

City of Pensacola

Memorandum

File #: 22-00765 City Council 7/21/2022

LEGISLATIVE ACTION ITEM

SPONSOR: Grover C. Robinson, IV, Mayor

SUBJECT:

CITY OF PENSACOLA RESILIENT COASTLINES PROGRAM - FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION GRANT AGREEMENT NO. 22PLN33

RECOMMENDATION:

That City Council approve and authorize the Mayor to execute the acceptance of the Florida Department of Environmental Protection Grant Agreement No. 22PLN33 in the amount of \$159,600 to update the existing Vulnerability Assessment for compliance with Section 380.093(3)(d), F.S. The NOAA Intermediate Low sea level rise curve will be incorporated into the City's existing analysis. A shoreline elevation analysis, additional maps, and required metadata consistent with the foregoing will also be produced. Further, that City Council authorize the Mayor to take all actions necessary relating to the finalization of the grant.

HEARING REQUIRED: No Hearing Required

SUMMARY:

Northwest Florida is threatened by sea-level rise, record-breaking heat indexes, increasing frequency and long durations of extreme heat and drought, heavier rain events, wildfires, inland and coastal flooding, storm surges exacerbated by stronger hurricanes, and decreasing freshwater availability. Historical water level records from Pensacola, Florida National Oceanic and Atmospheric Administration (NOAA) tide gauges have established a representative long-term historical SLR trend of 0.73 ft/century.

One of the foundational concepts of Fla Stat 380.093 and FEMA's CRS program is to assess the flood risk of a community using best available tools, data, and methodologies. The larger goal of both programs is to capture multiple types of weather-related scenarios to project and model how various flood risks would affect the community. This update will further evaluate the potential for flood exposure to critical assets as defined by s. 380.093 (transportation and evacuation routes, critical infrastructure, critical community, and emergency facilities, and natural, culture and historical resources).

To align the project's modeling effort with the new Florida statute the plan for this assessment will be to leverage the functionality within the best available GIS software to:

- map potential future regular tidal inundation using a modified bathtub approach that attempts to account for local and regional tidal variability and is used by the NOAA Office for Coastal Management to map sea level rise),
- 2) map potential high tide flooding based on NOAA's Coastal High Tide Flooding methodology
- 3) map potential storm surge events using a combination of presently available data from both NOAA and FEMA and leverage readily available software methodologies to project multiple sea-level-adjusted designed storm events (particularly the 25-, 50-, 100- and 500-year events), and
- 4) test the feasibility of mapping potential sea-level adjusted rainfall with a pilot- study using experimental methodologies and tools designed to model various rainfall events.

PRIOR ACTION:

None

FUNDING:

Budget: \$ 159,600 FDEP Grant 22PLN33

FINANCIAL IMPACT:

None

CITY ATTORNEY REVIEW: Yes

7/14/2020

STAFF CONTACT:

Kerrith Fiddler, City Administrator David Forte, Deputy City Administrator - Community Development Cynthia Cannon, AICP, Assistant Planning and Zoning Manager

ATTACHMENTS:

Grant Agreement No. 22PLN33

PRESENTATION: No