

## M E M O R A N D U M

**To:** Howard Tipton, Town Manager  
**From:** Charles Mopps, Interim Public Works Director  
**Report date:** November 1, 2024  
**Meeting date:** November 12, 2024  
**Subject:** Canal Navigation Maintenance Program Update

### **Recommended Action**

Provide direction to Town Manager.

### **Background**

Prior briefings:

At the October 21, 2024, Regular Workshop, the project team provided an update regarding the Canal Navigation Maintenance Program to include the following:

- Update on project planning efforts
- Initial presentation of apportionment methodology
- Beneficial Use of Dredge Material (BUDM) from the canal program for use on the force main project.

The Town has continued to engage engineering consultant, First Line Coastal (First Line), to assist staff in completing the directed work. Town staff and the consultants will provide clarification and further discussion on project planning efforts including the BUDM. Additionally, specific detail will be provided for the apportionment methodology including strategy and initial costs for residents.

### **Next Steps**

The following is the staff's assessment of the next step actions for continued program development:

- Continue assessment program development
- Continue project design, including BUDM efforts
- Prepare a draft ordinance for the Dec 2<sup>nd</sup> meeting
- Begin (or delay) public outreach
- Meet legal requirements for the establishment of Districts.

In order to meet the County's deadlines for the implementation of a dedicated mill rate for the FY2026 tax bills, we are preparing an Ordinance to establish an Ad Valorem District coterminous with the Town's boundaries, to the December 2<sup>nd</sup> Regular Meeting and December 12<sup>th</sup> Special Meeting for first and second reading.

In addition, a Resolution providing our Notice of Intent to Use the Uniform Method of Collection will need to be adopted by December 2024 and requires advertising on four (4) Friday's prior/up to the Public Hearing (Nov 8, 15, 22, 29).

Failure to meet these deadlines could result in the postponement of the non-ad valorem assessments until FY2027 tax bills.

**Staff Recommendation**

Staff will be requesting direction from the Commission regarding:

- Preparation of an ordinance for the Dec 2<sup>nd</sup> meeting
- Initiation of public outreach efforts
- Continuation of BUDM design concurrent with the subaqueous force main effort.

**Attachments**

PowerPoint Presentation



TOWN OF LONGBOAT KEY

# Canal Navigation Maintenance Program Update

Town Commission Workshop

November 12, 2024



# Advancements Toward Implementation

## **Have included:**

- Data collection and initial conditions assessment (presented June 2024)
  - Initial Opinion of Probable Construction Cost (presented June 2024)
  - Development and presentation of funding strategies (Oct 2024 & Today)
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## **Seeking guidance today:**

- Resolution of Intent and Tax District Ordinance preparation for December 2<sup>nd</sup> meeting
- Begin public outreach
- Continue with BUDM design concurrent with the subaqueous force main effort



# Path to Canal District Discussion

## Town Vision & Mission

- *“Longboat Key is a beautiful place to live, work, and visit, where the natural assets of a barrier island combine with cultural and recreational amenities, visionary planning, and proactive leadership to enhance your way of life.”*
- *“To vigorously maintain and preserve Longboat Key’s status as a premier residential and visitor destination that supports the historic balance between residential, recreational, tourism, and commercial attributes, through a commitment to long-term and short-term planning excellence and measurable results.”*

## Town Core Expectations

**6. The town will maintain Longboat Key as a premier vacation destination and enhance year round tourism through continued revitalization, development, and maintenance of tourism-oriented businesses and amenities such as; lodging, cultural attractions, restaurants, golf courses, tennis facilities and beaches.**

**7. The town will maintain and improve the quality and variety of island-based recreational and educational opportunities, including a high-quality community center, and will support and promote off-island recreational, cultural and urban attractions.**

**11. The town recognizes the need to provide suitable amenities for visitors and residents of all ages.**





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# Path to Canal District Discussion Cont.

**Conservation and Coastal Management (CCM) Element of the 2022 Comprehensive Plan (adopted June 6, 2022, Ordinance 2022-03) contains objectives and policies relating to Canal Navigability.**

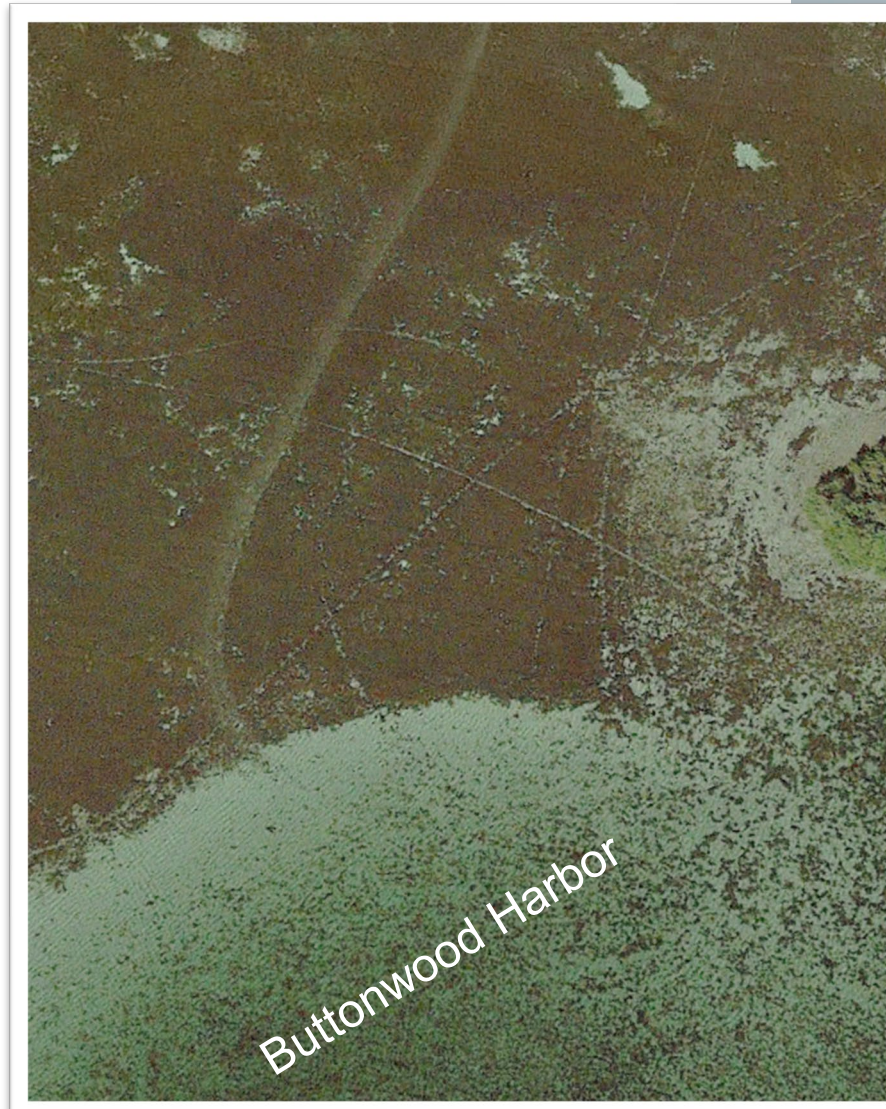
Specifically, it:

Objective 1.5: Preserve the navigability of canals.

Policy 1.5.1: Create and implement a Town Canal Navigation Maintenance Program

***Also Supports Vision, Mission, Community***

***Expectation 9***: Boat Usage Within Canal System Protects Environmental/Benthic Resources (Seagrasses & Oyster Beds) and Boater Safety.







# Background

## Island Amenity and Ambiance

As an island, (def. "...land surrounded by water..."), waterway and bay access for navigation and recreation is an important element to the overall quality of island life as an **amenity enhancing the ambiance** on Longboat Key.



## Wholistic Benefit

Portions of the Channel / Canal system can be considered as providing an overall benefit to the residents of the Town, as a recreational amenity to the island.

*Some canals may have an overall Town-wide benefit and some have a more private benefit (canal fronting properties)*



# Established Premise

**Every property is unique, and benefits vary based on accessible canals**

## Three Utilization Types

Local Canal	Communal Access	Mixed Use
direct access to residents via their property or community	accessible and commonly used by all boaters	both direct access to residents via their property or community and are commonly used by all boaters
Direct Benefit	General Benefit	Shared Benefit





# District Creation Critical Milestones

## Option 1

Maintain ability to collect funds in Nov. 2025

- Create Special Districts by March 2025

## Option 2

Delay assessments 1 yr until Nov. 2026

- Create Special Districts in 2026

Creation of a District provides the ability to progress but does not require funding.

Event	Date
Workshop of assessment with Commission	10/21/2024
Workshop of assessment with Commission	11/12/2024
Ordinance Establishing Ad Valorem District (First Reading)	11/12/2024 (SPC MTG)
Ad: Public Notice of Intent to Use Uniform Method of Collection (Assessments) in Newspaper	Ad to be Run 4 Fridays prior/up to Public hearing: Nov 8, 15, 22, 29
Resolution: Electing To Use Uniform Method of Collection	12/02/2024
Ordinance Establishing Ad Valorem District (Second Reading/Public Hearing)	12/02/2024
Public Meetings	January 2025 – March 2025



# Community Outreach & Engagement Opportunities

## Objectives

- Present and inform on the program need, benefits, and costs
- Garner public feedback
- Opportunity for public engagement in the process
- Specific address searches to inform on direct costs for properties

## Forums & Venues

- General Benefit & Canal Group focus sessions
- Virtual, Town Hall, Condo Federation, North End Coalition, etc.
- Per District Specific Meetings focus on specifics within district
- Program website, handouts, mailers

***Robust Public Outreach Campaign: VancoreJones***




# Feedback from October 21<sup>st</sup> Meeting

***Storm recovery is the top priority for the Town currently and should remain so.***

## Canal program feedback:

- Requested more detail:
  - Waterway specifics & categorization
  - Assessment methodology
  - Cost allocation
- Additional detail for shared benefit canals
- Appropriate cost-share models & examples

**Canal**  
**33**



Canal Group: 5      Subdivision: BAY ISLES UNIT 01 / COUNTRY CLUB SHORES UNIT 5 SEC 4  
 Funding Category: Green/Red      Cross Streets: Harbor Cove Cir / Puffer Ln

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**Existing Conditions:**

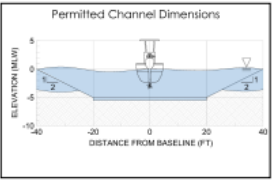
Primary Usage: Mooring/Dockage, Transit	Avg Vessel Beam: 7 - 10 ft
Density of Water Access: 60%	Avg Vessel Draft: 2 - 4 ft
Noted Damage to Structures: No	Mapped Seagrass: None Mapped
Notable Exposures: Waves, Wind	
Impediments: None	

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**Design Parameters**

**Existing Permit Info**

Permit Depth: -5 MLW  
 Permit Width: 40 FT  
 Placement Area:  
 Existing Permits: 58-01637883-001  
 Permit Expiration: 3/30/2005  
 Length of Canal: 1282 ft



Permitted Channel Dimensions

ELEVATION (MLW)

DISTANCE FROM BASELINE (FT)

Last Maintained: xx-xx-xxxx

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**Navigation Score**

Canal Nav Score	Current Score
Max with Current Design <b>A</b>	<b>B-</b>

Transiting: C - local knowledge  
 Meeting/Overtaking: B - As expected  
 Maneuvering/docking: B - As expected  
 Marker Density: Dense

Notes: split 33 at 33P and make west end 33-5. Seagrass observed on the north toe

**Survey Info**

Survey Date	Volume	Survey Type
Mar 2024	136 cy	SB Profile
2019	cy	Est. from OPCC [Taylor]

\*Volume presented represents total volume to permitted design. If no permitted design exists, volumes are based on maintenance plan below.

Limiting Depth at last Survey: -2.2 ft MLW at STA 4+40

Sheet Last Updated: 5/8/2024 by j.Pierson, First Line Coastal



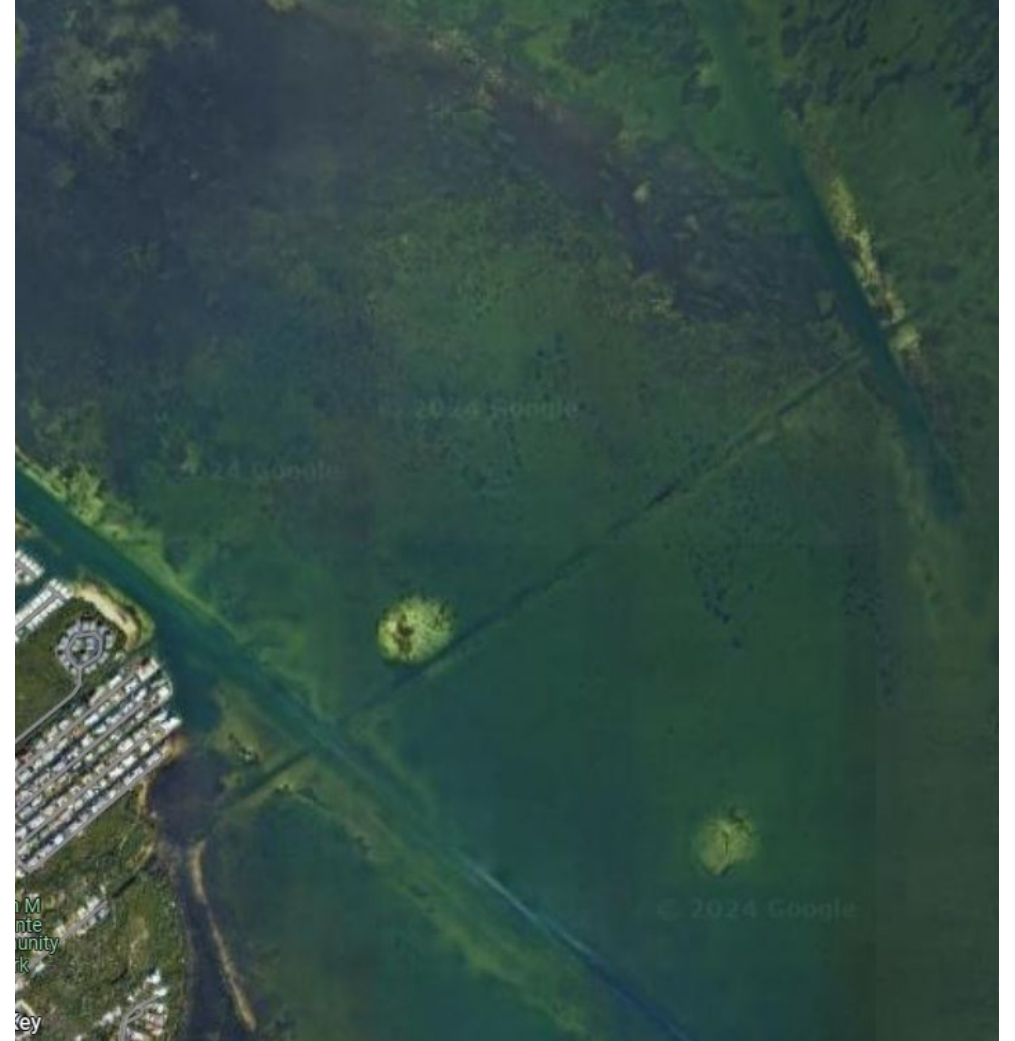
## Waterway Maintenance Program

- Work allocation review
- Subaqueous pipeline install

*Pause for discussion*

## Assessment Program Methodology

- Assessment program framework
- Example Scenarios



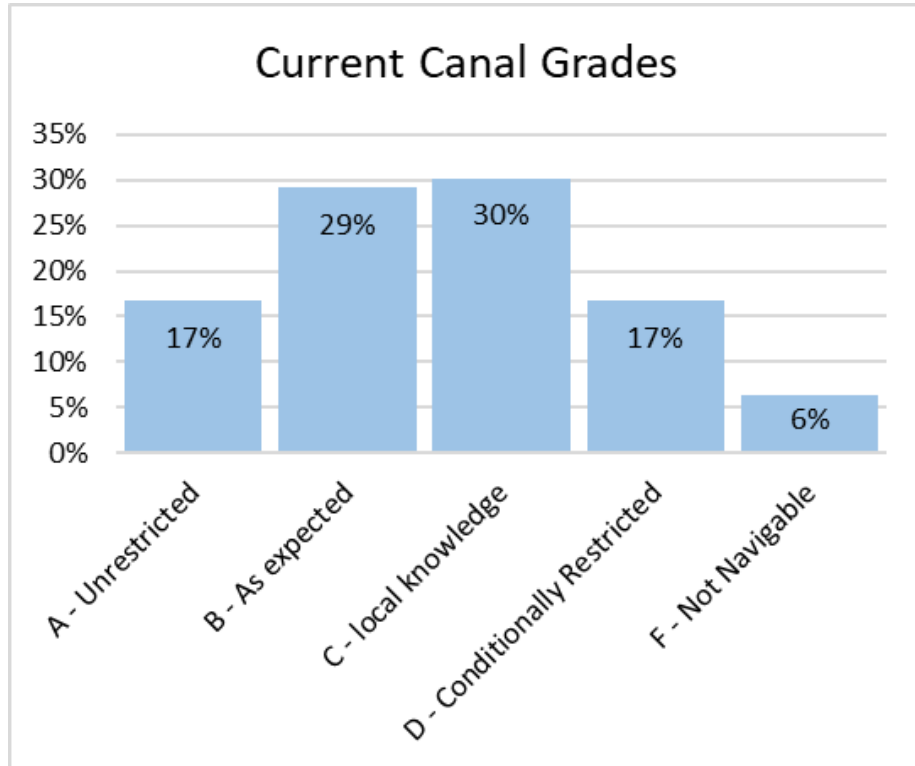


# Waterway Maintenance Program



# Program Statistics

## Existing island wide conditions



Max available volume  
(before cost saving measures)

62,000 CY



Target Volume  
(current maintenance plan)

40,000 CY



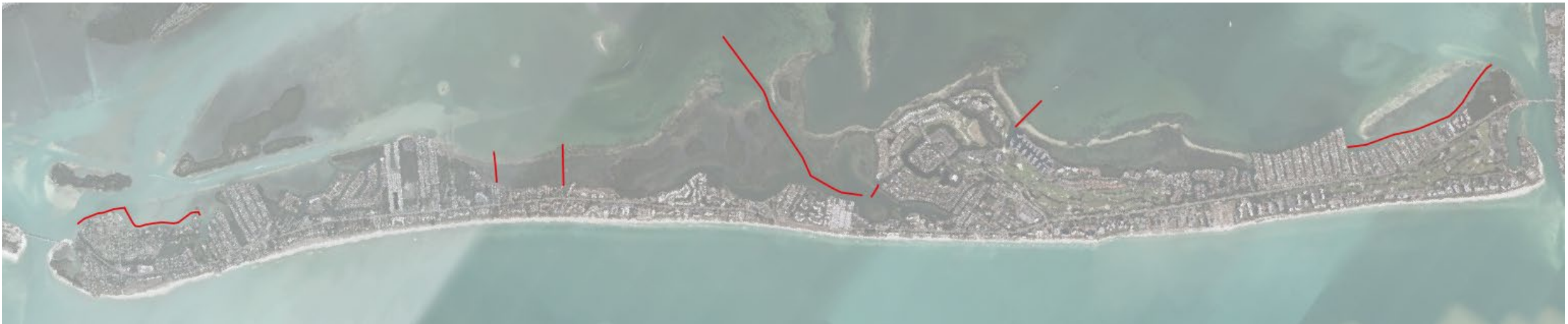
Category	Advanced Update
Dredging Cost	\$ 3,680,000
Permit, Design, Management	\$ 900,000
<b>2025 Dredging Cost</b>	<b>\$ 4,580,000</b>
Mitigation Cost	\$ 3,600,000
Adjustment for 2028	\$ 1,070,000
<b>Initial Construction Estimated Cost (2028)</b>	<b>\$ 9,250,000</b>
Annual Operations and Maintenance	\$ 450,000



# Canal and Funding Types – General Benefit

## Communal Access Waterways - **General Benefit**

Number of Waterways	8
Volume to Dredge	5,600 CY
Funding Strategy	Ad Valorem
Funding Group	All Residents



*Similar to WCIND millage found on all tax bills*



# Canal and Funding Types – Direct Benefit

## Local Canal – Direct Benefit

Number of Waterways	70
Volume to Dredge	17,000 CY
Funding Strategy	Non Ad Valorem
Funding Group	Water Abutting properties inside given group (1-6)

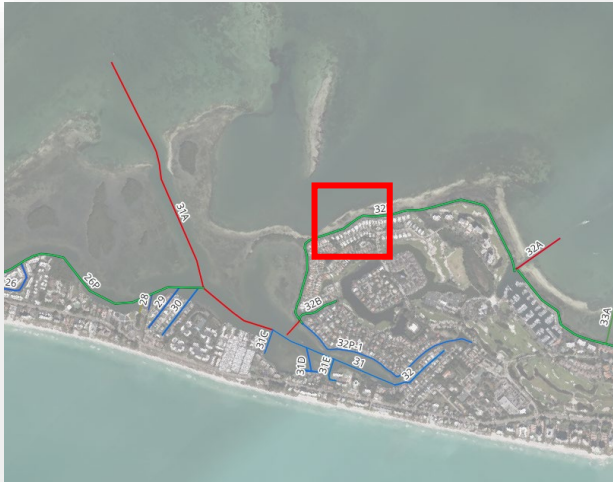






# Canal and Funding Types – Shared Benefit

## Canal 32P – Bay Isles perimeter canal

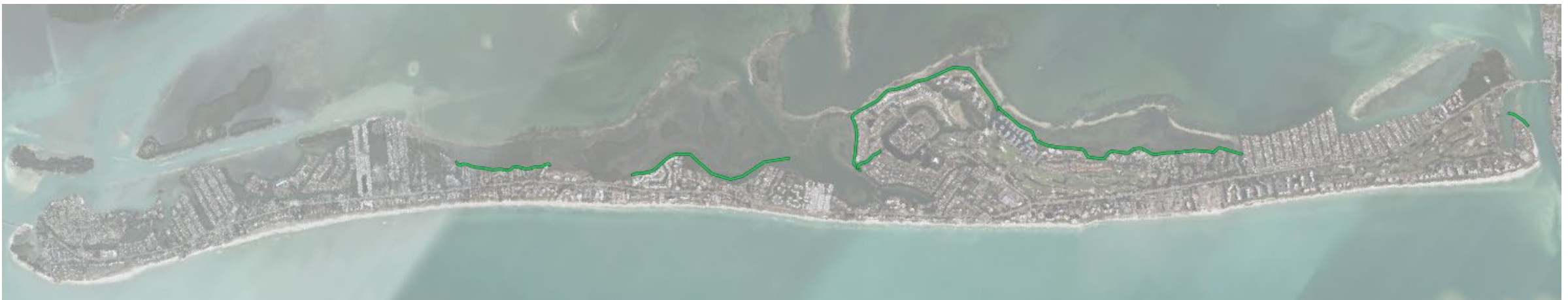




# Canal and Funding Types – Shared Benefit

## Mixed Use – Shared Benefit

Number of Waterways	7
Volume to Dredge	15,000 CY
Funding Strategy	Shared Assessment: Ad Valorem & Non
Funding Group	Ad Valorem – All Residents / Non Ad Valorem – Groups 1-6

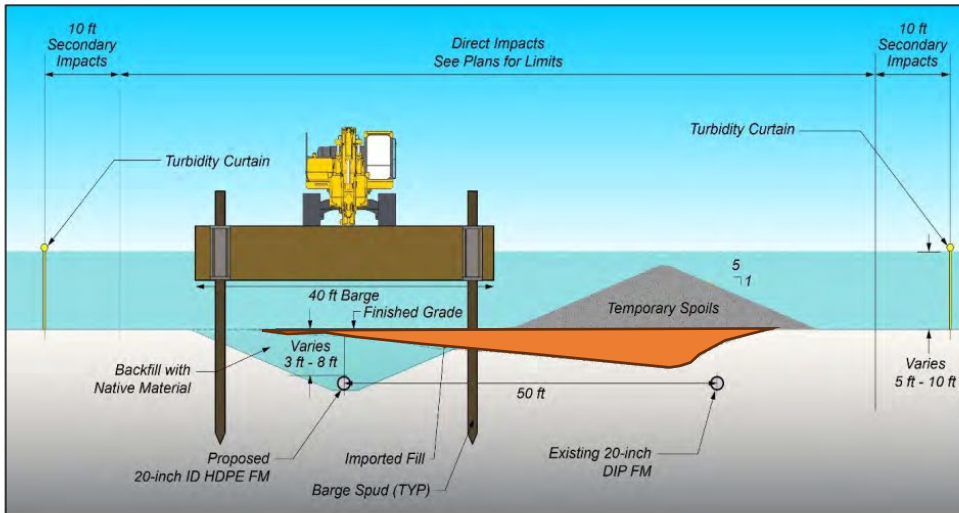






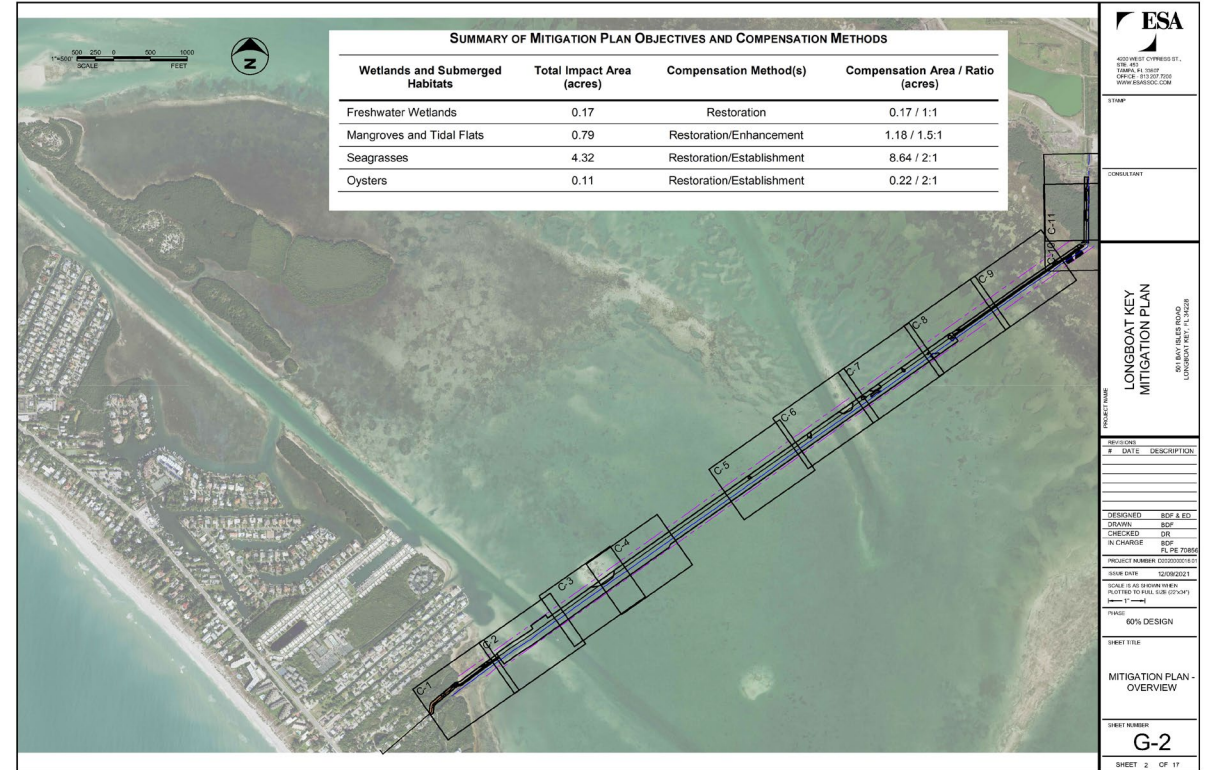
# Subaqueous Pipeline Install

Theoretical Cost to Obtain Fill	
Material Cost	\$ 20 / CY
Trucking	\$ 40 / CY
Barge & Place	\$ 35 / CY
<b>Total Unit Cost</b>	<b>\$ 95 / CY</b>



 Imported fill

Figure 1-7  
Construction Limits and Methods in Segment 3



Ready for Fill: May – Aug 2025

Completion Target: Jan – Aug 2026



# Canal BUDM

- Estimated Available ~ TBD
  - Potential for seagrass transplants







# Canal BUDM

Estimated volume available from canal program = TBD

Theoretical Cost to Obtain Fill	
Material Cost	\$ 20 / CY
Trucking	\$ 40 / CY
BUDM Dredge & Place	\$ 50 / CY
<b>Total Unit Cost</b>	<b>\$ 50 / CY</b>

Example Dredging Costs	
Dredge & Transport	\$ 40 / CY
Trucking	\$ 35 / CY
Misc. & Add.	\$ 5 / CY
<b>Total Unit Cost</b>	<b>\$ 80 / CY</b>

## ROM Potential Savings

Force main project	=	\$ 450,000	
		per	
		10,000 cy	

+

Waterway maintenance program	=	\$ 800,000	
		per	
		10,000 cy	



***Discussion break***

# Assessment Program Methodology



# Apportionment Methodology

## General Benefit

### General Benefit Canals (Red) – Town wide Ad Valorem Millage

- Costs Include:
  - Dredging – mobilization, dredging and transport, truck hauling, etc.
  - Mitigation Costs
  - Annual Assessment Program Costs (legal, study and implementation)
- Approximately 81.32% of Ad Valorem Funds for General Benefit and Mitigation Costs



# Apportionment Methodology

## Direct Benefit

### Direct Benefit Canals (Blue) – Non-Ad Valorem Assessment for Water Abutting Properties

- Parcels are equated using Equivalent Benefit Units (EBUs)
- Water Access Unit (WAU) – Dock, slip, boat lift, or similar that offers mooring and water access for vessels
- 1 WAU = 1 EBU

$$\frac{\text{Cost for Direct Benefit Canals Inside Group}}{\text{\# of EBUs Per Group}} = \text{Cost per EBU}$$



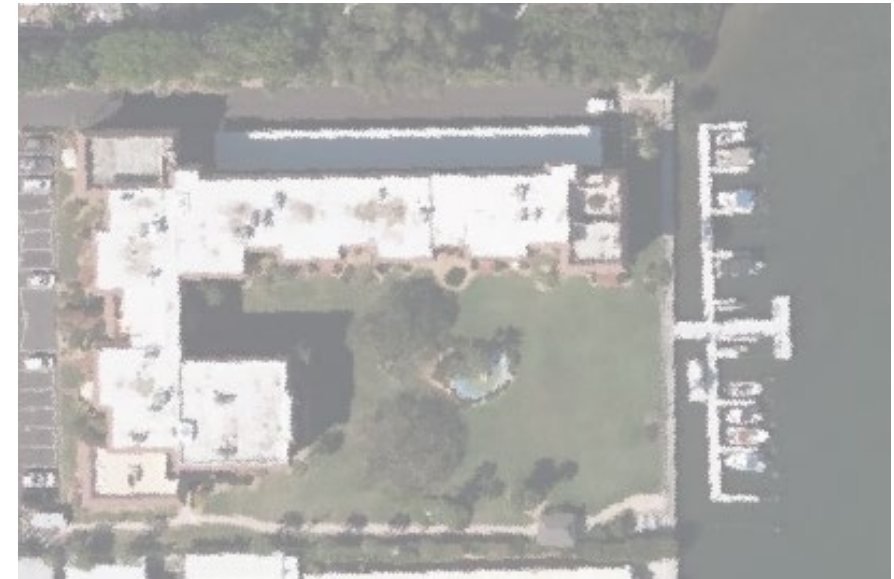


# Apportionment Methodology Direct Benefit

Single Family Homes = 1 EBU



Condominium, COA and HOA facilities: Total # of WAUs divided by total # of condo's/units with access to the facilities



Property has 133 Units and 15 WAUs  
Each resident would pay for 0.11 EBUs



# Apportionment Methodology Shared Benefit

## Shared Benefit Canal – (Green) Cost Breakdown Example

Cost to Dredge Canal 33 (approx) = \$16,000

Cost paid through island wide  
Ad Valorem Millage = \$8,000

Cost paid by direct benefit parcels  
inside Group 4 direct Non-Ad Valorem  
Assessment = \$8,000

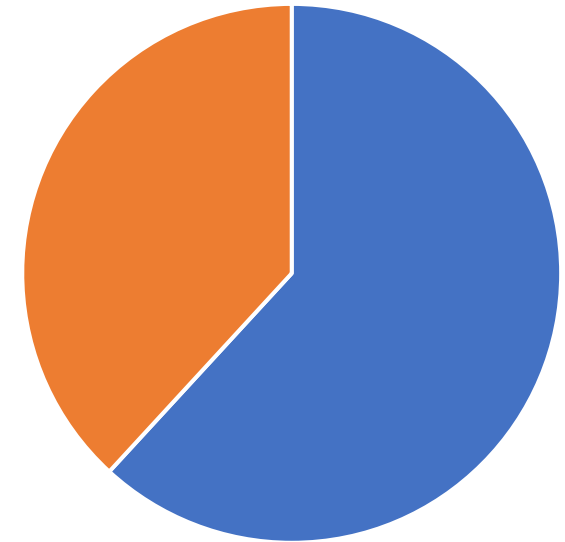




# Cost Breakdown by Funding Source

Assessment Type	Total Annual Assessment	Percent
Ad Valorem	\$ 1,141,641.63	61.84%
Non-Ad Valorem	\$ 704,389.05	38.16%
Total	\$ 1,846,030.68	100.00%

Funding Source



- Ad Valorem (General & 50% Shared)
- Non-Ad Valorem (Direct & 50% Shared)

Note: Preliminary Costs subject to change. Costs reflect Pre-BUDM Potential Savings



# Ad Valorem Millage Calculation

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Description	Year 1 Total Dredging Costs - General Benefit	Year 1 Total Dredging Costs - Shared Benefit	Year 1 Total Dredging Costs	Year 5 Total Dredging Costs	Five-Year Average Annual
Insurance/Bonding	\$ -	\$ -	\$ -	\$ -	\$ -
Mob/Demob (LS)	54,329	49,512	103,841	129,405	25,881
Dredging & Placement (CY)	213,489	407,197	620,686	773,487	154,697
Mitigation Costs	3,000,000	-	3,000,000	3,738,546	747,709
Truck Hauling	164,439	302,177	466,616	581,489	116,298
Miscellaneous	17,437	33,497	50,934	63,473	12,695
<b>Total Dredging OPC</b>	<b>\$ 3,449,695</b>	<b>\$ 792,383</b>	<b>\$ 4,242,077</b>	<b>\$ 5,286,400</b>	<b>\$ 1,057,280</b>
	<b>81.32%</b>	<b>18.68%</b>			
<b>Annual O&amp;M</b>					
Operation Costs (Surveying, General Engineering, Etc.)					-
Maintenance Costs (Begin in Year 6)					-
<b>Total O&amp;M Expenditures</b>					<b>\$ -</b>
<b>Misc. Assessment Expenditures</b>					
Study & Implementation					\$ 26,432
Legal Fees					10,573
<b>Total Misc. Assessment Expenditures</b>					<b>\$ 37,005</b>
<b>Estimated Amount Certified to Tax Collector</b>					<b>\$ 1,094,285</b>
Units (Taxable Value) Adjusted for Statutory Discount					\$ 8,714,435,622
<b>Annual Millage Rate</b>					<b>\$ 0.1256</b>

Note: Preliminary Costs subject to change. Costs reflect Pre-BUDM Potential Savings

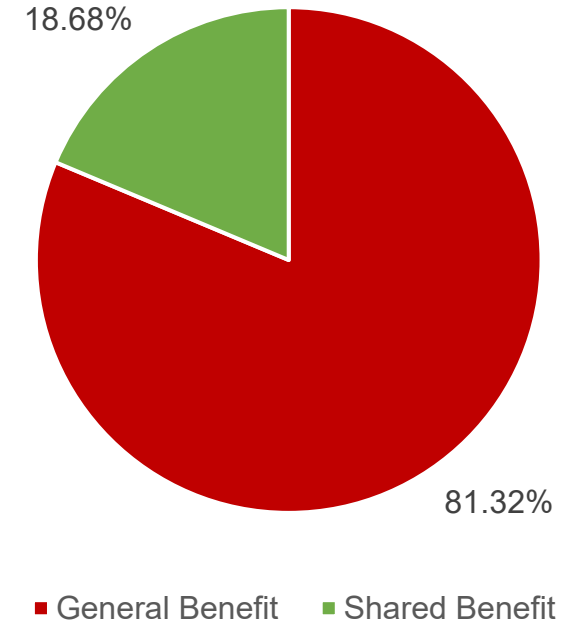




# Example – General & 50% Shared Benefits

Taxable Value	Annual Millage Rate	Annual Ad Valorem Assessment
\$ 500,000	0.1256	\$ 62.80
\$ 750,000	0.1256	\$ 94.20
\$ 1,000,000	0.1256	\$ 125.60
\$ 2,000,000	0.1256	\$ 251.20
\$ 3,500,000	0.1256	\$ 439.60
\$ 5,000,000	0.1256	\$ 628.00

Millage Rate Funding



Note: Preliminary Costs subject to change. Costs reflect Pre-BUDM Potential Savings



# Example – Direct Benefit

## Group 1

Description	Year 1 Total Dredging Costs	Year 5 Total Dredging Costs	Five-Year Average Annual
Insurance/Bonding	\$ -	\$ -	\$ -
Mob/Demob (LS)	91,827	114,433	22,887
Dredging & Placement (CY)	404,185	503,688	100,738
Seagrass Transplanting & Monitoring (CY)	-	-	-
Truck Hauling	276,433	344,485	68,897
Miscellaneous	31,716	39,524	7,905
<b>Total Dredging OPC</b>	<b>\$ 804,160</b>	<b>\$ 1,002,130</b>	<b>\$ 200,426</b>
<b>Annual O&amp;M</b>			
Operation Costs (Surveying, General Engineering, Etc.)			2,080
Maintenance Costs (Begin in Year 6)			-
<b>Total O&amp;M Expenditures</b>			<b>\$ 2,080</b>
<b>Misc. Assessment Expenditures</b>			
Study & Implementation			\$ 5,011
Legal Fees			2,004
Collection Costs (Property Appraiser @1.5%)			4,197
Collection Costs (Tax Collector @1.5%)			4,197
First Class Notice Costs (\$2.00 per)			333
Statutory Discount (@4%)			10,912
<b>Total Misc. Assessment Expenditures</b>			<b>\$ 26,654</b>
<b>Estimated Amount Certified to Tax Collector</b>			<b>\$ 229,160</b>
Equivalent Benefit Units			617.46
<b>Annual Rate Per Equivalent Benefit Unit</b>			<b>\$ 372.00</b>

Note: Preliminary Costs subject to change. Costs reflect Pre-BUDM Potential Savings



# Example – Benefit Groups

Group	Benefit Type	Total Estimated Annual Cost – Initial Dredging Program	EBUs (Rounded)	Rate per EBU
1	Direct	\$ 229,160.27	617.46	\$ 372.00
2	Direct and Shared	\$ 120,208.72	193.25	\$ 623.00
3	Direct	\$ 79,419.81	232.44	\$ 342.00
4	Direct and Shared	\$ 197,673.38	531.28	\$ 373.00
5	Direct	\$ 70,004.63	575.87	\$ 122.00
6	Direct and Shared	\$ 6,374.95	31.28	\$ 204.00
<b>Total</b>		<b>\$ 702,841.76</b>	<b>2,181.58</b>	

Note: Preliminary Costs subject to change. Costs reflect Pre-BUDM Potential Savings



# Example – Annual Assessments

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Parcel Type	Group	EBU	Taxable Value	Assessment		
				Non-Ad Valorem	Ad Valorem	Total
CONDO	6	0.28	\$ 732,183	\$ 57.12	\$ 91.96	\$ 149.08
SFR	6	1.00	\$ 4,025,343	\$ 204.00	\$ 505.58	\$ 709.58
MARINA	5	1.00	\$ 76,500	\$ 122.00	\$ 9.61	\$ 131.61
SFR	0	-	\$ 673,644	\$ -	\$ 84.61	\$ 84.61
CONDO	0	-	\$ 1,062,500	\$ -	\$ 133.45	\$ 133.45
COMMERCIAL	3	8.00	\$ 1,565,551	\$ 2,736.00	\$ 196.63	\$ 2,932.63
CONDO	3	0.02	\$ 603,500	\$ 6.84	\$ 75.80	\$ 82.64
CONDO	0	-	\$ 586,519	\$ -	\$ 73.67	\$ 73.67
CONDO	0	-	\$ 694,649	\$ -	\$ 87.25	\$ 87.25
SFR	5	1.00	\$ 680,550	\$ 122.00	\$ 85.48	\$ 207.48
SFR	1	1.00	\$ 824,519	\$ 372.00	\$ 103.56	\$ 475.56
SFR	2	1.00	\$ 927,115	\$ 623.00	\$ 116.45	\$ 739.45
SFR	4	1.00	\$ 1,197,536	\$ 373.00	\$ 150.41	\$ 523.41
COMMERCIAL	0	-	\$ 471,263	\$ -	\$ 59.19	\$ 59.19

Note: Preliminary Costs subject to change. Costs reflect Pre-BUDM Potential Savings





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***Questions?***



# *Extra Slides*



# Canal and Funding Types – General Benefit

## Canal 31A – Access to Buttonwood Harbor and other back waters





# Canal and Funding Types – Direct Benefit

## Country Clubs Shores Canals

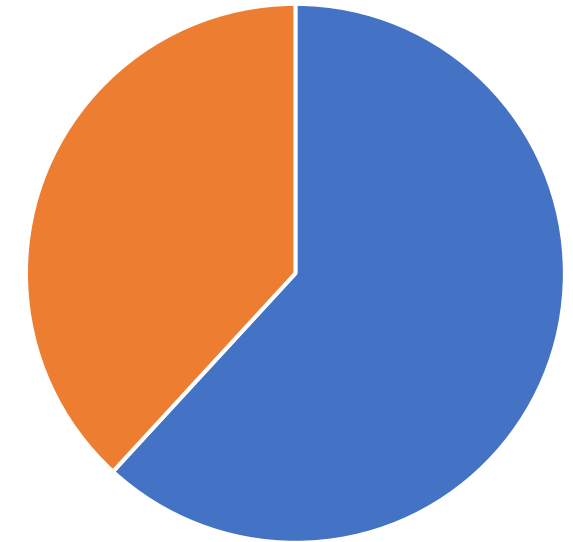




# Cost Breakdown by Location and Funding Source

Assessment	Bayside	Gulfside	Total	Percent
Ad Valorem	\$ 500,711.30	\$ 640,930.33	\$ 1,141,641.63	61.84%
Non-Ad Valorem	\$ 697,446.33	\$ 6,942.72	\$ 704,389.05	38.16%
<b>Total</b>	<b>\$ 1,198,157.63</b>	<b>\$ 647,873.05</b>	<b>\$ 1,846,030.68</b>	100.00%
Percent	65%	35%	100%	

Funding Source



- Ad Valorem (General & 50% Shared)
- Non-Ad Valorem (Direct & 50% Shared)

Note: Preliminary Costs subject to change.



**End of Agenda Item**