



INDIAN RIVER COUNTY, FLORIDA
AGENDA ITEM
Department of General Services /
Parks & Recreation

Date: February 27, 2023
To: The Honorable Board of County Commissioners
Through: Michael C. Zito, Interim County Administrator
Dylan Reingold, County Attorney
Beth Powell, Director Parks and Recreation/Acting General Services Director
From: Wendy Swindell, Conservation Lands Manager
Subject: South Oslo Riverfront Conservation Area – FDEP Resiliency Grant and
Development of a Cost-Share Agreement with the St. John’s River Water
Management District

BACKGROUND:

The South Oslo Riverfront Conservation Area (SORCA) was acquired through cost-share funding with Florida Communities Trust. SORCA consists of three parcels: (1) the 66-acre Salama & Emerson Tract that was acquired in 2000; (2) the 6.69-acre “South Link” which was acquired in 2004, and serves to connect the Audubon house to SORCA; and (3) the 70-acre Diamond Tract which was acquired in 2005. The property is located on the south side of Oslo Road directly across from the 298-acre Oslo Riverfront Conservation Area (ORCA). Similar to ORCA, the site contains pedestrian trails and a wetland overlook. Dominant plant communities on the site include mesic pine flatwoods, coastal hammock, and estuarine wetlands.

Over the past 10 years, hydrologic conditions within several of the plant communities abutting the coastline along the Indian River Lagoon (IRL) have been negatively affected by increased inundation from storms and king tides, and the duration of this inundation. Shifting hydroperiods have resulted in fringing coastal upland hammock communities transitioning into wetlands, with a complete loss of mature oaks and other hardwoods. The Indian River Lagoon National Estuary Program (IRLNEP) and other scientific research organizations have reported that this trend is occurring throughout the IRL. Coastal hammocks and maritime hammocks provide habitat for a wide variety of wildlife species, and many protected plants are found in these vegetative associations.

The Florida Department of Environmental Protection (FDEP) has allocated extensive funding, including funding through the St. John’s River Water Management District (SJRWMD), to encourage development and implementation of projects that will further resiliency and sustainability efforts along the IRL. In January 2021, staff was contacted by the SJRWMD Estuaries Section to solicit potential projects to meet these resiliency goals for the stretch of the IRL in Indian River County, specifically on conservation lands.

Since the mid-20th Century, more than 40,000 acres of highly productive herbaceous salt marsh within the IRL have been lost due to the construction of mosquito impoundments. These saltmarsh areas provided habitat for numerous wildlife and plant species unique to the IRL, and served to filter pollutants and protect shorelines from erosion. When mosquito control district implemented the Rotational Impoundment Management (RIM) operations, water levels were controlled during the year to reduce the amount of time that mud flats (where saltmarsh mosquitos breed) would be available. While this works very well to control mosquitos, the hydrologic isolation of these impoundments greatly affected the potential habitat and water quality benefits that are provided by non-impounded saltmarshes. These RIM impoundments become dominated by mangrove species, as these are the only vegetative species that can tolerate long-term saltwater impoundment

The eastern portion of SORCA includes an impoundment that is no longer part of the RIM network. The dike along this impoundment extends approximately 1,100 feet from Oslo Road to the conservation area boundary to the south. A connection to the IRL is present midway along the dike. The County has worked with SJRWMD to develop a plan to remove the dike (to the extent feasible), and re-connect wetlands west of the dike directly (in terms of hydrology) to the IRL. Open exchange of waters between the open water portion of the IRL and through the mangroves to the west will be a great benefit to wildlife habitat, especially fisheries, in this portion of the Lagoon. In addition, restoring a natural connection between the IRL and the uplands along the eastern portion of SORCA will provide increased resiliency by reducing the potential for long-term inundation of uplands. One of the goals for the project is for the upper portions of the mangroves to transition into a high marsh habitat.

Throughout 2022 County staff worked with the SJRWMD to provide a grant proposal to FDEP to fund the removal of the SORCA dike and the re-connection of the impoundment. County staff included funding for the design of the project in the currently approved CIE. If a grant with the SJRWMD is approved by the Board, County staff plan to engage Carter Associates, Inc. (CAI) to work with Ducks Unlimited (DU) on the design and engineering of the project. DU has extensive experience in habitat restoration work, and has recent experience on similar impoundment work in Brevard County. County staff, with the assistance from the project engineer, will prepare and submit any necessary permit authorizations required.

ANALYSIS:

FDEP awarded the grant to the SJRWMD in January 2023. A copy of this agreement (22SRP09) has been provided with this staff report. Staff is requesting that the Board authorize the County Attorney to work with SJRWMD staff to develop a cost-share agreement with the County to complete the SORCA impoundment restoration project.

FUNDING:

There is no funding required for this item at this time. Staff will come back before the Board when the grant is awarded to approve any necessary funding. However, there is \$50,000 in available funds in the Optional Sales Tax/Parks/S Oslo Conservation Impoundment Restoration account, number 31521072-066510-22002.

STAFF RECOMMENDATION

Staff respectfully recommends the Board authorize the County Attorney to work with the SJRWMD staff to develop a cost share agreement for completion of the re-connection of the SORCA impoundment to the Indian River Lagoon. The draft agreement will be presented to the Board for consideration and approval.

ATTACHMENT

- Agreement 22SRP09: FDEP Grant Agreement with the SJRWMD for the South Oslo Riverfront Conservation Area Floodplain restoration project

APPROVED AGENDA ITEM FOR MARCH 7, 2023