



# Flagler County Board of County Commissioners Workshop

## Funding Study and Survey Results for Beach Management

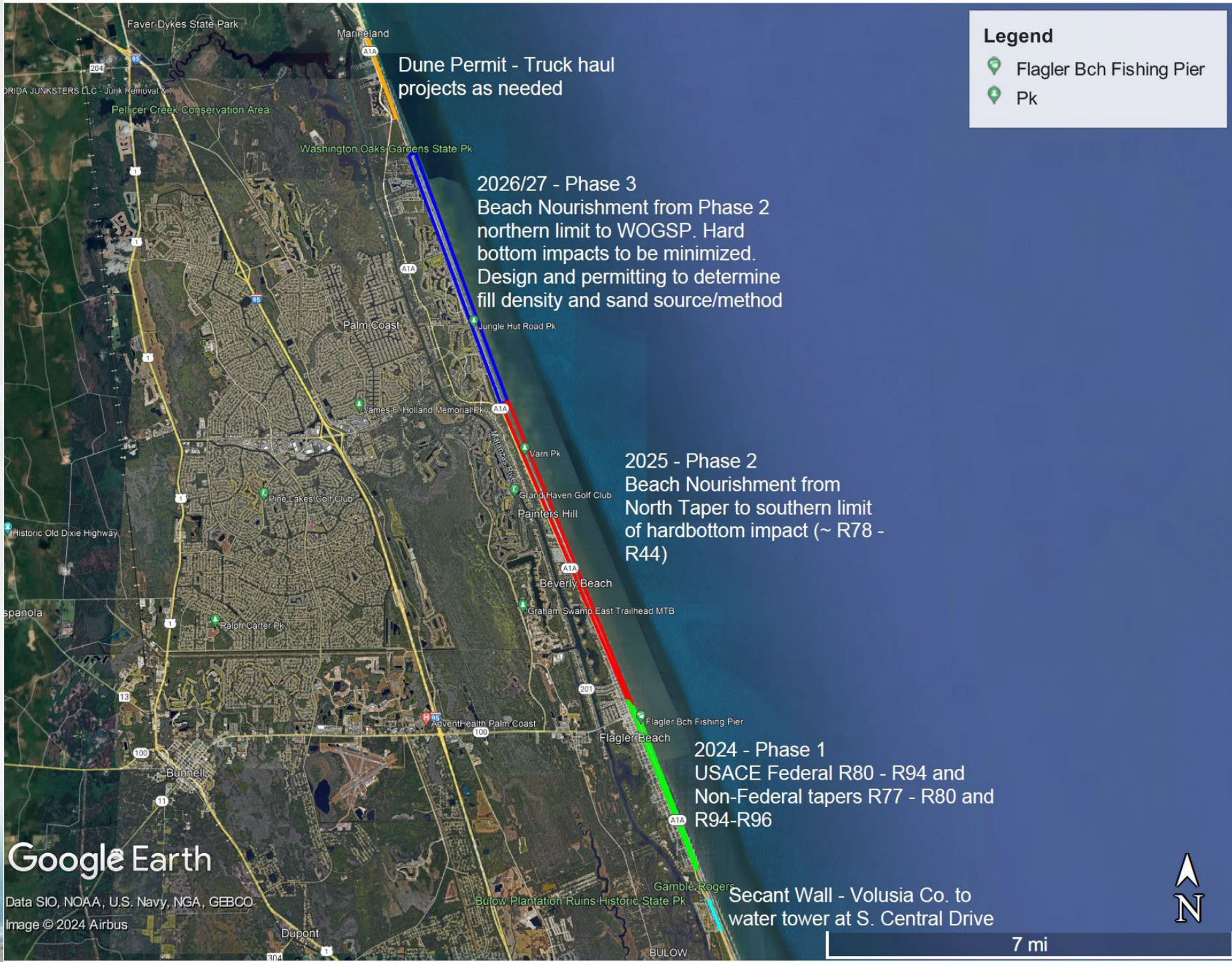
June 3, 2024

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COASTAL ENGINEERING  
ADMINISTRATOR

# BEACH MANAGEMENT PLAN- HISTORY AND BACKGROUND

- At a November 2019 Board of County Commissions (BOCC) Workshop, the BOCC established a consensus to develop a long-term comprehensive Beach Management Plan.
- In 2021, Flagler County sponsored a Beach Management Study (BMS) intended to identify beach management needs, goals and implementation requirements.
- The Beach Management Plan was adopted by the BOCC for implementation by the County on October 16<sup>th</sup>, 2023.





Dune Permit - Truck haul projects as needed

2026/27 - Phase 3  
 Beach Nourishment from Phase 2 northern limit to WOGSP. Hard bottom impacts to be minimized. Design and permitting to determine fill density and sand source/method

2025 - Phase 2  
 Beach Nourishment from North Taper to southern limit of hardbottom impact (~ R78 - R44)

2024 - Phase 1  
 USACE Federal R80 - R94 and Non-Federal tapers R77 - R80 and R94-R96

Secant Wall - Volusia Co. to water tower at S. Central Drive

**Legend**

- 📍 Flagler Bch Fishing Pier
- 📍 Pk

Google Earth

Data SIO, NOAA, U.S. Navy, NGA, GEBCO  
 Image © 2024 Airbus



7 mi

# Flagler County Proposed Phases of Dune/Beach Nourishment

FLAGLER COUNTY, FLORIDA

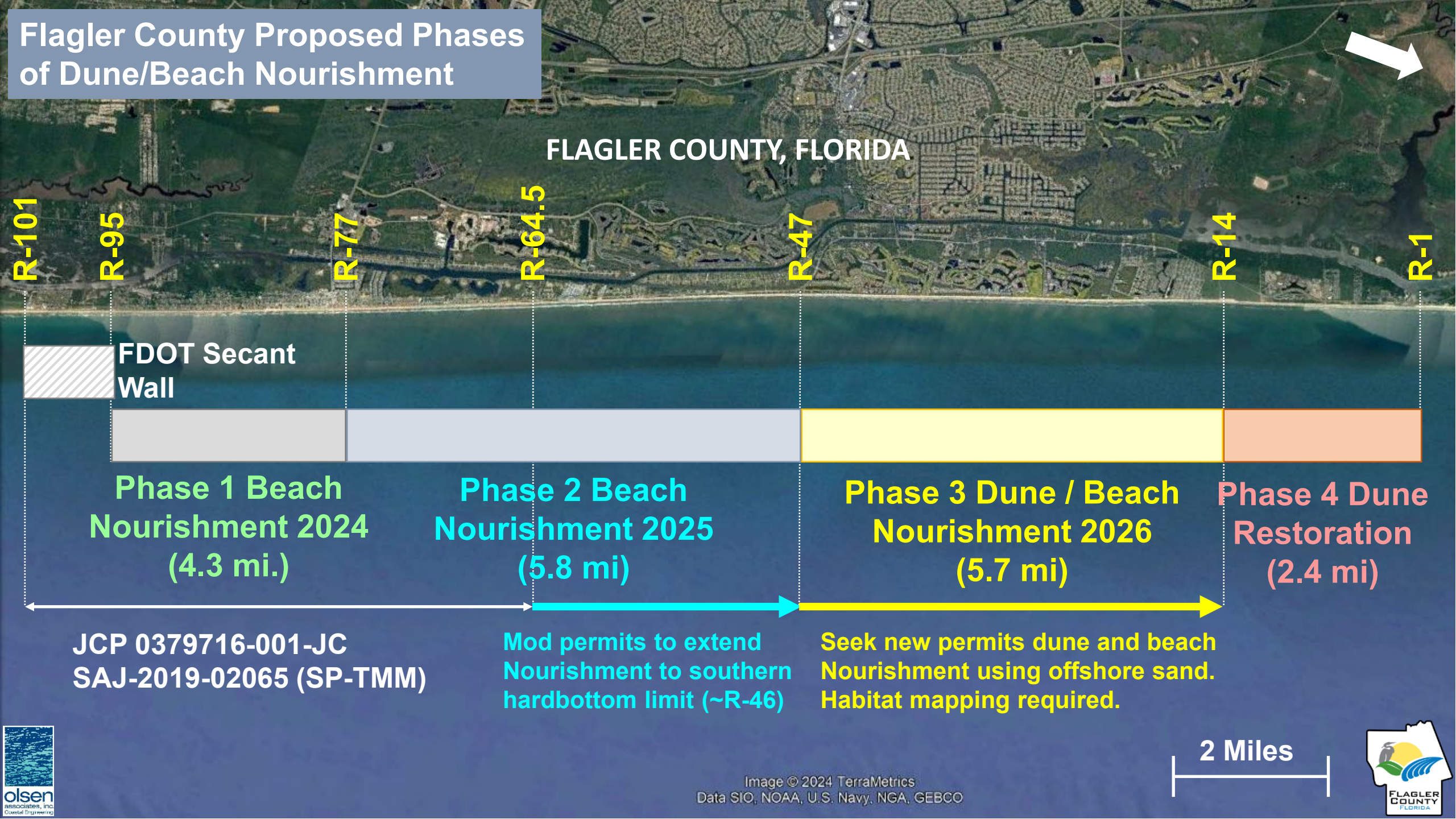


Image © 2024 TerraMetrics  
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# Flagler County Proposed Phases of Dune/Beach Nourishment

FLAGLER COUNTY, FLORIDA



R-101

R-95

R-77

R-64.5

R-47

R-14

R-1

FDOT Secant Wall

**Phase 1 Beach Nourishment 2024**  
(4.3 mi.)

**Phase 2 Beach Nourishment 2025**  
(5.8 mi)

**Phase 3 Dune / Beach Nourishment 2026**  
(5.7 mi)

**Phase 4 Dune Restoration**  
(2.4 mi)

JCP 0379716-001-JC  
SAJ-2019-02065 (SP-TMM)

Mod permits to extend Nourishment to southern hardbottom limit (~R-46)

Seek new permits dune and beach Nourishment using offshore sand. Habitat mapping required.

2 Miles



Image © 2024 TerraMetrics  
Data SIO, NOAA, U.S. Navy, NGA, GEBCO



# VILANO BEACH - ST JOHN'S COUNTY PRE-CONSTRUCTION



# VILANO BEACH - ST JOHN'S COUNTY POST-CONSTRUCTION



# VILANO BEACH – THE REEF RESTAURANT PRE-CONSTRUCTION





# VILANO BEACH – THE REEF RESTAURANT PRE-CONSTRUCTION



# JACKSONVILLE BEACH Summer 1973



# JACKSONVILLE BEACH

February 2011



# BEACH MANAGEMENT PLAN

- Local Funding is a requirement to receive State and Federal cost-sharing for beach nourishment.
- Olsen Associates has determined an Equivalent Annualized Cost for renourishing and maintaining the 18 miles of beaches in Flagler County based on the current and future needs of the County.
- Public Financial Management Group, LLC (PFM) was hired to conduct a Funding Study to test community interest in the program and willingness to pay.

# FUNDING STUDY RESULTS

- PFM Group has worked closely with the County Engineering Department and Administration and Olsen Associates Inc. in their analysis to determine their recommendation for a sustainable funding source to rebuild and maintain our beaches
- **The purpose of today's workshop is to review the survey results conducted as part of the funding study by PFM Group, and**
- **To initiate discussion with the BOCC about PFM's recommendation for generating a dedicated funding source for the Beach Management Program.**





# **Analysis of Flagler County Beach Nourishment Survey and MSBU Recommendation for Special Assessment**

**Presentation to the Flagler County  
Board of County Commissioners**

**June 3, 2024**

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PFM Group Consulting LLC

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[pfm.com](http://pfm.com)



# Project Overview and Approach



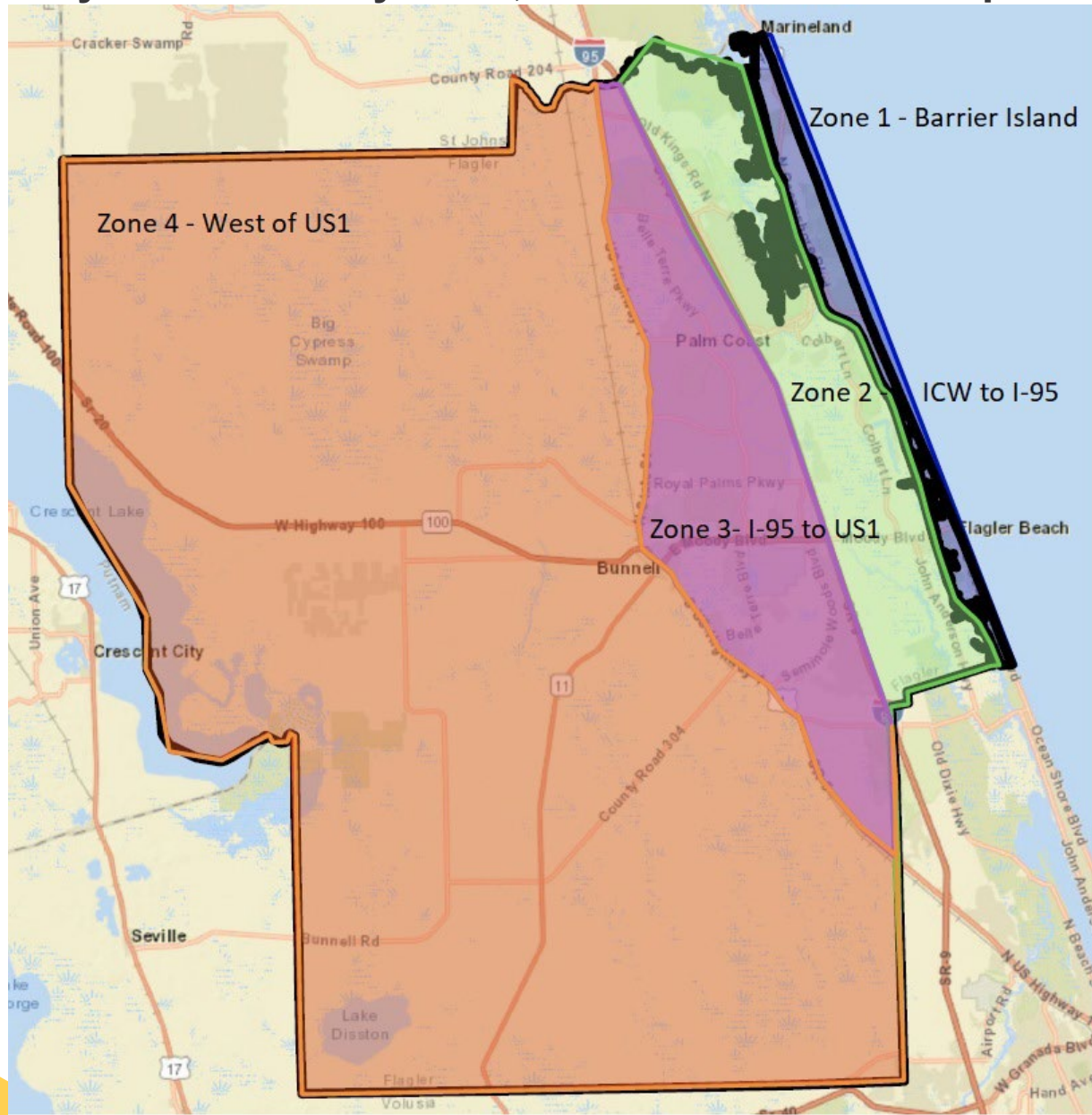
## PFM Project Overview

- Countywide survey undertaken to determine public support for funding beach nourishment:
  - Relies on **Beach Master Plan** to determine costs and protection
  - Components of Value: Protection; Use & Enjoyment; Environment
  - Examined public awareness and funding support
  - Compared MSTU vs MSBU funding alternatives
  - Establish and Document Benefits Received from Beach and Project
  - Propose Special Assessments through MSBU Zones
  - Preliminary assessment revenue estimates – not a final tax roll





# Proposed Countywide MSBU by Zone; inclusive of all Municipalities





# Beach Nourishment Project Costs



# Project Costs<sup>1</sup>

- Equivalent Annual Cost (EAC) is estimated to be from \$9 Million to \$10 Million year
- County share EAC required to qualify for and capture State and Federal matching funds ranges from \$6 Million to \$7 Million, including expanded cost sharing.
- Beaches are critically eroded; infrastructure failures; worsening trends
- State of Florida and USACE funding opportunities **require** cost-sharing from Flagler County. **Project construction will not be possible without local funding.**

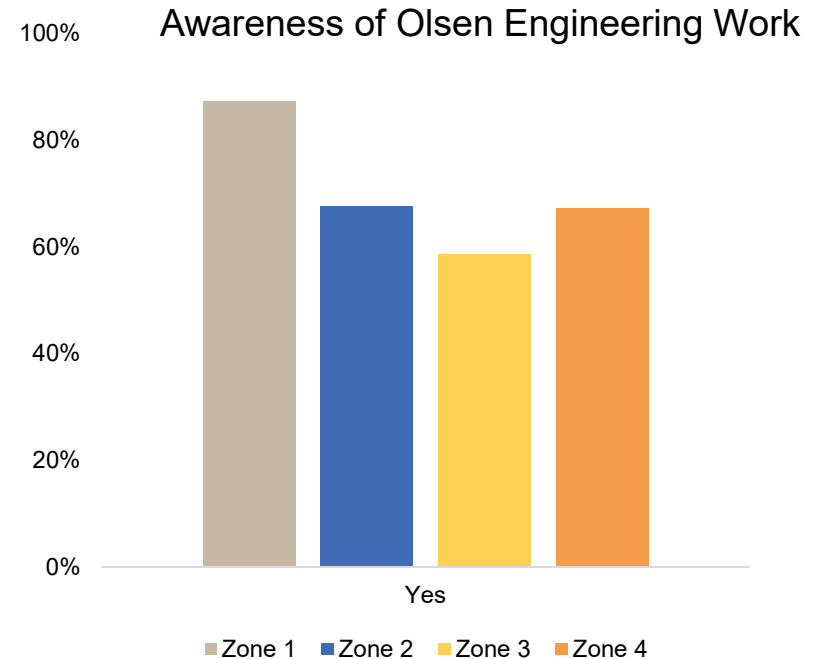
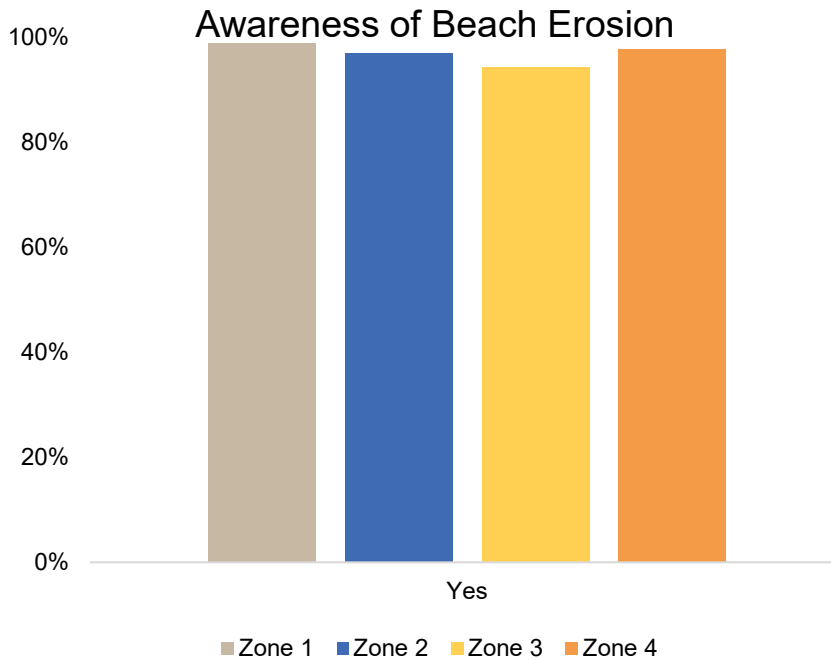


# **SURVEY: Infrastructure and Property Protection**



# Are you aware that recent beach erosion has resulted in roadway failures along A1A, has threatened homes and reduced accessibility of the beach for recreational use?

- Over 95% of respondents report being aware of these threatening conditions
- 66% of respondents are aware that Flagler County has hired a coastal engineering firm to assess beach and coastal conditions and develop a beach re-nourishment and restoration program



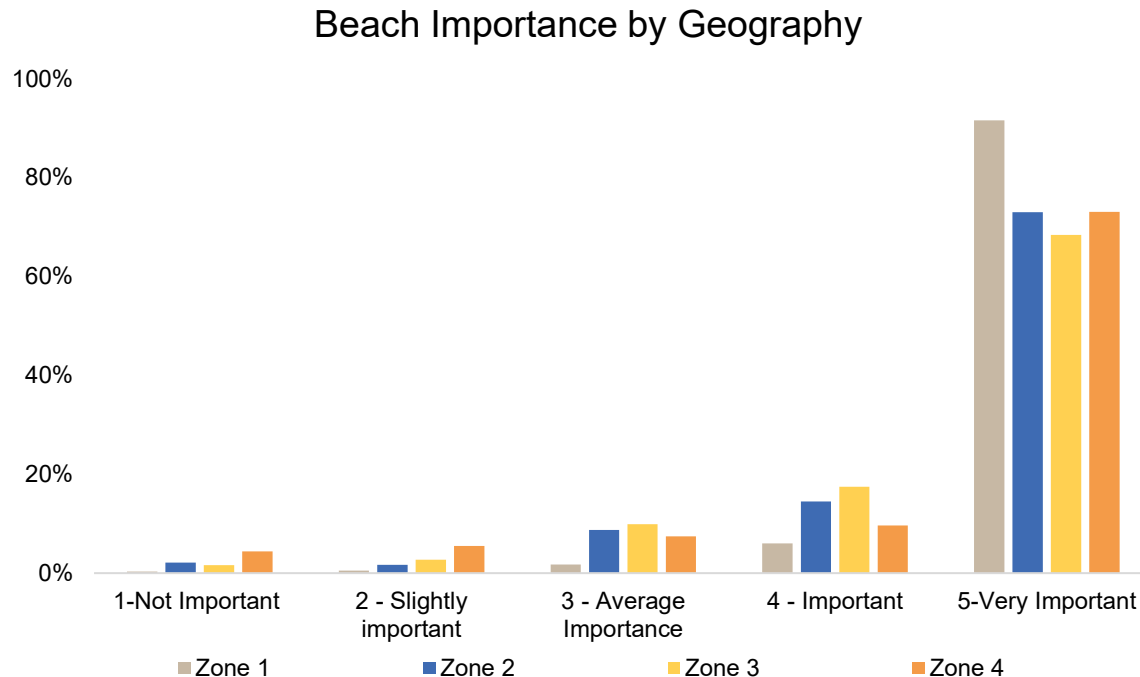


# **SURVEY: Use and Enjoyment of Beaches**



## On a scale of 1-5, with 1 being 'not important at all', and 5 being 'very important', how important is the beach to you?

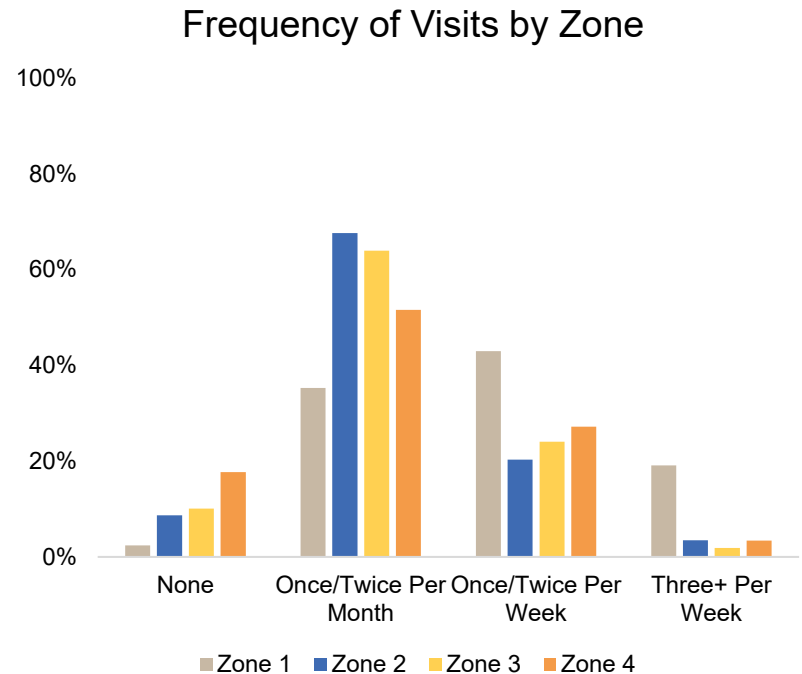
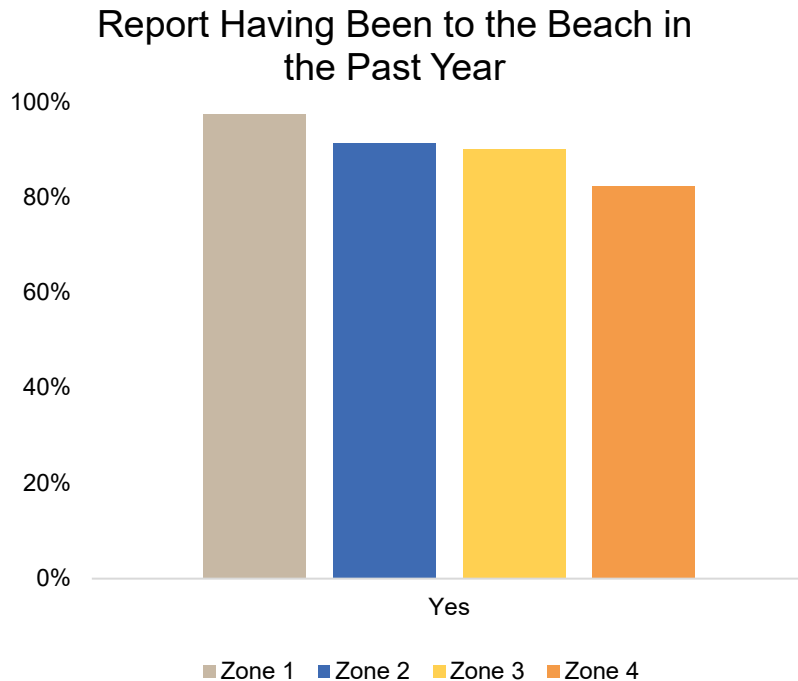
- Over 85% of respondents reported that the beach was either important or very important to them





# Have you Been to the Beach in the Past Year?

- Over 90% of respondents report visiting the beach in the past year
- Beach use increases with proximity to coast
- Frequency of visits is high







## Which activities do you typically do while visiting the beach?

- Beachgoers enjoy multiple activities, the most common of which were sitting on the beach, sunning, and walking. Roughly 50% report enjoying more than 5 activities at the beach

Answer	Zone 1	Zone 2	Zone 3	Zone 4	Overall
Walk	97%	80%	81%	78%	84%
Sit on beach	87%	77%	87%	75%	81%
Sun	60%	52%	62%	49%	56%
Collect shells	56%	44%	49%	42%	48%
Swim	52%	46%	57%	44%	50%
Watch birds	51%	40%	44%	41%	44%
Fish	24%	19%	20%	30%	23%
Surf	20%	10%	11%	17%	14%
Other	15%	17%	16%	12%	15%
Bike	14%	9%	8%	6%	9%
Run	13%	6%	9%	6%	9%
Play sports	13%	8%	10%	13%	11%
Dive	2%	5%	5%	4%	4%
Sail	1%	1%	1%	1%	1%



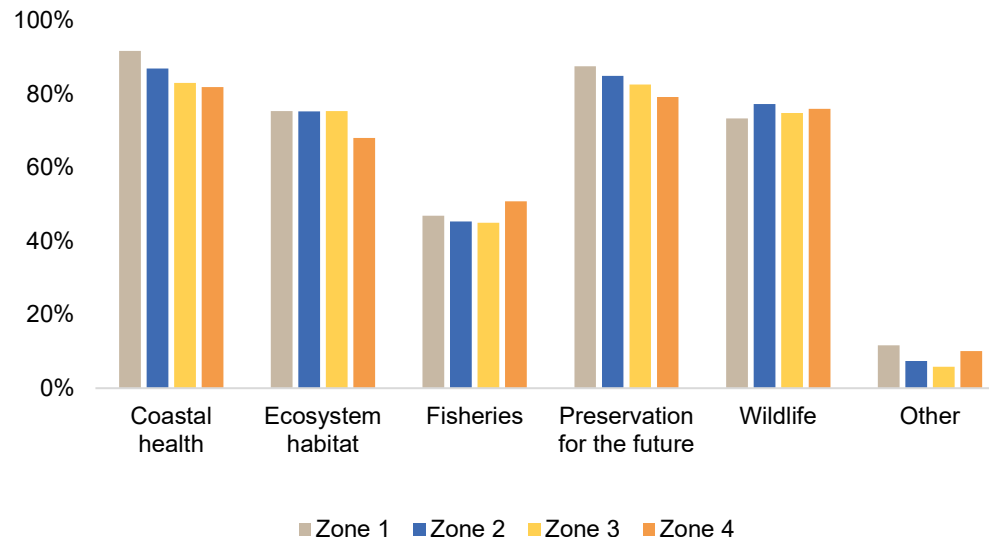
# Valuing Environmental Preservation



## Which of the following do you consider to be significant aspects of the beach?

- Over 75% of respondents reported at least 3 aspects were significant
- Importance of coastal health and preservation for the future exceeds 80% in all zones
- Environmental importance remained very high regardless of zone proximity to the beach

Significant Aspects of the Beach by Geography



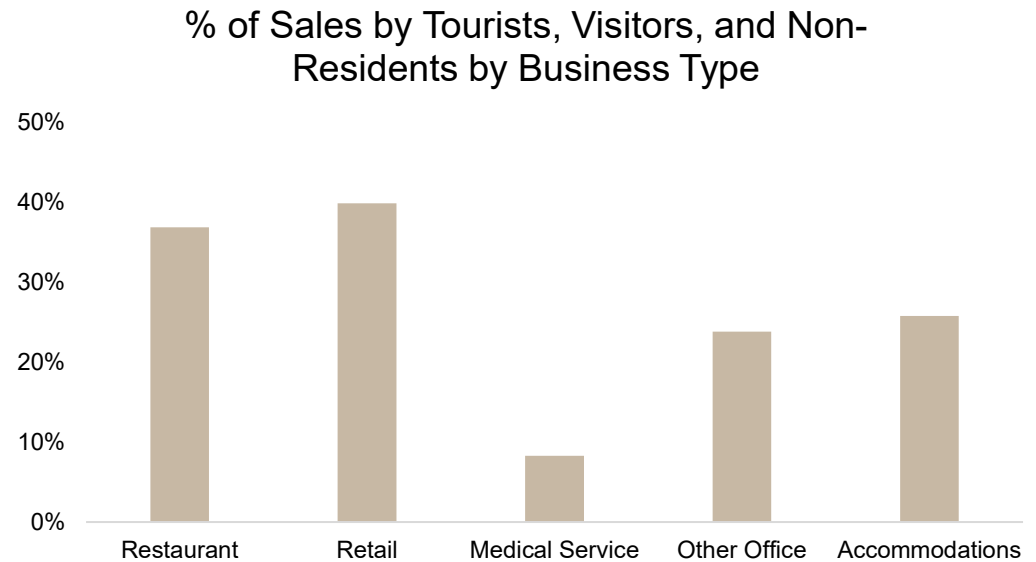


# Business Responses



## Businesses Impacted by Tourism

- Only businesses impacted by tourism were included for survey analysis. These businesses include:
  - Retail
  - Restaurant
  - Hotels/lodging
  - Medical service
  - Other office

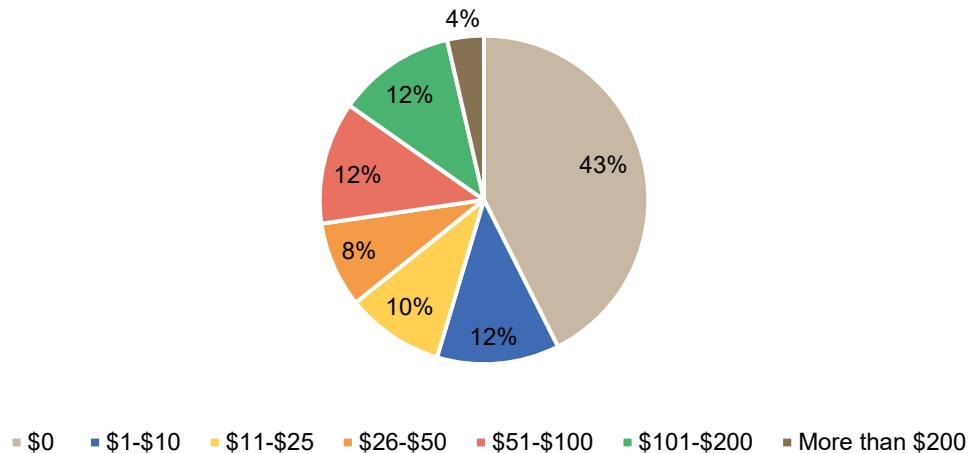




## Business Willingness to Pay

- 57% of tourism-impacted businesses were willing to pay some amount for beach renourishment and restoration
- Non-tourism-impacted businesses, which represent 34% of Flagler's business community, were assumed to have a willingness to pay of \$0

Reported Annual Willingness to Pay for Beach Restoration among Tourism-Impacted Businesses



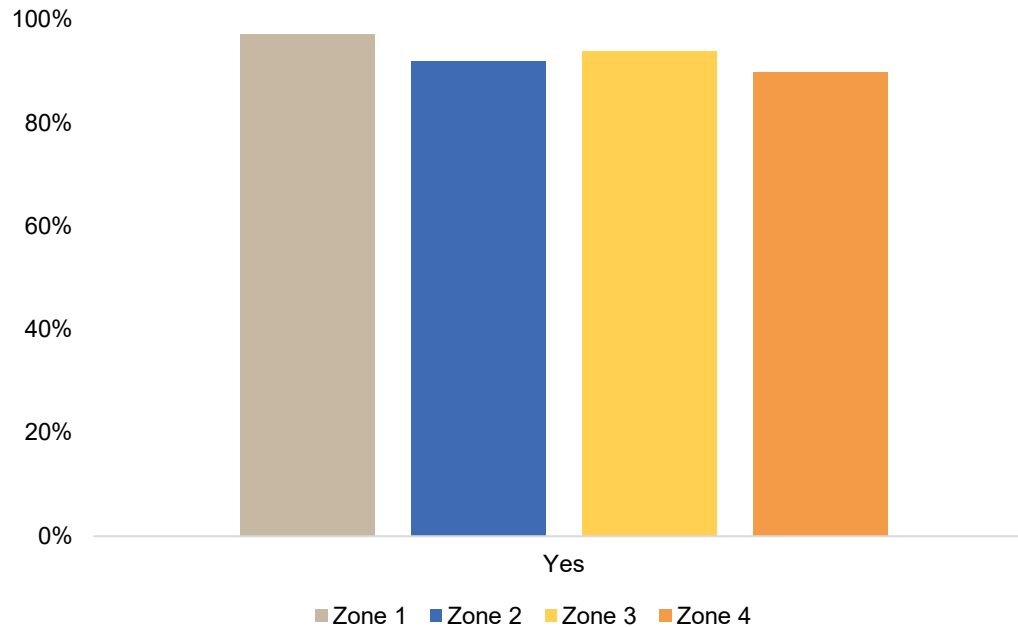


# Public Support for Funding Beach Nourishment



# Are you in favor of plans to fix, restore and protect the beaches in Flagler County?

- 94% report being in favor
- All zones favor in excess of 90%

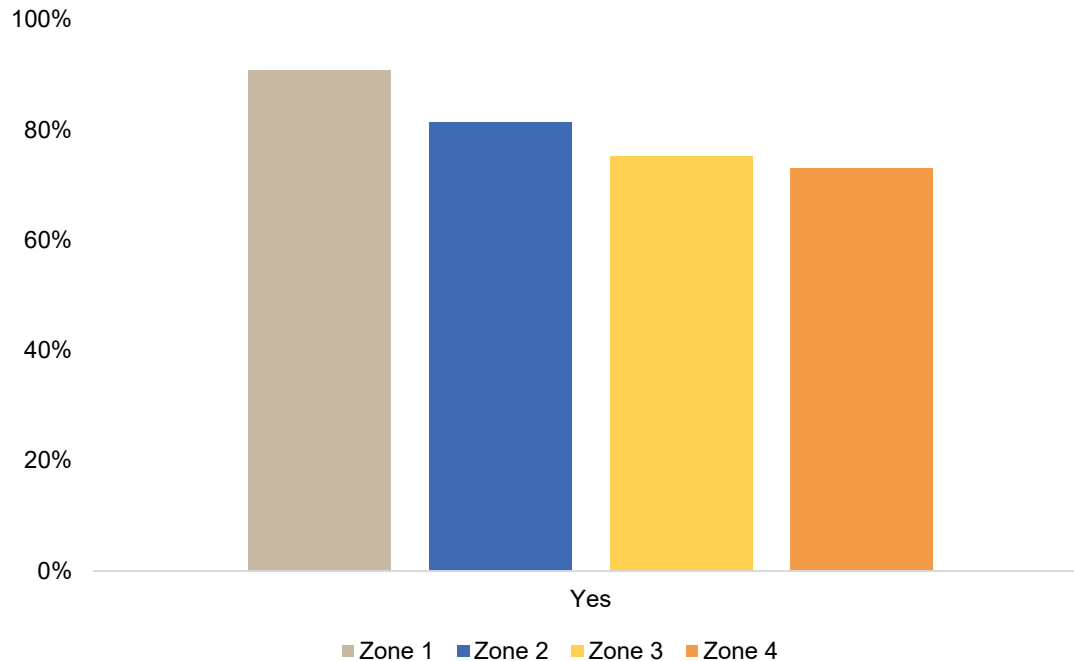






# Do you believe Flagler County should help pay its proportionate fair-share for a periodic, long-term shoreline protection and sand renourishment program along its beaches?

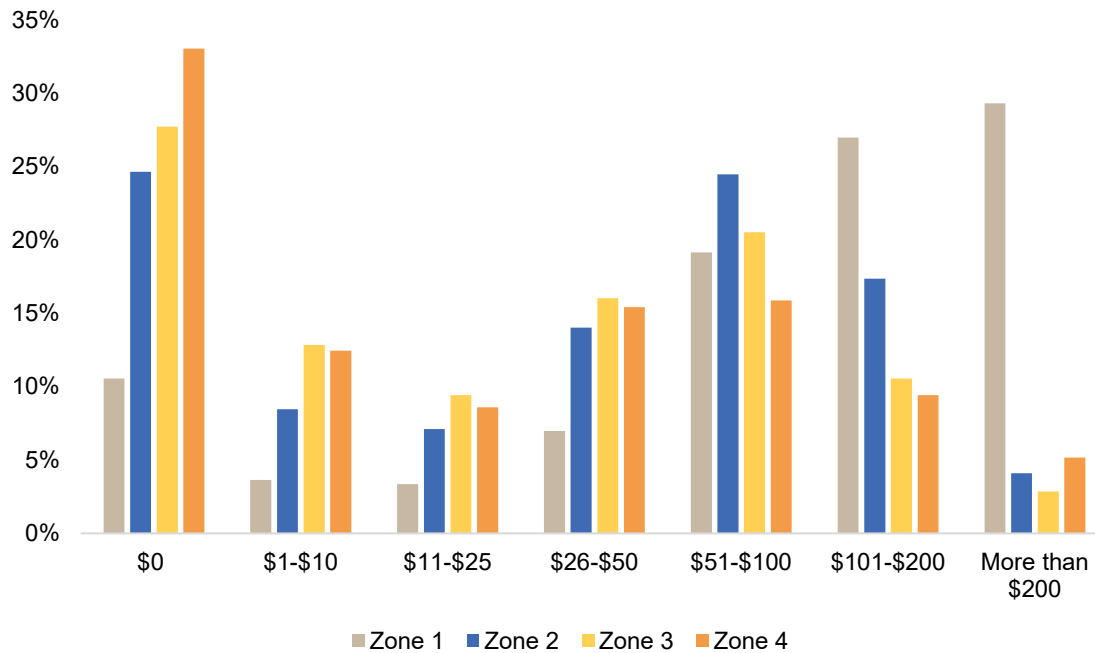
- Roughly 79% believe the County should help pay
- Exceeds a referendum threshold in each zone





# How much would your household be willing to pay per year to support beach restoration?

- 76% favor some annual household payment

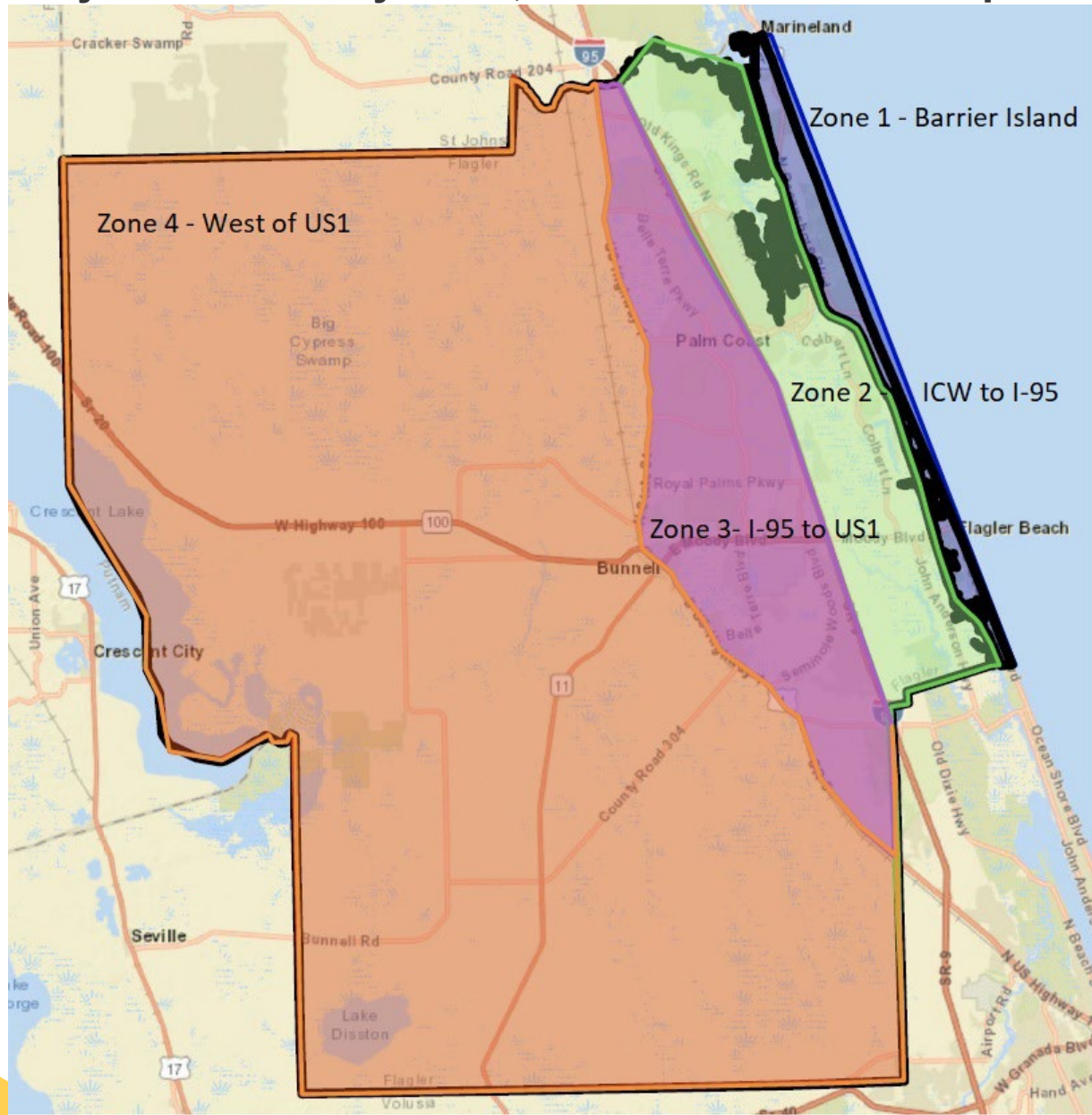




# Proposed Zones and Special Assessment



# Proposed Countywide MSBU by Zone; inclusive of all Municipalities





## Benefits to Local Property

- The Benefits Received from Beach and Project may be defined as the project cost itself

*“the power of taxation...must be exercised only for the public necessity or convenience. The budgetary [Project cost] requirements would be the measure of the value or benefit which is to be apportioned among the properties benefited. Thus, the benefit, as defined by the Project cost, is between \$8.8 and \$10.0 million per year<sup>1</sup>.*

- Survey data results clearly demonstrates how benefits are scaled by Zone from east to west
- Propose Special Assessments through MSBU Zones
- Preliminary assessment revenue estimates – not a final tax roll

1. Fire District No. 1 of Polk County v. Jenkins 221 So. 2d 740 (Fla. 1969)



## MSBU Approximate Assessment by Zone – SURVEY BASED

Scenario	Assessment	Zone 1A	Zone 1B	Zone 2	Zone 3	Zone 4*
Count	Households	1,795	3,984	12,833	31,450	2,948
	Businesses	160	334	903	1,944	590
\$7M	Household	\$578.40	\$289.20	\$118.06	\$89.22	\$93.70
	Business	\$234.03	\$117.01	\$47.77	\$36.10	\$37.91
\$10M MAX	Household	\$826.29	\$413.14	\$168.66	\$127.46	\$133.85
	Business	\$334.32	\$167.16	\$68.24	\$51.57	\$54.16
Private HOAs/ Other Land Uses In Zone 1A	Linear Feet Dune/Beach	12,332	5,775	4,685	920	
	Cost Per LF	Range between \$				

\* Note: Zone 4 is affected by small survey sample limitations – final expected assessment to be lower than Zone 3



## Assessment Revenue Generation

- Finalize Zone 1a and Zone 1b maps
- Determine any other Zone structures – particularly Zone 4
- Recommend the County notice taxpayers the Maximum assessment based on \$10 million annual benefit received
- Set actual rate based on \$7.0 million annual local revenue needed
- Determine business exemptions, if any, by zone
- Determine additional rates for HOAs and other types of property such as state or utilities, etc.



## MSBU Approximate Assessment by Zone – Possible Alternative

Scenario	Assessment	Zone 1A	Zone 1B	Zone 2	Zone 3	Zone 4*
Count	Households	1,795	3,984	12,833	31,450	600
	Businesses	160	334	903	1,944	590
\$7M	Household	\$550	\$250	\$100	\$75	\$25
	Business	\$234	\$110	\$44	\$33	\$0
\$10M	Household	\$786	\$357	\$157	\$114	\$43
	MAX Business	\$334	\$157	\$69	\$50	\$0
<b>Private POAs that front the Beach</b>						
		HDOA	OHHOA	Resort	Sea Colony	
Linear Feet	Dune/Beach	12,332	5,775	4,685	920	
	\$7M	\$ 614,536	\$ 287,783	\$ 233,466	\$ 45,846	
	\$10M	\$ 657,375	\$ 307,845	\$ 249,741	\$ 49,042	

\* Note: Zone 4 only includes City of Palm Coast





## Survey Feedback – Selected Comments

- More than 1,100 selected comments were received in open ended question – 32.5% of respondents left comments
- Of those leaving a comment 75% were IN FAVOR of the County paying to fix the beach
- Overall, 76% of respondents are willing to have their household pay something to support the Project
- Despite the “tone” of some comments, a large majority support and are willing to pay for the Project
- Detailed responses to comments are included in today’s submittal