INDIAN RIVER COUNTY, FLORIDA BOARD MEMORANDUM

DEPARTMENTAL

TO: Board of County Commissioners

THROUGH: John A. Titkanich, Jr., County Administrator

Kylie Yanchula, Natural Resources Director

THROUGH: Eric Charest, Assistant Director, Natural Resources Department

SUBJECT: Indian River County Climate Vulnerability Assessment Update

DATE: February 20, 2025

DESCRIPTION AND CONDITIONS

In 2023, the County accepted a Florida Department of Environmental Protection (FDEP) Resilient Florida Grant in the amount of \$248,675 to develop a climate vulnerability assessment (VA) in accordance with statutory requirements set forth under Section 380.093, Florida Statutes.

The intent of the VA is to identify critical assets that are at risk of flooding associated with increases in the frequency and duration of rainfall events, storm surge from severe weather events, and projected sea level rise. Critical assets include transportation and evacuation routes, critical infrastructure, community and emergency facilities, as well as natural, cultural and historic resources. The VA is intended to be utilized for future adaptation planning efforts to identify resiliency and mitigation projects for potential grant funding which dovetails off the FDEP's Comprehensive Statewide Flood and Sea Level Rise Assessment that was recently completed.

Indian River County selected Tetra Tech, Inc to complete the VA based upon a competitive request for proposal (RFP) and selection committee process. The contract was awarded and executed in March of 2024. Upon execution of the contract, Tetra Tech initiated the collection of critical asset Geographic Information System (GIS) data from publicly available datasets as well as existing Indian River County GIS datasets. The consultant then used GIS to model 54 flood event scenarios associated with sea level rise, tidal events, storm surge, rainfall, and compound flooding in accordance with the requirements of Section 380.093 F.S. with planning horizons for the present day, 2040, 2070, and 2100. This modeling effort was used to complete an exposure analysis, which evaluates the likelihood and extent an area, asset, or population of interest is physically affected by the flooding, and sensitivity analysis, which characterizes the extent an area, asset, or population is expected to experience adverse impacts. Flood focus areas were then identified based upon the concentration of assets impacted. Assets at risk were subject to a sensitivity analysis and prioritization ranking taking into account the planning horizon (year of impact), inundation risk, and social vulnerability.

The contractor has completed a draft VA report providing details on the findings of the exposure and sensitivity analyses. This draft report was presented in a public meeting held at the Intergenerational Center on February 26, 2025, which allowed stakeholders and the public to ask questions and provide input. With public comment solicitation complete, staff and Tetra Tech

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are presenting the draft VA to the Board of County Commissioners for comment prior to submission to the grant agency. The finalized report will be brought back to the Board for

adoption on March 25, 2025.

FUNDING

There is no additional funding required for this item.

NOTE: The Full Climate Vulnerability Assessment Update is available in the Board of County

Commission office for viewing.

RECOMMENDATION

Staff recommend that the Board of County Commissioners provide comments for incorporation

into the draft Climate Vulnerability Assessment.

ATTACHMENTS

1. Indian River County Climate Vulnerability Assessment – Draft Report

APPROVED AGENDA ITEM FOR: March 11, 2025