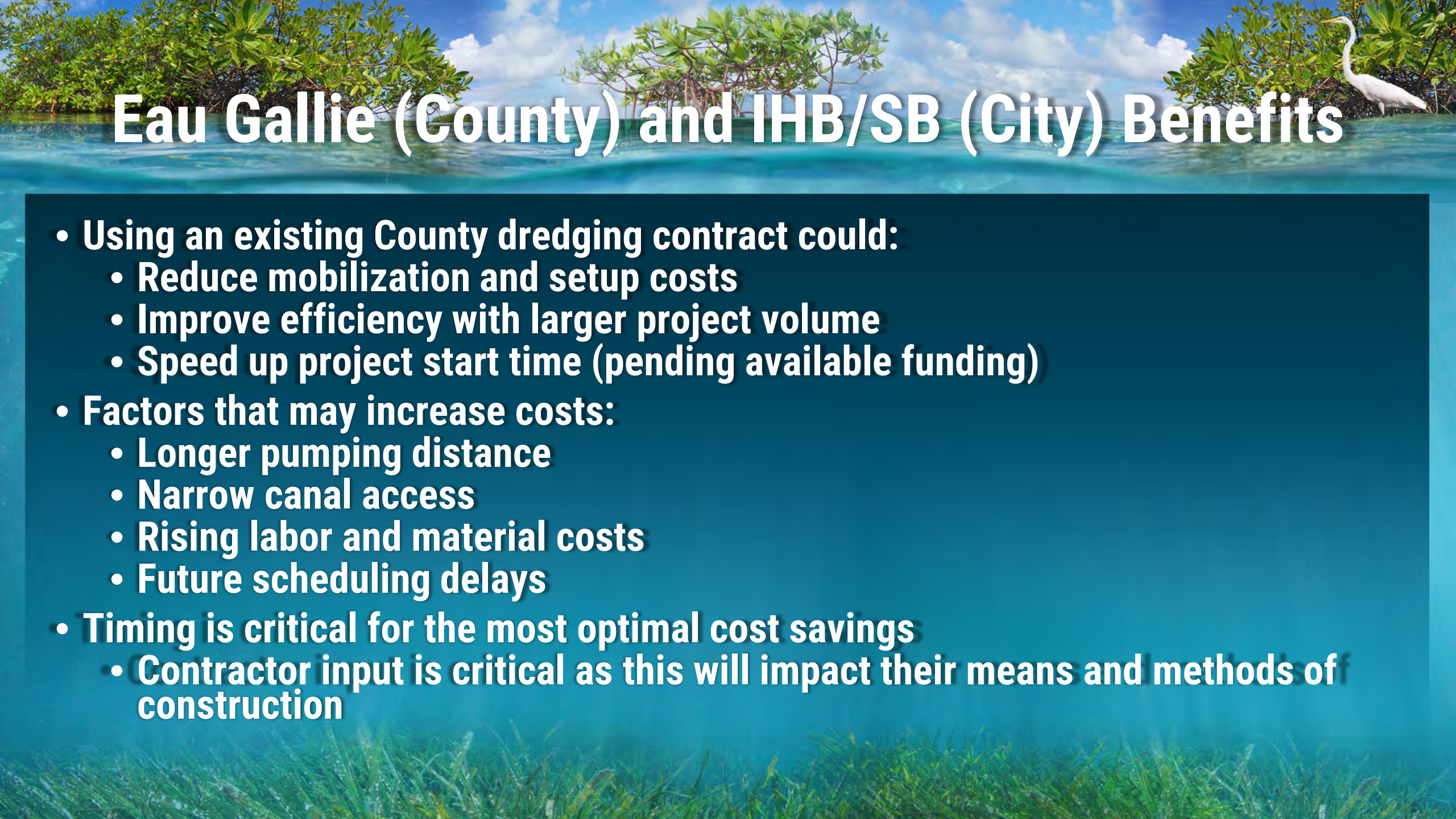
- **Permits issued by USACE and FDEP**
 - **IHB Payable Volume – 325,209 CY**
 - **SB Payable Volume – 299,144 CY**
 - ***Note these are higher than the estimated volumes**
- **Hydraulic dredging**
- **Mechanical dredging was not included in the USACE permit (permit modification if needed)**
- **Contractor and City will be required to follow the General and Special Conditions within permits**



Next Steps

- 1. Permit Modifications – project changes, update dewatering and disposal sites (either City or Contractor responsibility)**
- 2. Select engineer to finalize “Issue for Construction” drawings with technical specifications**
- 3. Coordinate with FIND on utilizing BV-52 dewatering facility (Lease modification)**
- 4. Complete Pre-Construction permit requirement (i.e., update seagrass surveys)**
- 5. Develop a bid package, review bids, select contractor**
- 6. Or piggyback on existing Eau Gallie contract (items 1 through 5 still required)**





Eau Gallie (County) and IHB/SB (City) Benefits

- **Using an existing County dredging contract could:**
 - Reduce mobilization and setup costs
 - Improve efficiency with larger project volume
 - Speed up project start time (pending available funding)
- **Factors that may increase costs:**
 - Longer pumping distance
 - Narrow canal access
 - Rising labor and material costs
 - Future scheduling delays
- **Timing is critical for the most optimal cost savings**
 - Contractor input is critical as this will impact their means and methods of construction

Estimated Costs ^{1,2,3} & Current Funding					
ESTIMATED COSTS	Cubic Yards				
Total Base Bid Only (SB & IHB):	517,121		\$ 40,184,228.00		
Satellite Beach Total:	297,150			\$ 22,715,315.50	
Indian Harbour Beach Total:	219,971				\$ 17,468,028.00
Optional Scope - Finger Canals Only (SB & IHB) ⁴	105,453		\$ 12,190,804.00		
Satellite Beach Finger Canals Only:	56,460			\$ 6,349,280.00	
Indian Harbour Beach Finger Canals Only:	48,993				\$ 5,841,524.00
Optional Scope - Grand Canal Only (SB & IHB) ⁴	411,668		\$ 27,993,424.00		
Satellite Beach Grand Canal Only:	240,690			\$ 16,366,035.50	
Indian Harbour Beach Finger Canals Only:	170,978				\$ 11,626,504.00
CURRENT FUNDS	SOIRL Funds⁵	FDEP Funds	Total Funds		
Satellite Beach	\$ 7,129,321.00	\$ 500,000.00	\$ 7,629,321.00		
Indian Harbour Beach	\$ 12,922,232.00	\$ 760,000.00	\$ 13,682,232.00		
Total Funds (SB & IHB)			\$ 21,311,553.00		
Notes:					
¹ IHB and SB contracts to be awarded simultaneously					
² Work to take place immediately after Eau Gallie to allow for the pipeline to remain in place to BV-52. Assumes FIND approves the needed time extension and approval for cities to use BV-52. Request has been made.					
³ Work to be performed between 2026-2030					
⁴ SOIRL funding is based on nutrient reduction potential, which is calculated using nutrient flux and area.					
Any reduction in the dredged area will require a reevaluation of the nutrient flux and associated reduction potential.					
⁵ SOIRL funds based on the 2026 Project Plan Update, and includes inflation. City contracts may need amending to reflect this.					

Questions?

