

AGENDA MEMORANDUM

Natural Resources Department

City Council Regular Meeting Date: November 4, 2025

To: City Council

From: Holly Milbrandt, Natural Resources Director

Date: November 2, 2025

SUBJECT: Northern Sanibel Beach Renourishment Project

BACKGROUND: Hurricanes in 2022 and 2024 caused extensive damage to the island's beaches and the beach dune system. Ongoing beach recovery efforts by the City have been facilitated by funding from the Florida Department of Environmental Protection (FDEP) and FEMA and have included the emergency berm/gully & beach recovery project from Bowman's Beach Park to the Sanibel Lighthouse, the Historic Sanibel Lighthouse Protection Project, and the Clam Bayou Sand Recovery Project.

To date, City-led beach recovery work on northern Sanibel has been limited due to several factors. With funding from FDEP, Lee County placed ~85,000 cubic yards (cy) of sand in the area of northern Sanibel (between Blind Pass and Bowman's Beach Park) in August/September 2023. Although this project was severely impacted when the sand was displaced by a strong low-pressure system in November 2023 shortly after it was completed, the County was also continuing to evaluate the need and timing for maintenance dredging of Blind Pass in accordance with the 2019 Blind Pass Inlet Management Plan (BPIMP). Under the BPIMP, material dredged from Blind Pass is required to be placed on northern Sanibel to mitigate for the erosional impact of the inlet on the downdrift beach. However, with no immediate plans for the dredging of Blind Pass and FDEP funding remaining, the City began exploring the feasibility of placing sand on north Sanibel (from R110.5- to R118) to address the significant sand loss in this region since Hurricane Ian. The 2025 Sanibel Island Beach Survey Report prepared by Humiston & Moore Engineers documents that the entire reach (from R-108 to R-123) encompassing Blind Pass (located between R-109 and R-110), lost on average almost 50 feet from Pre-Hurricane Ian to June 2024, 30 feet since June 2024 (additional losses due to Hurricanes Helene & Milton), and a cumulative average of almost

80 feet since prior to Hurricane Ian. The full annual beach monitoring report is attached to the agenda for reference.

Aware that the Captiva Erosion Prevention District (CEPD) was currently engaged in the Captiva Beach Renourishment Project, the City contacted CEPD and their contractor Great Lakes Dock and Dredge (GLDD) to determine if an opportunity might exist to undertake beach renourishment work on Sanibel following the completion of the Captiva project while GLDD was currently mobilized and in the area. With a positive response, the City, CEPD, and GLDD are coordinating extensively to finalize the necessary details and agreements required to proceed with the proposed work.

Proposed Scope of Work

The North Sanibel Beach Renourishment Project proposes to place approximately 300,000 cy of sand fill on northern Sanibel between FDEP reference monuments R-110.5 and R-118 (roughly from the former Mad Hatter to the western boundary of Bowman's Beach Park). Fill placement will be accomplished by hopper dredge utilizing FDEP permitted borrow area VI-E, located approximately 8.3 nautical miles west of Captiva Island. Draft plans prepared by Humiston & Moore Engineers are attached to the agenda for reference. Revisions to the draft plans are underway in order to enhance the area of sand fill in the northern portion of the template (near the former Castaways, Sanibel-Captiva seawall, and the Clam Bayou breach area) to focus the sand fill on the areas of greatest vulnerability. Fill placement will occur both above and below mean high water (MHW) with a landward beach/dune height of approximately 6.5 feet NAVD. Appropriate dune vegetation will be installed immediately after placement of sand fill.

Project Costs

Unit prices are based on the current contract between CEPD and GLDD for the Captiva Beach Renourishment Project. The contract and supporting documents are attached to the agenda for reference. In accordance with the City's purchasing policy and procedures, in order for the City to "piggyback" off the current contract between CEPD and GLDD, the contract must be valid while the work for the City is underway. City Attorney John Agnew is drafting the necessary contract amendments for review and execution by CEPD.

	Item	QTY	Unit	Unit Price	Amount
A.	Mobilization and Demobilization	1	LS	\$2,500,000.00	\$2,500,000.00
B.	Beach Tilling and Scarp Leveling	8,750	LF	\$1.50	\$13,125.00
C.	Turbidity Monitoring - Sanibel	1	LS	\$45,000.00	\$45,000.00
D.	Dredging and Placement	300,000	CY	\$19.16	\$5,748,000.00
	Total				\$8,306,125.00

Revisions to the cost proposal are underway to incorporate dune plantings (estimated 46,000 plants @ \$1.00/each; +\$46,000) and possible minor adjustments to the sand volume (Item D) in accordance with the final plans.

Additional costs to be incurred include construction oversight/coastal engineering services by Humiston & Moore (~\$50,000), post-construction sea turtle monitoring (~\$150,000), and cost-share of eligible CEPD pre-construction expenses detailed in the section below.

The estimated total project costs are as follows:

Item	Estimated Cost
GLDD North Sanibel Beach Renourishment Proposal	\$8,306,125
Add Dune Plantings	\$46,000
Construction Oversight/Coastal Engineering	\$50,000
Post-Construction Sea Turtle Monitoring	\$150,000
CEPD Cost-Share Pre-Construction Expenses	\$142,046
Estimated Total	\$8,694,171

Agency Permits

In November 2015, the City and CEPD entered into interlocal agreement 15-115 in which CEPD granted authority to the City to "piggyback" or conduct emergency beach renourishment in the area of northern Sanibel under the authority of, and in accordance with current CEPD state and federal permits. A copy of the interlocal agreement (ILA) is attached to the agenda for reference. State and federal permits currently issued to the CEPD for dredging/beach renourishment on Captiva also include a beach fill template on northern Sanibel from DEP reference monuments R-110.5 to R-118. This corresponds to the approximate area from the former Mad Hatter restaurant to the northern boundary of Bowmans Beach Park. The agreement was negotiated in order for the City to address critical erosion along Sanibel-Captiva Road that threatened the integrity of the roadway and the sole evacuation route for residents of northern Sanibel and Captiva. ILA 15-115 is valid through the current expiration date of the CEPD's FDEP permit which is December 11, 2029. The ILA has been reviewed by both the City & CEPD legal counsel and found to be applicable to the current northern Sanibel renourishment project proposed by the City.

Section 9 of the ILA details the City's agreement to pay CEPD for certain costs and expenses paid by CEPD to include professional services deemed necessary by CEPD to review or evaluate any beach renourishment project proposed to the City (up to a maximum or \$10,000 per City project) as well as attorney's fees incurred by CEPD directly related to the preparation or review of the ILA (up to a maximum of \$5,000). Section 9.c. requires CEPD to notify the City in writing if any costs will exceed the maximum amounts described above, after which the City shall decide whether or not to proceed with or continue any proposed City beach renourishment project. The CEPD is requesting that the City cost-share in the pre-construction expenses detailed below, with each entity's contribution based on the percentage of the total amount of sand dredged. Based on current estimates, the total quantity of dredged sand is 1,300,000 cy; 1,000,000 cy placed on Captiva (77%) and 300,000 cy to be placed on Sanibel (23%). This equates to a pro-rated cost for the City in the amount of \$142,046.

Task	Total Cost	Captiva Cost	Sanibel Cost
Borrow Area Investigation	\$ 324,500		
Borrow Area Design Survey	\$ 27,137		
Borrow Area Hardbottom			
Survey	\$ 40,124		
Permitting	\$ 98,793		
Pre-construction Services	\$ 127,036		
		(77%)	(23%)
Total	\$ 617,590	\$475,544	\$142,046

Anticipated Construction Schedule & Construction Hours

Beach renourishment operations on Captiva are currently underway 24-hours per day, 7-days per week. By contract, "once commencement of dredging takes place, the Work shall be continuous and completed, accepted, and ready for use by completion date". Overnight work is a standard practice for dredging/beach renourishment operations to expedite project completion and minimize the length of time beaches are subject to construction activities. With a current production rate of 25,000 cy per day, GLDD may complete work on Captiva as soon as November 20, 2025, provided there are no weather or equipment delays. GLDD estimates that it will take 5-7 days to transfer operations and equipment to Sanibel with construction beginning the week of November 24, 2025, and project completion by the end December 2025.

Section 30-63 of the Sanibel code establishes construction hours of 7:00AM-5:00PM, Monday through Saturday. To allow for continuous operations, City Council will need to approve expanded work hours.

Staging Area

The City is executing an agreement with the owner of 6451/6455/6459 Sanibel Captiva Road (formerly Castaways) for use as the primary project staging area. Additional staging may be needed in the Blind Pass Beach Park parking lot and may require the closure of the parking lot for the duration of the project. The City will provide as much public notice as possible should a closure be necessary and direct beachgoers to alternate parking locations. The Turner Beach parking lot reopened as of 10/30/2025.

Temporary Beach Management and Access Easements

While most of the work will occur seaward of City-owned lands, a small number of parcels that abut the project area are privately owned. The City will request temporary easements from the four property owners of these parcels prior to the beginning of construction.

FUNDING SOURCE:

The proposed project will be fully funded by FDEP Grant Agreement 23LE5 for the City of Sanibel 2022 Hurricane Ian and Nicole Beach Recovery Project. The grant agreement was approved by City Council on 11/7/2023. At the City's request, the grant deadline was recently extended from December 31, 2025 to December 31, 2026. Staff has also confirmed with FDEP that remaining funding may be allocated to either task as needed.

		Task 1.1	Task 1.2	
		North Sanibel	Sanibel	Total
FDEP Funding		\$3,180,000	\$23,793,000	\$26,973,000
Expenses 9/30/2025	through	\$148,860	\$17,403,705*	\$17,552,565
Remaining FDEP funds		\$3,031,140	\$6,389,295	\$9,420,435

^{*}Additional expenses in the amount of \$5,311,270 for Task 1.2 were reimbursed by FEMA

In addition to funding all expenses related to the proposed North Sanibel Beach Renourishment Project including dune planting, sufficient funding remains for additional dune planting along privately owned areas of the beach previously nourished in 2023/2024. This work was previously

planned but was delayed due to additional beach impacts from Hurricanes Helene and Milton in September/October 2024. The estimated cost of the work is \$400,000 for the installation of approximately 200,000 plants along nearly 10 miles of beach and will be completed in FY2026.

Funding Summary	Amount
Current FDEP Funds	\$9,420,435
Total Estimated Cost: North Sanibel Beach Renourishment	\$8,694,171
Remaining FDEP Funds for Island-Wide Dune Planting	\$726,264

Section 2-332 of the City's Code of Ordinances authorizes the City Manager to make an emergency procurement to avoid injury, loss or damage to property, or economic waste. The proposed North Sanibel Beach Renourishment Project will provide needed protection for property and infrastructure along this vulnerable portion of the island and limits economic waste through the coordination and shared mobilization with the ongoing CEPD Captiva Beach Renourishment Project.

While it is difficult to do a direct price comparison between the proposed dredging project and a comparable truck haul project, the initial bid for the 2023/2024 truck haul project on Sanibel was \$14,181,208 for 410,100 tons (273,400 cy). The proposed North Sanibel Project will place approximately 300,000 cy (an additional 26,600 cy) for almost \$5.5 million dollars less, plus will be completed much faster with a much more limited impact on traffic.

Section 2-332(c) of the City Code is cited below:

<u>Emergencies</u>. Where it is certified by the city manager that the procurement is required as a result of an emergency or a situation requiring immediate action to avoid injury, loss or damage to property, or economic waste. In such situations, the city manager shall report the procurement to the city council as soon as is practicable and seek ratification of the procurement.

RECOMMENDED ACTION:

- 1. Authorize the City Manager to execute a piggyback agreement with GLDD for the placement of approximately 300,000 cy of sand fill on north Sanibel consistent with the draft plans and price proposal detailed above and the City's purchasing policy and procedures, subject to the City Attorney's approval. Final costs may vary slightly from the estimates presented in this memorandum. Any agreement by the City will be presented to the City Council for ratification at the next regularly scheduled City Council meeting on December 2, 2025.
- 2. Approve the cost-share request from CEPD for pre-construction services in the amount of \$142,046 in accordance with ILA 15-115.
- 3. Approve expanded construction hours, authorizing GLDD to operate 24-hours per day, 7 days per week.

Agenda Attachments:

- 2025 Sanibel Annual Beach Monitoring Report
- Draft Construction Plans: North Sanibel Beach Renourishment Project
- CEPD/GLDD Contract and Attachments for the 2025 Captiva Beach Renourishment Project
- Interlocal Agreement 15-115