Agenda Report

2725 Judge Fran Jamieson Way
Viera, FL 32940

New Business - Add-On

J.2. 8/24/2021

Subject:
Request the Board approve sending a letter to the U.S. Army Corps of Engineers on behalf of the Board of Commissioners requesting a Feasibility Study re: restoration of natural water flow and wetlands at Kennedy Space Center (KSC)

Fiscal Impact:
n/a

Dept/Office:
District 1 for Economic Development Commission

Requested Action:
Request the Board approve sending a letter to the U.S. Army Corps of Engineers on behalf of the Board of Commissioners requesting a Feasibility Study.

Summary Explanation and Background:
The (non-federal sponsor(s)) and related stakeholders are requesting a Feasibility Study to show how restoration of natural water flow and wetlands at Kennedy Space Center (KSC) - not dissimilar to environmental restoration being carried out in the Florida Everglades - can improve water flow and natural wetland connects to improve the overall health of the IRL.

Federal construction at Kennedy Space Center has altered natural water flow, water connections and wetlands between Mosquito Lagoon, Banana River, and the Indian River Lagoon. Infrastructure improvements, including reimagined east-west transportation corridors, a new 21st century wastewater treatment facility serving KSC and the City of Titusville, FL, and environmental restoration at KSC can mitigate some of those federal impacts.

Indian River Lagoon harmful algal blooms are driven by nutrients, temperature, salinity, changes in light, long water residence time, and shifts in climate. We can mitigate for two factors: nutrient loads from all sources and restoration of internal natural flow at KSC.

Project Purpose
The purpose of the feasibility study would be to evaluate and optimize new and modern infrastructure to build coastal resilience into KSC infrastructure and a new wastewater treatment facility, east-west transportation corridors and improve water flow and natural wetland connections between Mosquito Lagoon, Banana River, and Indian River Lagoon.

Clerk to the Board Instructions:
Please return copy of signed letter to Brian Baluta, EDC Director of Communications and Partner Relations

Riverview Tower - Suntree Blvd. & U.S. 1, 6525 3rd Street, Suite 304
Rockledge, FL 32955

BREVARD County
BOARD OF COUNTY COMMISSIONERS

FLORIDA'S SPACE COAST

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

August 25, 2021

MEMORANDUM

TO: Commissioner Rita Pritchett, District 1 - Chair

RE: Item J.2., Letter to the U.S. Army Corps of Engineers on Behalf of the Board of County Commissioners Requesting a Feasibility Study for Restoration of Natural Water Flow and Wetlands at Kennedy Space Center (KSC)

The Board of County Commissioners, in regular session on August 24, 2021, approved sending the letter to the U.S. Army Corps of Engineers on behalf of the Board of County Commissioners requesting a feasibility study for restoration of natural water flow and wetlands at KSC. Enclosed is the Letter.

Your continued cooperation is always appreciated.

Sincerely,

BOARD OF COUNTY COMMISSIONERS
RACHEL M. SADOFF, CLERK

Kimberly Powell

Kimberly Powell, Clerk to the Board

Encl. (1)

cc: Economic Development Commission (EDC)

Rita Pritchett, District 1 Commissioner
7101 S Highway 1
Titusville, FL 32780
321-607-6901
D1.commissioner@brevardfl.gov

BOARD OF COUNTY COMMISSIONERS

August 24, 2021

Lieutenant General Scott A. Spellmon
Chief of Engineers and Commanding General
U.S. Army Corps of Engineers
441 G Street NW
Washington, D.C. 20314-1000

RE: Federal Solicitation for Proposals by Non-Federal Interests in FY2023 Water Resources Development Act: Kennedy Space Center and the Indian River Lagoon

Dear LT GEN Spellmon:

Along Florida's Space Coast, two valuable assets coexist – NASA's Kennedy Space Center (KSC) and the Indian River Lagoon, which was designated by Congress as an estuary of national significance. The Indian River Lagoon (IRL) occupies 40% of Florida's east coast with a watershed comprised of seven counties and 39 cities. The IRL generates $7.6 Billion annually to Florida's economy, is home to 1.6 million residents and is recognized for its high biological diversity (4,300 species documented, with numerous species of economic value and species of concern (rare, threatened or endangered). The IRL is a key driver to the wealth and health of Florida's economy by providing jobs, housing, tourism, industry, and recreation. The natural resource looms large for the quality of life that will help ensure KSC and its commercial space partners can attract and retain the skilled workforce necessary to sustain the Space Coast, Florida, and the United States as the epicenter of human spaceflight, technology development, and space discovery.

I am writing to you today to propose a project for the inclusion of the February 2022 Annual Report to Congress as required by WRRDA 2014, Section 7001. The proposal is for a feasibility study on ways to restore IRL water flow. Federal construction at KSC has altered the natural water flow, water connections and wetlands between Mosquito Lagoon, Banana River, and the Indian River Lagoon. Current east-west transportation corridor and earthen causeway infrastructure servicing KSC are contributing to poor water quality, harmful algal blooms, loss of seagrass and impacts to biological resources – including manatees.

East-west transportation causeways have compartmentalized the system, further restricted water flow and increased water retention time in waterbodies. Slow flow and long retention times makes these segments of water more vulnerable to nutrient pollution and Harmful Algal Blooms (HABs). The worst water quality and hot spots for algal blooms in in the Mosquito Lagoon, northern Indian River Lagoon, and Banana River.

Outcomes of this study will determine a way forward to build coastal resilience into KSC infrastructure and transportation corridors while improving water flow and restoration of natural wetland connections that were once natural hydrological features of the Mosquito Lagoon, Banana River, and northern Indian River Lagoon estuary complex.

Sincerely,

Rita Pritchett, Chair
Brevard County Commissioner
District 1

August 24, 2021

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Chief of Engineers and Commanding General
U.S. Army Corps of Engineers
441 G Street NW
Washington, D.C. 20314-1000

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Sincerely,

Rita Pritchett, Chair
Brevard County Commissioner
District 1

Report to Congress on Future Water Resources Development
https://www.usace.army.mil/Missions/Civil-Works/Project-Planning/WRRDA-7001-Proposals/

Preparing and Submitting a Proposal
https://www.wrrda7001proposals.us/

Purpose

Non-Federal Interests

Brevard County Board of County Commissioners

Specific Purpose: Feasibility Study

The (non-federal sponsor(s)) and related stakeholders are requesting a Feasibility Study to show how restoration of natural water flow and wetlands at Kennedy Space Center (KSC) – not dissimilar to environmental restoration being carried out in the Florida Everglades – can improve water flow and natural wetland connects to improve the overall health of the IRL.

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Project Purpose

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Estimated Cost of Proposed Study

Although a detailed scope has yet to be developed, it is estimated that a Feasibility Study for reimagining KSC infrastructure to include east-west transportation corridors, 21st century wastewater treatment facility, water flow and natural wetland connections between the Mosquito Lagoon, Banana River and Indian River Lagoon to be $800,000 including non-federal cost share. This cost estimate and the related scope is subject to further refinement.

Anticipated Benefits

The IRL is one of the most biologically diverse estuaries in the continental United States. It is home to 1.6 million residents and generates $7.6 Billion annually to Florida's economy. A cleaner, healthier, sustainable lagoon translates to cleaner, healthier, more sustainable economy and population along Space Coast, Florida and the 5 counties of the IRLNEP.

Improvements to east-west corridors will improve water flow by reducing earthen construction with expanded low-elevation bridges and/or box-culverts. The implementation of elevation changes and living-

shoreline restoration along east-west corridors and earthen causeway shorelines will build resilience to flooding, storm surge and sea level rise.

A 21st century wastewater treatment facility will support current and historic expansion of public and private commercial launch activity and the expanded KSC workforce needed to support that growth.

The removal of legacy loads of contaminants at KSC that impacts soils, groundwater, and nearby IRL waters will protect the health and wellbeing of the KSC workforce and 1.6 million residents along the lagoon.

The restoration of clean water and the long-term stewardship of the Indian River Lagoon is an important priority. The significance of the Indian River Lagoon restoration and stewardship is twofold. The lagoon is an economic driver in its own right with respect to tourism, recreation, commercial fishing, and real estate development. The natural resource also looms large for the quality of life that will help ensure Kennedy Space Center and its commercial space partners can attract and retain a skilled workforce necessary to sustain the Space Coast and the United States as the epicenter of human spaceflight, technology development and space discovery.

Local Support

A feasibility study has the general support of the five counties along the Indian River Lagoon.

Non-Federal Financial Support

(non-federal sponsor) has the financial ability to provide a cost share as match for the study as well as collection of funds from other interested parties and stakeholders.