

AGENDA ITEM MEMO

BOARD MEETING DATE: March 9, 2023

TO: Board Members

THROUGH: Jeff Walker, Executive Administrator
Ashley Harden, General Counsel
Rebecca Trevino, Chief Financial Officer
John T. Dupnik, P.G., Deputy Executive Administrator, Water Science and Conservation

FROM: Caimee Schoenbaechler, Manager, Coastal Science

SUBJECT: Contract approval for the Texas Integrated Flooding Framework

ACTION REQUESTED

Consider authorizing the Executive Administrator to negotiate and execute a contract with The University of Texas at Austin in a total amount not to exceed \$600,000 to support the Texas Integrated Flooding Framework.

BACKGROUND

Coastal Texas is vulnerable to flooding from multiple drivers, including rainfall and coastal storm surges. These events may occur simultaneously or sequentially during storm events, leading to compound flooding hazards. Recent hurricane events in Texas, including Hurricanes Ike and Harvey, highlighted the need to better understand and plan for flooding as a continuum of processes across the landscape. In 2020, the Texas General Land Office Community Development and Revitalization department funded the Texas Water Development Board (TWDB) to serve as the lead agency to coordinate a comprehensive flood risk reduction planning project in partnership with the U.S. Geological Survey and the U.S. Army Corps of Engineers – Galveston District. The source of funding for this project is the U.S. Department of Housing and Urban Development's Community Development Block Grant Disaster Recovery Program. This project, the Texas Integrated Flooding Framework, aims to create guidelines for integrating planning tools, models, and data that may assist local and state entities enhance their efforts in regional flood planning and mitigation in the coastal zone.

Our Mission

Leading the state's efforts in ensuring a secure water future for Texas and its citizens

Board Members

Brooke T. Paup, Chairwoman | George B. Peyton V, Board Member | L'Oreal Stepney, P.E., Board Member
Jeff Walker, Executive Administrator

KEY ISSUES

The Executive Administrator proposes to negotiate and execute an interagency contract with The University of Texas at Austin for coastal flood modeling support in fiscal years 2023 and 2024. The TWDB will pass through the federal funds to The University of Texas at Austin. The total project cost will be determined through interagency contract negotiations and will not exceed \$600,000. The contract will support the Texas Integrated Flooding Framework by achieving three primary goals:

- 1) conduct a literature review on the physical processes and models of rainfall-runoff, riverine flooding, storm surge, and wave action across the coast;
- 2) develop a guide for modelers and decision-makers describing probabilistic compound flood hazard modeling and analysis techniques that can be used for flood planning; and,
- 3) develop conceptual workflows describing the process for modelers and decision-makers to use when assessing compound flooding hazards in coastal Texas regions.

This effort furthers agency objectives related to flood science, planning, mitigation, education, and outreach.

RECOMMENDATION

The Executive Administrator recommends approval to authorize negotiating and executing a contract with The University of Texas at Austin in a total amount not to exceed \$600,000.