

**AGENDA
TOWN OF JUPITER ISLAND
BEACH PROTECTION DISTRICT MEETING
WEDNESDAY, DECEMBER 4, 2024
ISLAND ROOM – TOWN HALL – 2 BRIDGE ROAD
10:00 AM**

1. Consent Agenda

Category A- To be reviewed and approved (as is or as edited) by the Town Commission

a. Minutes of the November 6, 2024, Beach Protection District Meeting

2. Martin County Local Mitigation Strategy (LMS) Presentation*

3. Beach Project Update*

4. Turtle Monitoring Program*

5. Beach Conditions Report*

6. Other Items*

** No advanced materials provided*

Town Commission

Penny Townsend, Mayor
Marshall Field, VI, Vice Mayor
Anne Scott, Commissioner
Patricia Warner, Commissioner
Joseph Taddeo, Commissioner

Town Staff

Town Manager, Robert Garlo
Town Attorney, Thomas J. Baird
Town Clerk, Kimberly Kogos

STATE MANDATED STATEMENT

If a person decides to appeal any decision made by the board, agency, or commission with respect to any matter considered at such meeting or hearing, he will need a record of the proceedings, and that, for such purpose, he 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. Any person requiring a special accommodation at this meeting because of a disability or physical impairment should contact the Town prior to the meeting. Please contact the Town Hall, 2 Bridge Road, Hobe Sound, FL 33455, telephone (772) 545-0103.

**MINUTES
TOWN OF JUPITER ISLAND
BEACH PROTECTION DISTRICT MEETING
WEDNESDAY, NOVEMBER 6, 2024**

TIME: Wednesday, November 6, 2024 – 9:00 AM
PLACE: Town Hall Island Room – 2 Bridge Rd., Hobe Sound, FL
PRESENT: Present were Mayor Penny Townsend, Vice Mayor Marshall Field VI, and Commissioners Anne Scott, Patricia Warner and Joseph Taddeo. Also present were Town Manager Robert Garlo, Town Clerk Kimberly Kogos, Town Attorney Brett Lashley and IT Director Bill Sutton.

1. Consent Agenda

Category A- To be reviewed and approved (as is or as edited) by the Town Commission

- a. Minutes of the October 2, 2024, Beach Protection District Meeting

MOTION: *Field/Scott moved to approve the consent agenda as presented.*

ACTION: *5-0 motion passed.*

2. Turbidity Monitoring Work Authorization (Olin Hydrographic Solutions)

Director Duchock stated that Olin Hydrographic Solutions had been the low bidder and approved contractor to conduct Turbidity Monitoring during the 2025 beach restoration project. At this time, staff is requesting an approval of a work order for an amount not to exceed \$78,800.

MOTION: *Warner/Field moved to approve the work order Olin Hydrographic Solutions in an amount not to exceed \$78,800.*

ACTION: *5-0 motion passed.*

3. General Consulting Services

- a. Gahagan & Bryant

Director Duchock provided an explanation of staff's request for approval of task orders for General Consulting services under the existing continuing services contracts for Gahagan & Bryant as well as Cummins Cederberg for amounts not to exceed \$25,000 per contractor.

MOTION: *Warner/Scott moved to approve both requests not to exceed \$25,000 per contractor.*

ACTION: *5-0 motion passed.*

- b. Cummins & Cederberg

This item was approved along with item 3a.

4. Beach Status/ Hurricane Milton*

Director Duchock provided beach status conditions where wave heights have been greater than 5 feet. He reported a steep and rolling beach face with changes to upper beach areas (no dune impacts observed).

He noted active hotspots at 450-480 South Beach with the usual potential hotspot areas. He added that beach conditions have experienced moderate erosion over the past month related to the passage of Hurricane Milton and subsequent extended period of strong winds and waves. Director Duchock provided

current beach photographs and aerial drone views.

Director Duchock reviewed Hurricane Milton beach sand (volume) losses. In summary, he explained that the Preliminary Loss Estimate is 205,000 to 390,000 cubic yards. He stated that the losses are visually assessed to be at the low end of the range with movement from the dry beach to immediate nearshore likely. He explained that the pre-construction survey approved for the beach project is to serve as the post storm survey for potential FEMA disaster recovery funds.

5. Beach Project Timeline*

Director Duchock provided a brief overview of the beach project timeline. He explained that staff is currently requesting commencement from the agencies to proceed. He stated that the Town has engaged and contracted with a contractor for the conch survey. As soon as beach conditions allow, the hydrographic and topographic surveys (pre/post storm survey) will be conducted. He noted that the dredging contractor has indicated arrival and prep work to begin in mid-January. Finally, the dredge should arrive at the end of January and with project completion by May 1.

6. Turtle Monitoring Program Discussion*

Director Duchock stated that the state does not allow for turtle monitoring programs to be directly tied to beach management programs, and currently turtle monitoring is conducted thru part time town staff. He stated there are three options to address the matter including:

- Shifting the town turtle monitoring program to a different dept with a new full time management position
- Shifting the town turtle minoring program back to GBA under existing continuing service agreement
- open solicitation for a new contract for services (Timing constraints are involved in securing a qualified contractor with a state-issued permit before the start of the next nesting season.)

Staff will present recommendations to the Commission during the December meeting.

Town Manager Garlo noted that the state continues to push unfunded mandates. They have changed requirements from two zones to three zones which will require added resources.

7. Other Items*

No other items were discussed.

Adjourned at 4:44pm.

Respectfully Submitted,

Kimberly Kogos, Town Clerk



Jupiter Island Beach Protection District



Weeks Marine Hopper Dredge – Magdalen



1.

Consent Agenda

Action: Motion to adopt the consent agenda, including submitted reports and meeting minutes of the November 2024 Beach Protection District.



2. Martin County Local Mitigation Strategy

- Amy Lopez, Deputy Director for Martin County Emergency Management Agency, will give a presentation on the Local Mitigation Strategy Plan, detailing the State and County strategies for identifying and supporting local mitigation projects.



3.

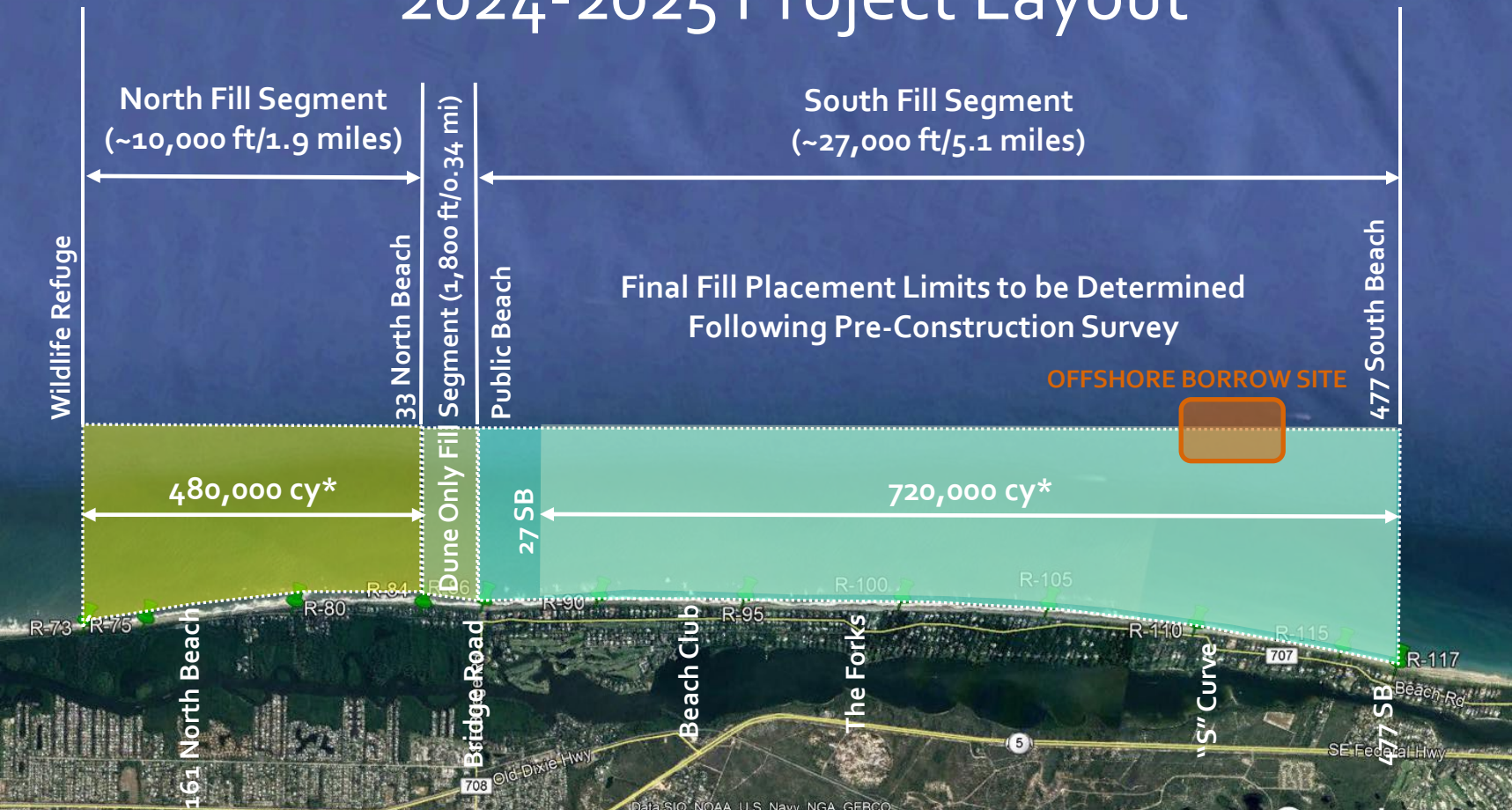
Beach Project Update

Beach Project Summary:

- Excavate 1,200,000 cy of beach quality sand from offshore Borrow Site "B".
- Construction Cost \$28,565,000 (Weeks Marine)
- Placement of sand in two fill sections:
 - North Fill Section (projected)
 - ~10,000 feet from the Refuge to 35 North Beach Road
 - Volume estimate: 480,000 cy
 - South Fill Section (projected)
 - ~25,000 feet between 27 South Beach Road and 477 South Beach Road
 - Volume estimate: 720,000 cy



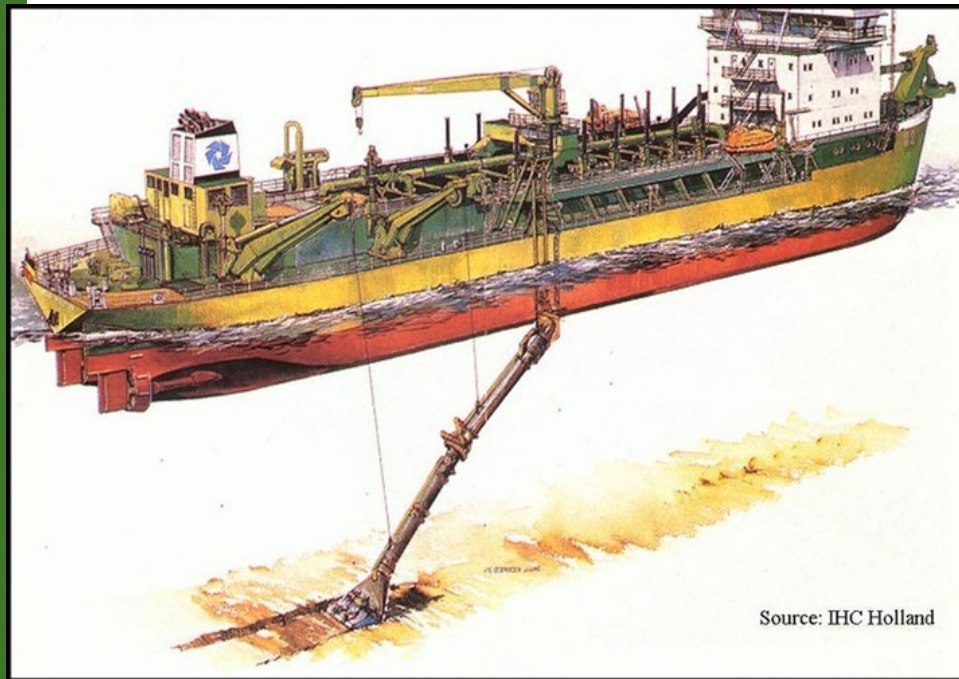
2024-2025 Project Layout



* - Final volume distributions TBD following pre-construction survey

Hydraulic Hopper Dredge

Removal from 45' to 60' water depths
5,000 to 8,000 cy per load
100'+ of beach template fill per load
125 to 200 round trips per 1M cy
Typical project 1.1M to 1.6M cy



Source: IHC Holland

Permit restrictions related to
existing hardbottom resources.

Dredge Hook Up (35-ft water depth)

Offshore Borrow Site "B"
Located Rough 5.5 miles
South (2 miles offshore of
"S" Curve)

6,000-ft Submerged Pipeline

R-76A

HSNWR

R-77

161 NB

N Beach Rd

R-78

R-79

113 NB

R-80

N Beach Rd

Beach
Access

Google Earth
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Permit Requirements:

- Endangered species monitors
- Bi-weekly pipeline inspections
- Pre and Post hardbottom surveys
- Turbidity monitoring
- Physical monitoring
- Sediment quality control checks
- Turtle monitoring
- Bird monitoring
- Engineering certification
- As-built drawings
- Escarpment leveling
- Compaction /tilling

March 10, 2016



Project Construction Schedule

- Week of December 15: Mobilization of shore-based equipment and preparation of north staging area
- December 15-January 1: Delivery of pipe to beach through north staging area. Mobilization of offshore tugs and floating pipe for setting first offshore pipe landing near 113 North Beach Road
- January 1-15: Arrival of dredge and initiation of sand pumping.
- Estimate 30-40 days to complete north fill section (mid-February).
- Estimate 45-55 days to complete south fill section (early to mid-April).
- Project must be complete and contractor equipment and pipe must be off the beach before May 1st.
- Public notices to be issued regularly to keep residents informed of the location of construction as it progresses along the beach.

3.

Beach Project Update



4.

Turtle Monitoring Program

- State rule does not allow for turtle monitoring programs to be directed under a beach management program. Currently, the turtle monitoring program is conducted through part-time Town staff under the direction of the Beach Protection District.
- Two options are being advanced to address the issue:
 - Shifting the Town turtle monitoring program to a different department with a new, full-time management position.
 - Open solicitation for a new contract for services (bids due December 20th).
- Timing constraints are involved in securing a qualified contractor with a State-issued permit before the start of the next nesting season (Feb/March 2025).
- Staff will present a recommendation to the Commission during the January 8th meeting.



5.

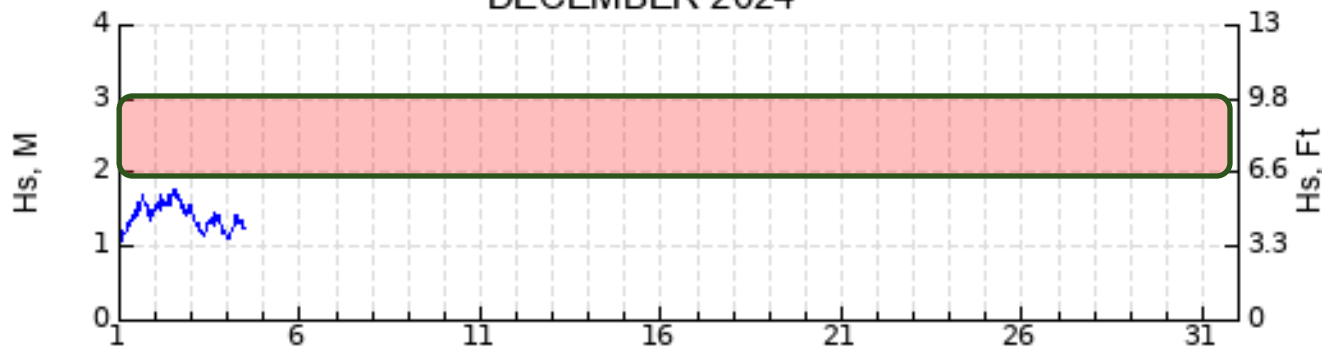
Beach Status Wave Heights

134 FORT PIERCE, FL
(BUOY)

NOVEMBER 2024



DECEMBER 2024





5.

Beach Conditions

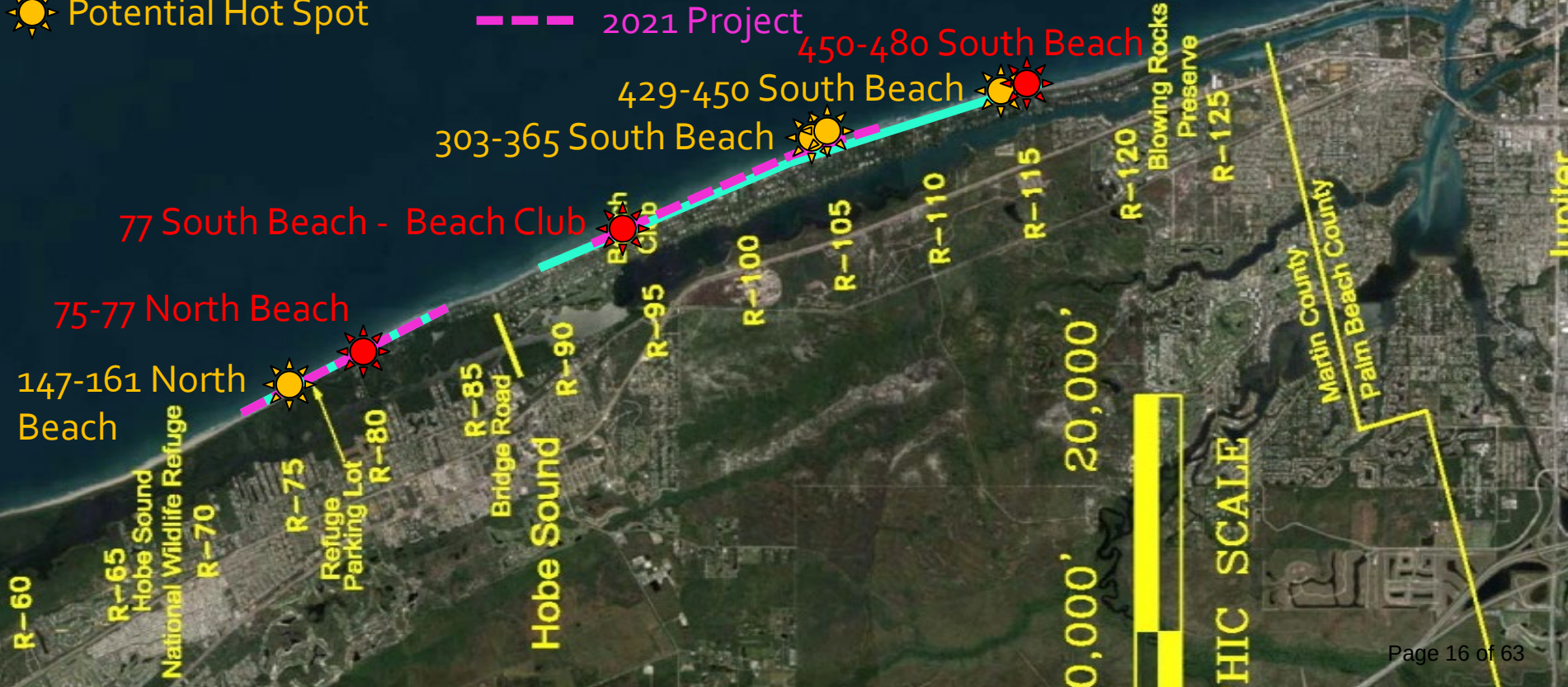
- Steep and rolling beach face with changes to upper beach areas
- Widespread escarpments
- Isolated loss of dune toes in hot spot areas
- Active hotspots:
 - 75-77 North Beach Road
 - 450-480 South Beach Road
 - 77-South Beach Road – Beach Club
- Potential hotspot areas:
 - 147 - 161 North Beach Road
 - 303 - 365 South Beach Road
 - 429 - 450 South Beach Road
- Beach conditions: Minor to moderate erosion over the past month related to nor'easter conditions.

December 2024 Erosion Hot Spot Areas

- ☀ Active Hot Spot
- ☀ Potential Hot Spot

— 2019 Project

- - - 2021 Project



July 2024



October 25, 2024



Near Low Tide (rough seas)

Approx. FCI

December 3, 2024



Mid-Tide (rough seas)





July 2024



October 25, 2024



Near Low Tide (rough seas)

Approx. ECL

December 3, 2024



Mid-Tide (rough seas)







July 2024



October 25, 2024

Near Low Tide (rough seas)

Approx. ECL
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December 3, 2024

Mid-Tide (rough seas)

Approx. ECL
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July 2024



October 25, 2024

Near Low Tide (rough seas)

Approx. ECL

December 3, 2024



Mid-Tide (rough seas)

July 2024



October 25, 2024



Approx. ECL

Near Low Tide (rough seas)
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December 3, 2024



Approx. ECL

Mid-Tide (rough seas)
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July 2024



September 5, 2024

Near Mid Tide (offshore swell)

Approx. ECL
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December 3, 2024



Mid-Tide (rough seas)

July 2024



October 25, 2024



Near Low Tide (rough seas)

Approx. ECL

December 3, 2024



Mid-Tide (rough seas)

December 2, 2024



Near Low Tide



613 S Beach Road

December 2, 2024



Photographs taken
near low tide. Page 44 of 63 ⁴¹



Monthly Ground Photo Stations



161 N Beach Road

December 4, 2024



Photographs taken
near low tide. Page 46 of 63 43



141 N Beach Road

December 2, 2024



Photographs taken
near low tide. Page 47 of 63 44



133 N Beach Road

December 2, 2024



Photographs taken
near low tide. Page 48 of 63 45



71 N Beach Road

December 2, 2024



Photographs taken
near low tide. Page 49 of 63



45 N Beach Road

December 2, 2024



Photographs taken
near low tide. Page 50 of 63



Public Beach

December 2, 2024



Photographs taken
near low tide. Page 51 of 63



33 S Beach Road

December 2, 2024



Photographs taken
near low tide. Page 52 of 63



Beach Club

December 2, 2024



Photographs taken
near low tide. Page 53 of 63



149 S Beach Road

December 2, 2024



Photographs taken
near low tide. Page 54 of 63



167 S Beach Road

December 2, 2024



Photographs taken
near low tide. Page 55 of 63 ⁵²



203 S Beach Road

December 2, 2024



Photographs taken
near low tide. Page 56 of 63 53



223 S Beach Road

December 2, 2024



Photographs taken
near low tide. Page 57 of 63 54



251 S Beach Road

December 2, 2024



Photographs taken
near low tide. Page 58 of 63 55



255 S Beach Road

December 2, 2024



Photographs taken
near low tide. Page 59 of 63 56



299 S Beach Road

December 2, 2024

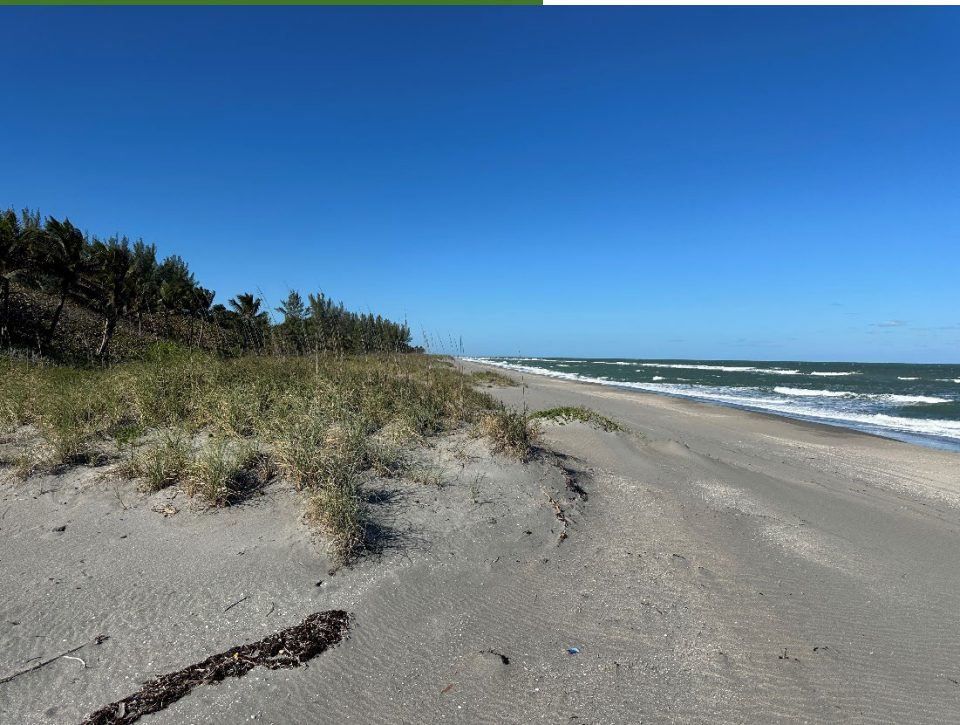


Photographs taken
near low tide. Page 60 of 63 57



365 S Beach Road

December 2, 2024



Photographs taken
near low tide. Page 61 of 63 ⁵⁸



400 S Beach Road

December 2, 2024



Photographs taken
near low tide. Page 62 of 63 59



450 S Beach Road

December 2, 2024



Photographs taken
near low tide. Page 63 of 63 60