



AGENDA MEMORANDUM

Natural Resources Department

Planning Commission Meeting Date: July 22, 2025
Sanibel Slough Dredging Project (DP-2025-020806)
Item 6(c)

To: Planning Commission
From: Dana Dettmar, Environmental Biologist
Date: July 11, 2025

SUBJECT: SANIBEL SLOUGH DREDGING PROJECT – CITY OF SANIBEL

SUMMARY

The City of Sanibel will dredge approximately 1,100 linear feet in a portion of the east basin of the Sanibel Slough stretching from Elinor Way to Beach Road. Modeling performed as part of the 2018 draft Surface Water Master Plan identified this project to have significant benefits to localized stormwater management by increasing capacity for stormwater runoff within this section of the Slough. The Sanibel Slough is also a verified impaired water body by the State of Florida and has an assigned Total Maximum Daily Load (TMDL), which imposes nutrient reduction targets for water quality improvement. The project will remove approximately 5,000 cubic yards of organic, nutrient-rich muck from the Slough bottom, restoring lost stormwater capacity, removing legacy nutrients in support of the established TMDL, and reducing nutrient-rich stormwater discharge from the Slough into San Carlos Bay. This will result in benefits for seagrasses, oysters, and other marine resources in Sanibel's coastal waters and enhance water quality and wildlife habitat within the Sanibel Slough.

The City has received grant funding in the amount of \$1,000,000 from the State of Florida for design, permitting, and construction via grant agreement LPA0679. Additionally, the City has also received a federal appropriation in the amount of \$1,000,000 to cover remaining construction costs and will be disseminated to the City via an Environmental Protection Agency (EPA) Community Grant.

To date, staff has completed the following activities related to the project:

- Entered in grant agreement LPA0679 with the Florida Department of Environmental Protection (FDEP)
- Applied for EPA Community Grant
- Completed protected species survey, which found no protected species within project footprint
- Completed geotechnical engineering survey
- Completed the project design plans
- Obtained temporary construction easements and rights of entry from all property owners surrounding the project area

Sanibel is and shall remain a barrier island sanctuary

- Obtained written authorization from Periwinkle Park and Sanibel-Captiva Conservation Foundation for construction staging
- Applied for and obtained an Environmental Resource Permit from FDEP (457045-001 EI)
- Applied for a permit from the Army Corps of Engineers
- Draft of project construction bid documents

Once all Local, State, and Federal permits are in place the City will move forward with bidding the project. Dredging will involve the removal of approximately 5,000 cubic yards of muck to a depth of -6.0 NAVD. This depth is extent of the muck layer and top/beginning of the natural sandy bottom layer. The type of dredging used to accomplish the project will be hydraulic as it is less invasive and harmful to the environment. This form of dredging will require staging areas for the muck slurry to be pumped to a vacuum truck. Dewatering will occur at this point, in which muck sediments will remain in the truck while water is returned to the Slough. Dredge material will be hauled off-island to a State approved disposal site as determined by the contractor awarded the bid. All dredging will be in-water and impacts to shoreline vegetation including mangroves are not anticipated.

RECOMMENDATION

Staff recommends the following conditions be included as part of the Resolution:

1. The City of Sanibel shall adhere to all conditions in Local, State, and Federal permits/authorizations.
2. If any unanticipated impacts occur to the shoreline and/or vegetation, the impacts will be mitigated in accordance with FDEP grant agreement deliverable requirements: The Slough banks will be restored through contouring/grading and native vegetation installation as needed.
3. Dredge activities shall not cause disturbance to active waterbird nests.



Figure 1. Area of dredge activity next to mangrove fringe