

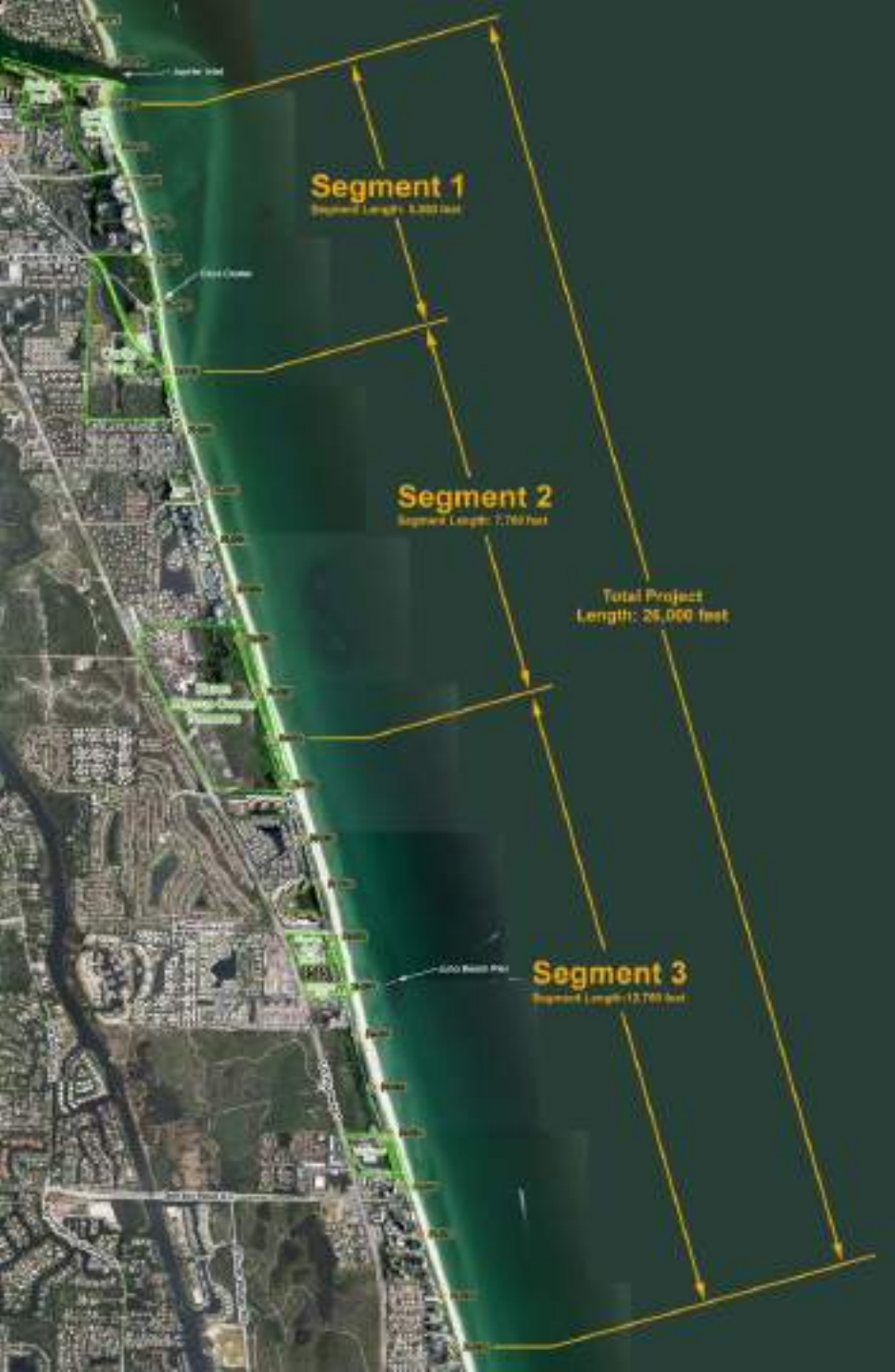
Town of Juno Beach Coastal Update

April 2024



Andy Studt
Palm Beach County
Dept of Environmental Resources Management

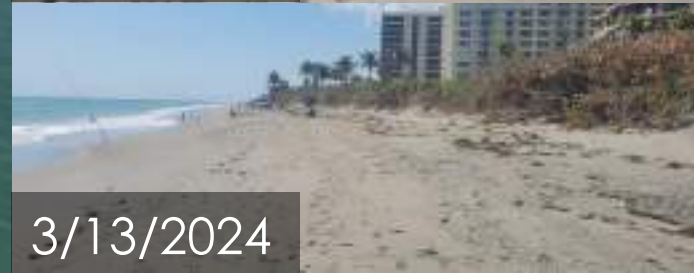
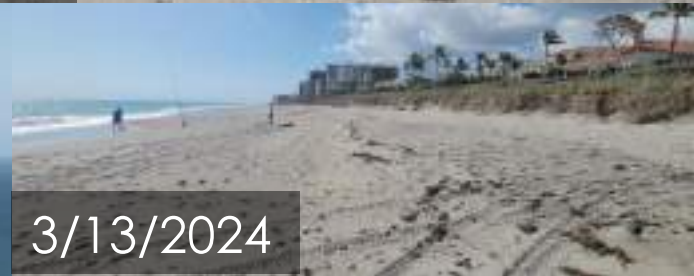
North County Comprehensive Shore Protection Project



- Total Project Length – 4.92 miles
- Segment I – Traditional Jupiter/Carlin Project Area
 - 5,550 ft length
 - 150-200 ft berm width
- Segment II – South Jupiter Segment
 - 7,700 ft length
 - Dune-only Restoration and Maintenance
- Segment III – Traditional Juno Beach Project Area
 - 12,750 ft length
 - 150-200 ft berm width



Fall 2023/Winter 2024 Erosion





Fall 2023/Winter 2024 Erosion





Fall 2023/Winter 2024 Erosion





Project History – Jupiter/Carlin Segment



- Beach Nourishment
 - 1995 603,000 CY
 - 2002 626,000 CY
 - 2015 424,000 CY
 - 2020 513,000 CY
 - 2022 409,000 CY
- 2022 Restoration Facts
 - ~\$7M Total Cost
 - 50% External Cost Share
- Fall 2023 / Winter 2024
 - Severe Erosion Hotspot
 - Accelerated Sand Movement
- 2024 JID Maintenance
 - 2024 ~140,000+ CY (ongoing)



Project History – South Jupiter Dune



- Dune Nourishment
 - 2016 3,300 CY
 - 2020 5,000 CY
 - 2022 27,595 CY
- 2022 Restoration Facts
 - \$1.4M+ Total Cost
- Fall 2023 / Winter 2024
 - Limited Dune Erosion
 - Accretion South of R. Club
 - Beach Stabilizing
 - Ongoing Vandalism Issues



Project History – Juno Beach Segment



- Beach Nourishment
 - 2001 1,000,000 CY
 - 2010 925,000 CY
 - 2021 991,000 CY
- FY2021 Project Facts
 - ~\$15M Total Cost
 - 95% External Cost Share
- 2022 Hurricane Nicole
 - 207,745 CY Damages
 - \$4,281,668 FEMA (75%)
 - \$1,051,963 FDEP (100%)
- Fall 2023 / Winter 2024
 - Significant Damage South
 - Accretion North of Juno Pier



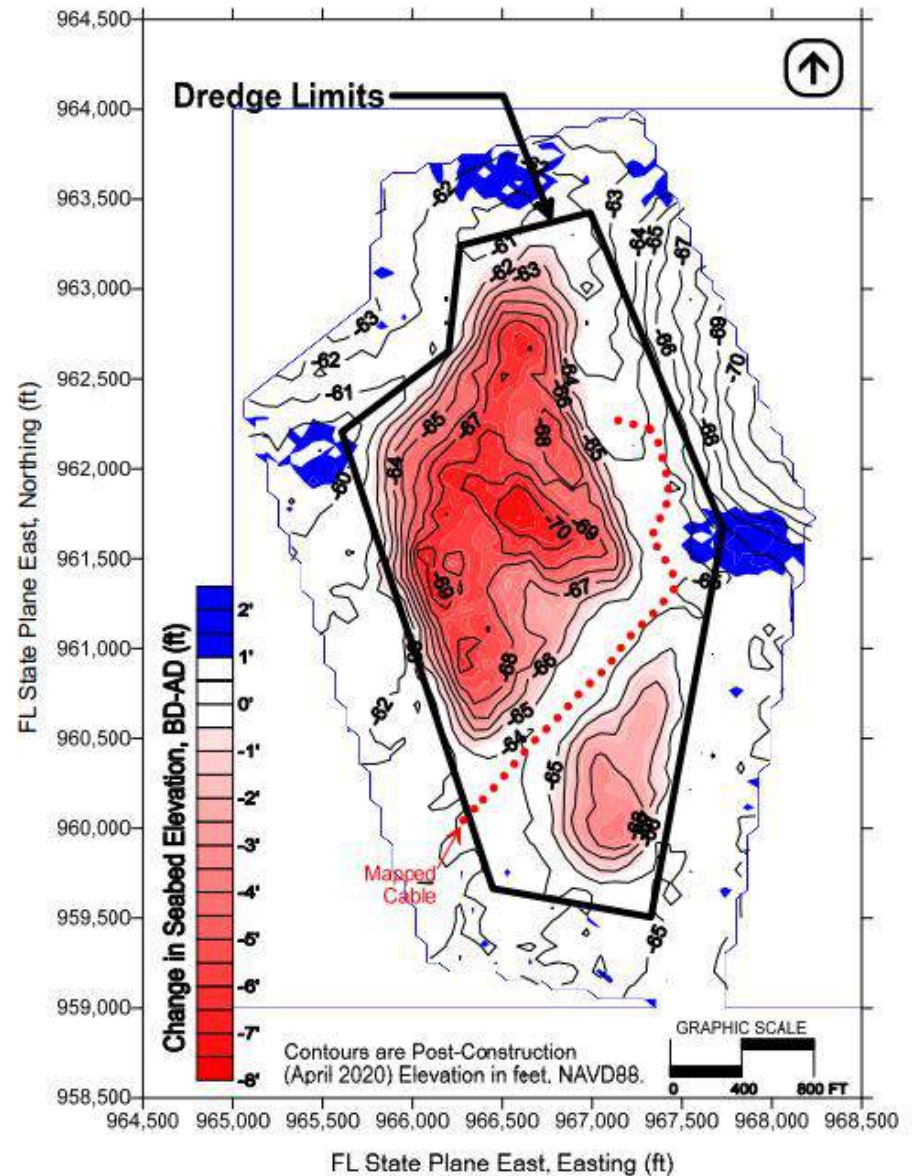
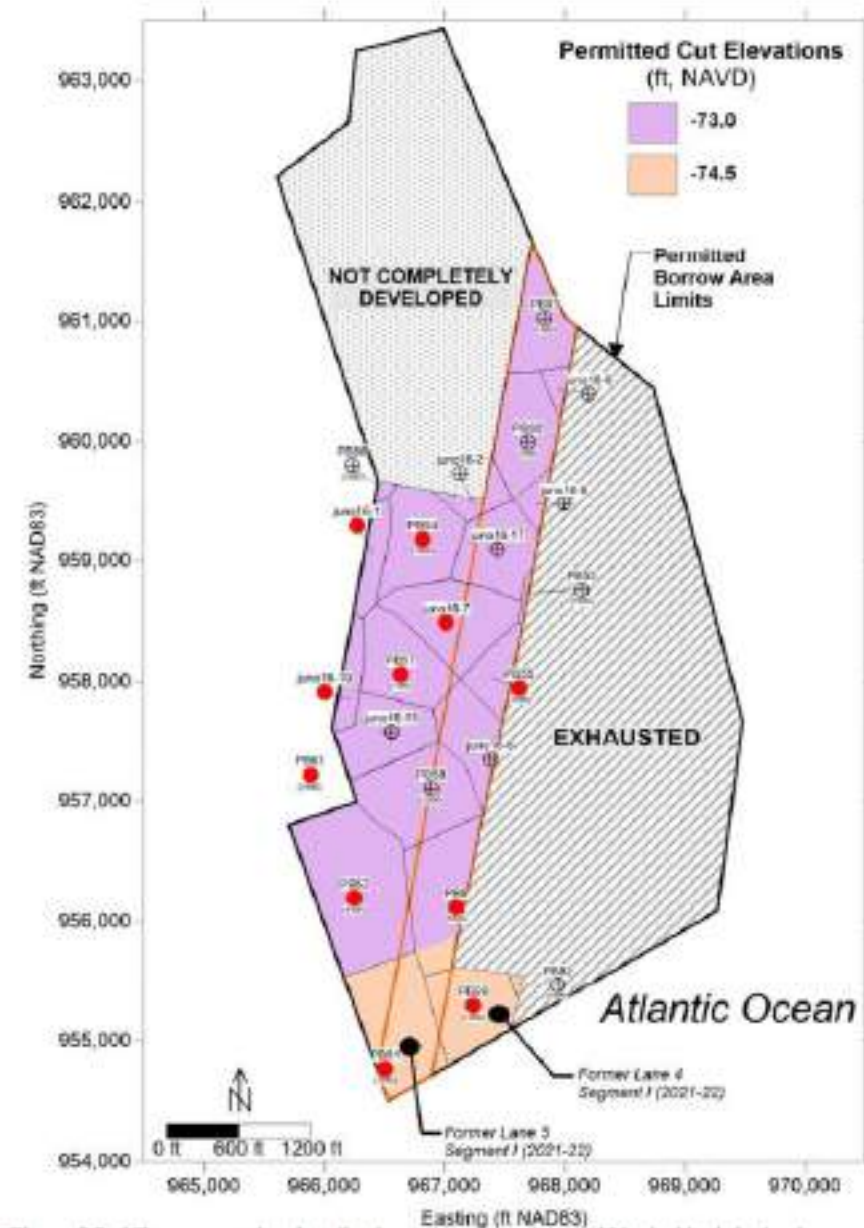
Project Status and Planned Construction



- Segment I (Jupiter/Carlin)
 - FY2022 409,000 CY Nourishment
 - ~7yr nourishment interval
 - FIND ICWW Maintenance FY2025
 - Potential Nourishment Winter 2026
 - Dune Construction as Needed (FY2025?)
- Segment II (South Jupiter)
 - Permitting- Major Permit Modification
 - FDEP Permit App Sent 2/6/2024
 - USACE Permit App Sent 2/29/2024
 - Potential Nourishment Winter 2026
 - Dune Construction as Needed
- Segment III (Juno Beach)
 - FY2021 991,000 CY Nourishment
 - ~10yr nourishment interval
 - Potential Nourishment Winter 2026
 - Dune Construction as needed



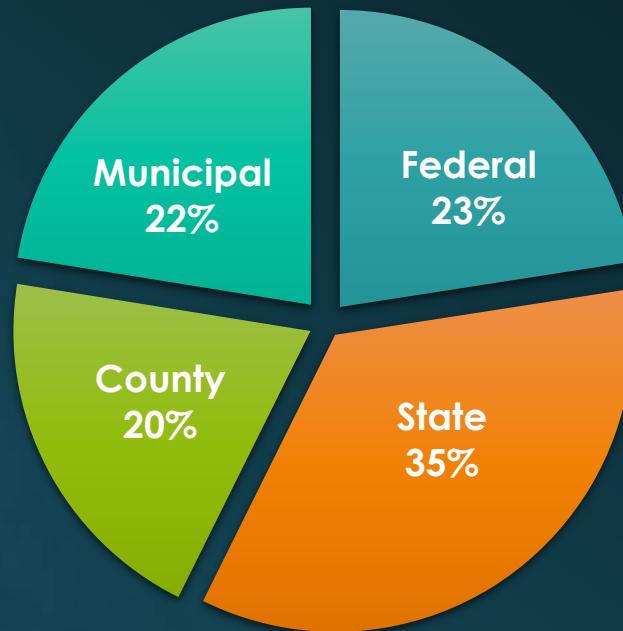
North County Sand Search





Countywide Beaches Funding

- Funding sources include



- County (TDC)
- State (DEP)
- Federal (USACE, FEMA)
- Local Municipalities



FEMA



What's Next?

- Updated Annual Surveys to Assess Project-Wide Condition
- Normalization of Conditions and Summer Accretion
- Regrowth of Wind/Salt Damaged Native Vegetation
- Monitoring and Maintenance of Erosional “Hotspots”
- Ongoing Permitting for South Jupiter Dune Area
- Sand Search for Next Borrow Area



Questions?

Andy Studt

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