



# Agenda Report

2725 Judge Fran Jamieson  
Way  
Viera, FL 32940

## Consent

F.4.

10/25/2022

### Subject:

Restoration of Engineered Dunes in South Beaches post Hurricane Ian

### Fiscal Impact:

Approximately \$8,500,000 cost to the Tourist Development Tax Beach Improvement Fund prior to reimbursement of up to 87.5% to be sought through FEMA and state reimbursement

### Dept/Office:

Natural Resources Management Department

### Requested Action:

It is requested that the Board authorize the following: 1) advertisement of the South Beaches engineered dune restoration for a reduced two week bid period and award of contracts to the lowest responsive bidders; 2) the County Manager to execute all contracts and task orders in excess of \$100,000 including construction & maintenance, engineering, and environmental services necessary to complete the projects; 3) use of County owned/managed land for construction access 4) staff to seek FEMA and State reimbursement and 4) associated budget change requests.

### Summary Explanation and Background:

Initial inspections of all Brevard County beach projects were completed immediately after Hurricane Ian. The beach projects performed as designed and protected all upland structures from direct damage by the ocean, however erosion damage by the storm was significant. Any necessary maintenance of the federal shore protection project (North, Mid and South Reaches) will be arranged through our Project Cooperative Agreement with the United States Army Corps of Engineers. Repair of damage to the engineered dunes within the South Beaches are being coordinated by the Natural Resources Management Department, and are expected to be eligible for FEMA assistance as a Category G project.

In the South Beaches approximately 90,000 cubic yard (CY) of material was eroded from the engineered dune during Hurricane Ian. The dunes were most recently maintained in January-March 2021. The cost estimate to repair damage from Ian, including sand, dune vegetation, permit compliance and engineering services is \$8.5M. The expected local share of 12.5%, after FEMA and FDEM participation, is \$1,062,500. Because maintenance of the project is required for FEMA eligibility, and Brevard has completed such maintenance in recent years, the construction contracts for sand and vegetation will be drafted to allow the Hurricane Ian repairs as well as future work for up to five years, at the discretion of the County Commission with future pricing adjustments using CPI-U.

A preliminary damage assessment for Hurricane Ian was submitted to FEMA to pursue a Category G Project Worksheet for funding eligibility. If the BOCC would like to pursue complete repair of the engineered dunes in the South Beaches before the 2023 hurricane season, action must begin immediately. This will require Board

authorization to advertise the projects, both sand and vegetation, for a reduced two week bid period and the award of contracts to the lowest responsive bidders. Authorization is also needed for the County Manager to execute all contracts and task orders including construction & maintenance, engineering, and environmental services necessary to complete the project, use of county owned/managed land for construction access, and associated budget change requests.

**Clerk to the Board Instructions:**

Work associated with this agenda report is very time sensitive. Once the clerk's memo is complete, please contact Mike McGarry (321-537-1779 or [Mike.McGarry@brevardfl.gov](mailto:Mike.McGarry@brevardfl.gov)) for pickup or email a copy if possible. Thank you.



Kimberly Powell, Clerk to the Board, 400 South Street • P.O. Box 999, Titusville, Florida 32781-0999

Telephone: (321) 637-2001

Fax: (321) 264-6972

Kimberly.Powell@brevardclerk.us

October 26, 2022

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

**TO:** Virginia Barker, Natural Resources Management Director Attn: Mike McGarry

**RE:** Item F.4., Restoration of Engineered Dunes in South Beaches Post Hurricane Ian

The Board of County Commissioners, in regular session on October 25, 2022, authorized advertisement of the South Beaches engineered dune restoration for a reduced two-week bid period and award of contracts to the lowest responsive bidders; authorized the County Manager to execute all contracts and task orders in excess of \$100,000, including construction and maintenance, engineering, and environmental services necessary to complete the projects; authorized use of County-owned/managed land for construction access; authorized staff to seek Federal Emergency Management Agency (FEMA) and State reimbursement; and authorized associated Budget Change Requests.

Your continued cooperation is always appreciated.

Sincerely,

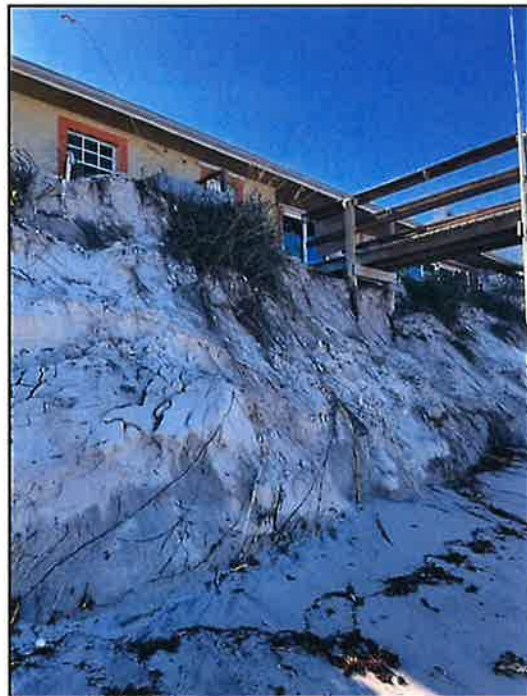
**BOARD OF COUNTY COMMISSIONERS**  
**RACHEL M. SADOFF, CLERK**

*for: Donna Scott*  
Kimberly Powell, Clerk to the Board

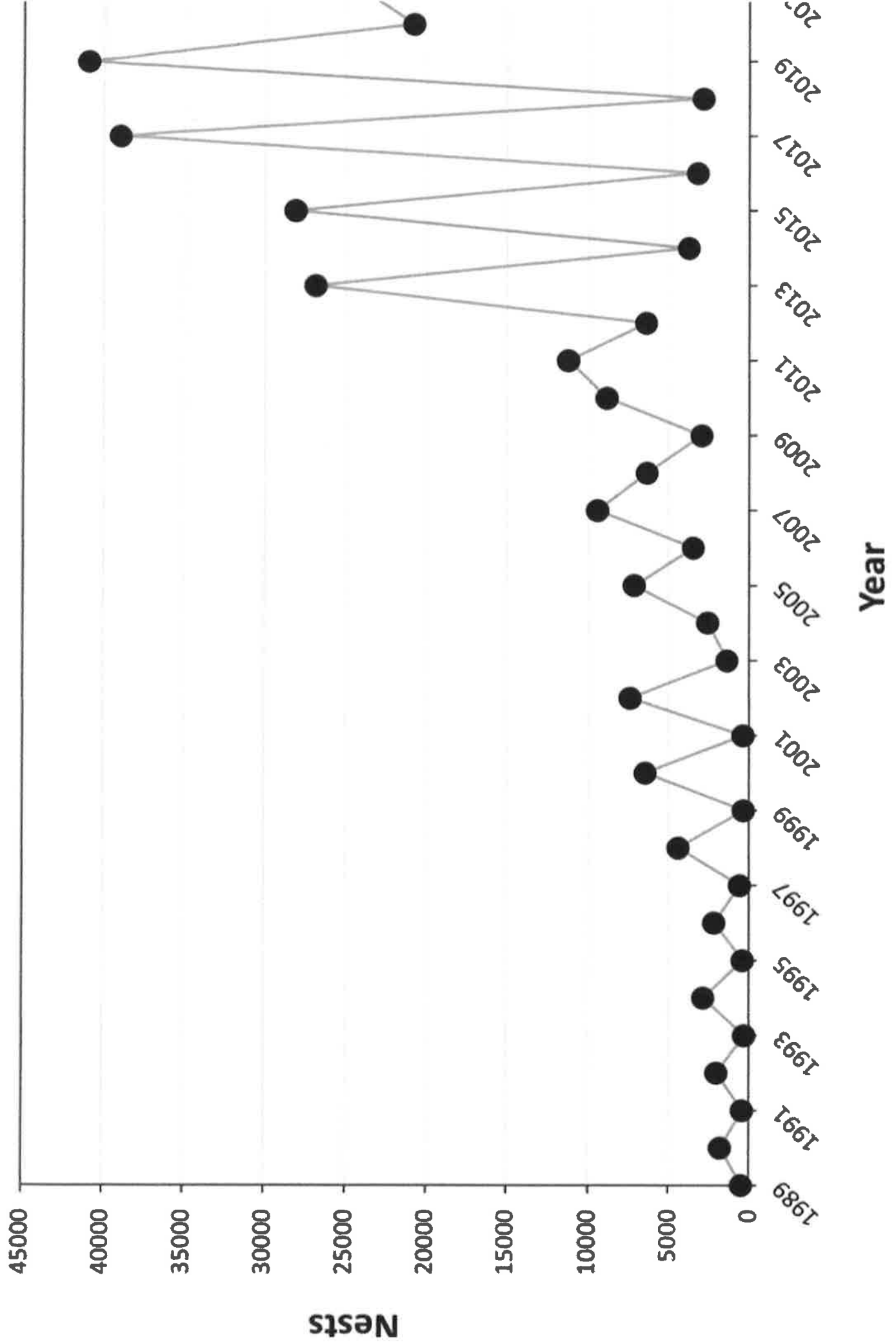
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cc: Finance  
Budget

These photos illustrate erosion in the South Beaches after the passage of Hurricane Ian



CS- F14



Number of green turtle nests counted on core index beaches in Florida, from 1989 to 2021.





**SUPERVISOR/EMPLOYEE  
PERFORMANCE EXPECTATION FORM**

Employee's Name Virginia Barker Signature/Date \_\_\_\_\_

Supervisor's Name Conrad White Signature/Date \_\_\_\_\_

Inclusive Dates, From 11/01/00 To 11/01/01

*Virginia Barker*  
*Conrad White 11-15-00*

**Supervisory Instructions:** List performance expectations or goals and objectives for upcoming year using the following guidelines:

- Identify the expectations of how duties are to be performed.
- Identify the principal duties of the employee's job and outline how results will be measured.

*Outline special objectives or significant work or projects expected to be accomplished. Identify and address areas for employee development needs including an action plan for training so that knowledge, skills and abilities can be improved or expanded upon. Discuss these goals and objectives with the employee and use them to help evaluate the employee during the upcoming year. Once reviewed with the employee, both parties sign this form. Remember, where possible, performance expectations should be measurable.*

**Goal: Beach Nourishment-Shore Protection Project**

To keep all necessary agencies and departments on task to facilitate construction of the North Reach Base Bid by April 30<sup>th</sup> 2001, start Option A this winter, construct Option B and the South Reach starting in Nov. 2001, and to address rock reef impediments through evaluating options and selecting a preferred alternative for the Satellite Beach area.

**Tasks:**

1. Assist the County Attorney's office in obtaining all necessary easements for the North and South Reaches by May 2001.
2. Obtain permits necessary for Space Coast Shoals by spring.
3. Collect and analyze data useful in planning and evaluating shore protection options in the area of rock reef outcroppings.
4. Set an Erosion Control Line through the South Reach in the spring.
5. Collect all post-construction biological monitoring data as required in the project permits.
6. Participate in the BCO in June, 2001 for providing detailed technical review of the plans and specifications for the South Reach before soliciting for construction bids.
7. Provide project information to the legislative delegation and other political interests to ensure continued federal and state funding for the project in FY2002.
8. Participate in numerous inter-agency meetings including TDC, ACOE, FDEP, PAFB and "Team Brevard" meetings.
9. Keep apace with technical, political, fiscal, and biological issues specific to the project.
10. Develop, present, and update educational materials to the public to increase their understanding of the benefits of this project. This will include presentations, flyers, street signs, web site expansion, an information hotline, and SCGTV infomercials.

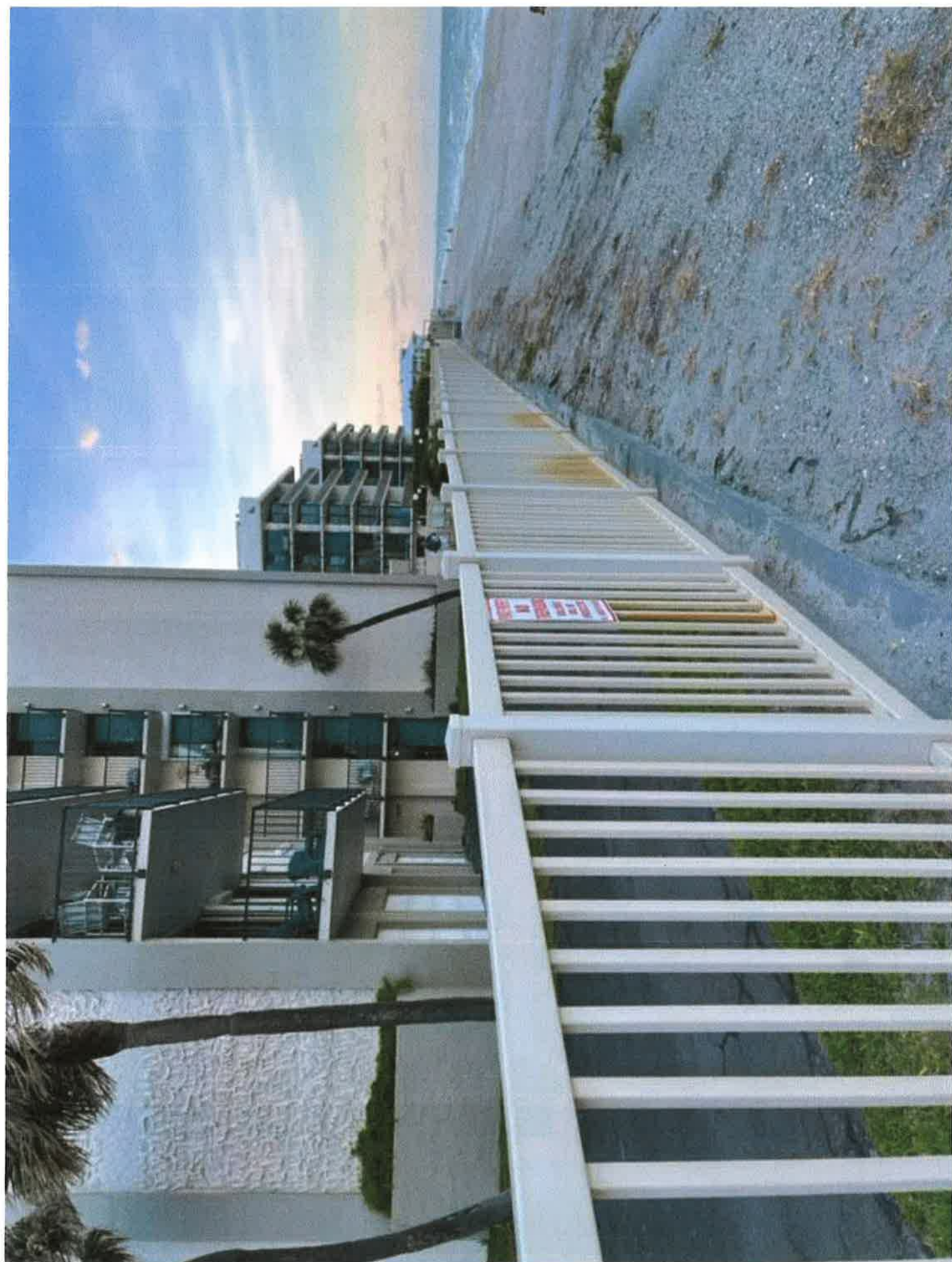
Brevard's restoration effort, involving some 20.8 miles of beach, from the Port Canaveral inlet south to Spessard Holland Park, consists of three separate projects. The north reach -- from the inlet to Patrick's Air Force Base -- included 9.4 miles of beach and required 2.8 million cubic yards of sand. It cost \$22.7 million. The south reach -- from Indianalantic Beach to Spessard Holland Park -- included 3.8 miles and 1.6 million cubic yards of sand. It cost \$13.8 million.

The middle reach, a 7.6-mile stretch through Satellite Beach, wasn't restored because of environmental concerns. That portion of the coast has a hard, rocky bottom and has been designated by state and federal fish and wildlife agencies as an "essential fish habitat." Meanwhile, Brevard's dredging contractor, Great Lakes Dredge and Dock ("The Bulk of the Beach Work," page 84), had to complete the last of the project by early May, before the sea turtle nesting season begins.











8.5 mi

These photos illustrate erosion in the South Beaches after the passage of Hurricane Ian



