

AGENDA ITEM MEMO

BOARD MEETING DATE: December 7, 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: Nathan Leber, Manager, TexMesonet
Carla G. Guthrie, Ph.D., Director, Surface Water

SUBJECT: Hydrometeorological data agreement with Texas Tech University

ACTION REQUESTED

Consider authorizing the Executive Administrator to execute an amendment to a contract with Texas Tech University to increase the contract amount by an amount not to exceed \$500,000 for continuation of hydrometeorological data in Fiscal Years 2024 and 2025.

BACKGROUND

Formed in 2016, the TexMesonet program serves the state by aggregating and displaying high quality hydrometeorological data from stations across Texas to provide support for weather forecasting, flood preparedness, drought monitoring, wildfire management, water planning and conservation, and agricultural, industrial, and business readiness and productivity. The network operates by retrieving data from stations in partner networks and from Texas Water Development Board (TWDB)-owned stations that are being installed to fill gaps in existing network coverage across the state. All data, such as temperature, precipitation, humidity, pressure, wind, solar radiation, and soil moisture from nearly 1,650 stations across Texas, is then displayed and is accessible to users via a centralized website, TexMesonet.org.

Statewide weather station coverage is essential to the mission of the TexMesonet program. To facilitate statewide coverage, the TWDB installs and maintains its own stations and looks for opportunities to leverage partnerships. The TWDB has established a cost-effective partnership with Texas Tech University to provide weather station data from the West

Texas Mesonet network. This extensive network includes high quality earth observation stations providing near-comprehensive coverage for much of the Panhandle, Plains, and West Texas—areas of the state that are poorly covered by other networks meeting the standards of the TexMesonet program. The attachment shows the extent of statewide coverage from Tier 1 mesonet stations within TWDB’s network and partner networks, with West Texas Mesonet stations separately identified. Stations are considered Tier 1 if they meet TexMesonet’s siting, sensory, and quality standards. In Fiscal Year 2023, the TWDB negotiated and executed a contract for \$226,050 with Texas Tech University to provide West Texas Mesonet data. Continued sharing of data from this network is essential to developing TexMesonet.org as the one-stop resource for Texas’ hydrometeorological information.

KEY ISSUES

To maintain hydrometeorological data coverage in the Panhandle, Plains, and West Texas, the Executive Administrator proposes to extend a contract with Texas Tech University and to add additional funding. Total cost for Fiscal Years 2024 and 2025 will not exceed \$500,000 and will be provided by the TWDB from general revenue. The agreement will provide 15-minute hydrometeorological data from at least 137 West Texas Mesonet stations for display, download, and public use via TexMesonet.org. The proposed agreement provides excellent value, as the locations covered by West Texas Mesonet stations are logistically difficult for TWDB to support due to their distance from headquarters. Moreover, the West Texas Mesonet complements existing TexMesonet infrastructure, provides high quality data comparable to TexMesonet standards, and furthers the program’s mission of providing statewide coverage.

RECOMMENDATION

The Executive Administrator concludes that the contract with Texas Tech University for West Texas Mesonet data furthers the objectives for statewide monitoring of hydrometeorological conditions and recommends approval of this request.

Attachment: Existing TexMesonet coverage by Tier 1 stations

