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AGENDA ITEM MEMO

BOARD MEETING DATE: March 3, 2026

TO: Board Members

THROUGH: Bryan McMath, Executive Administrator
Ashley Harden, General Counsel
Georgia Sanchez, Chief Financial Officer

FROM: Richard A. Wade, Deputy Executive Administrator, Texas Geographic Information Office

SUBJECT: 3D Hydrography Program Data for Portions of Central and North East Texas

ACTION REQUESTED

Consider authorizing the Executive Administrator to execute a cost match with the United States Geological Survey (USGS) for a total Texas Water Development Board (TWDB) contributed amount not to exceed \$500,000 for the creation of elevation derived hydrography for the National 3D Hydrography Program (3DHP) utilizing the Geospatial Products and Services Contracts (GPSC) administered by the USGS.

BACKGROUND

The Texas Geographic Information Office (TxGIO) is pursuing a new initiative to collect elevation derived hydrography for Texas by contributing to the USGS National 3D Hydrography Program (3DHP). In 2025, TxGIO responded to the USGS Data Collaboration Announcement for 3DHP cost match opportunity. The TxGIO proposal was recommended for an award in January 2026.

Elevation derived hydrography (EDH) is a 3D surface water dataset created from high quality lidar surface models. EDH data has improved accuracy and precision compared to the previous generation of national hydrography data. The new EDH data, when joined to advanced attribution of the 3DHP program, creates significantly superior surface water data with connectivity to the “Internet of Water” for improved interoperability and modeling.

Benefits from 3DHP data are improved flood risk management and modeling, modernized infrastructure management, enhanced environmental and economic decision making, and enhanced water modeling.

[Our Mission](#) : [Board Members](#)

Leading the state’s efforts
in ensuring a secure
water future for Texas

L’Oreal Stepney, P.E., Chairwoman | W. Brady Franks, Board Member | Ashley Morgan, Board Member
Bryan McMath, Executive Administrator

Area of Interest

This project aims to produce a hydrography dataset using high quality, QL2 lidar data from the USGS 3D Elevation Program (3DEP), accepted by the USGS in 2025 for Lampasas and Smith counties. The Areas of Interest (AOIs) cover approximately 3,577 square miles, encompassing 7 Hydrologic Unit Codes (HUC) 10 watersheds and 41 HUC12 sub-watersheds. The AOIs fall predominantly within the Upper Trinity, Neches, Sabine, Little, Middle Colorado-Concho, and Middle Colorado-Llano basins.

Participating partners: Texas Water Development Board

Total cost for TWDB: Not to exceed \$500,000

Total cost for USGS: Proposed at ~\$243,417

Total proposed project cost: ~\$743,417

The new 3DHP datasets from this project will be publicly available through TxGIO's DataHub (<https://data.geographic.texas.gov/>) to improve mapping efforts, support research, enhance flood modeling, and increase disaster preparedness in Texas.

KEY ISSUES

TxGIO is currently awaiting board approval to proceed with negotiations with the USGS on this opportunity.

Final Areas of Interest or cost contribution from the USGS may increase if adjacent areas are collected by the USGS.

This project will obligate a total amount not to exceed \$500,000 from the TxGIO Fiscal Year 2026 Strategic Mapping Capital Funds.

RECOMMENDATION

The Executive Administrator recommends approval to execute a cost match agreement with the USGS in a total amount not to exceed a total contribution of \$500,000 for the creation of 3DHP data using the TxGIO Strategic Mapping Program in cooperation with the USGS and their associated GPSC contracts.