

**INDIAN RIVER COUNTY, FLORIDA
BOARD MEMORANDUM**

CONSENT AGENDA

TO: Jason E. Brown
County Administrator

THROUGH: Richard B. Szpyrka, P.E.
Public Works Director

FROM: James D. Gray, Jr.
Natural Resources Manager

SUBJECT: **Work Order No. 2 Environmental Science Associates
Lost Tree Islands Feasibility Study**

DATE: January 31, 2018

BACKGROUND

On April 4, 2017, under Commissioners Matters 14.D (2), a number of potential lagoon legacy partnership projects between Indian River County and the City of Vero Beach (COVB) were presented. Following the presentation, the Board authorized staff to begin discussions with City staff to further evaluate the proposed projects and requested that staff update the Board on their progress.

Proposed Lagoon Legacy Projects and brief summary as presented on April 4, 2017:

Lagoon Legacy Project Name	Project Summary
A – Oyster Reef	Install new Oyster reef within the COVB limits
B – Lost Tree Island Cuts	Determine the feasibility of opening two points on the island to improve water quality
C – COVB Outfall Redesign	Construct rock rubble oyster reef
D – Foot Island Merrill Barber Bridge Stabilization	Construct a living shoreline to reduce island erosion and improve water quality
E – Rockridge Aeration Pilot Project	Use aeration to remove legacy N and P in muck
F – South Vero Storm Water Treatment	Pump untreated water through existing salt marsh to filter out N and P
G – Main Relief Canal Storm Water Treatment	Pump untreated water through existing salt marsh to filter out N and P

Upon further review of the proposed lagoon legacy projects, City and County staff determined that similar projects could be combined to improve project effectiveness and permitability.

As such, projects A, C, and D, all utilizing a living shoreline and/or oyster reef construction focus, have been combined. Currently, City and County staff are refining the project design and anticipate project permitting beginning this coming March/April.

Project E – Aeration Pilot Project is being administered by the City and is currently under project design.

Projects F and G, both utilizing a salt marsh to treat water, are long term focused projects and have not begun at this time.

The subject of this agenda item is to provide an update on Project B – Lost Tree Island Cuts and to request Board approval of Work Order No. 2 with Environmental Science Associates.

DESCRIPTION AND CONDITIONS

On October 10, 2017, the Board approved a contract with Environmental Science Associates (ESA) for professional continuing environmental and biological support services for engineering projects for a two year term, through October 10, 2019. ESA is the selected consultant for professional environmental services related to the Lost Tree Island Project.

The proposed Work Order No. 2 provides professional environmental services to determine the feasibility of reconnecting the historically connected Lost Tree Islands Conservation Area (LTICA) to the open water of the Lagoon. The goal of the project is to improve the overall health of the LTICA in conjunction with the Indian River Lagoon (IRL).

The feasibility project will focus and explore the following:

1. Reconnection of specific LTICA canals to open water
2. Improvement of water quality and habitat restoration
3. Reduction of exotic vegetation and stagnant water in an effort to reduce mosquito breeding, etc.

Work Order No. 2 includes five separate tasks for a not-to-exceed amount of \$41,750. A preliminary design report will be developed to enable the County to make an informed decision if the project is feasible going forward. If the project is deemed feasible, future project work orders will be presented to the Board for approval.

FUNDING

Funding, in the amount of \$41,750 for ESA Work Order No. 2, will be provided by a budget amendment transferring money from General Fund/Reserve for Contingency to General Fund/IR Lagoon Projects/Other Professional Services-Acct# 00128337-033190

RECOMMENDATION

The recommendation of staff is for the Board to approve Work Order No. 2 to the contract with Environmental Science Associates and authorize the Chairman to sign on behalf of the County.

ATTACHMENT

Environmental Science Associates Work Order No. 2
Lagoon Legacy Projects as presented April 4, 2017

APPROVED AGENDA ITEM FOR: FEBRUARY 13, 201