## Dedicate financial resources to support a statewide ET network into the TexMesonet program.

The WCAC recommends the Texas Legislature provide TWDB the financial resources necessary to sufficiently incorporate a statewide evapotranspiration (ET) network into the existing TexMesonet program, subject to available state revenue for the 2026-2027 biennium. A key aspect of this program expansion should include:

* Increase appropriations by $1,200,000 for the biennium to the TWDB to develop and support a statewide ET network within the TexMesonet. Funding will be used for:
  + Up to 2.5 new full-time equivalent staff positions
  + Contracting a study on existing TexMesonet weather stations regarding siting requirements to accurately calculate ET (study of fetch)
  + Resources to update existing sites to accommodate ET measurements
  + Grants and/or contracts with agencies to provide technical assistance

In 2016, TWDB started the TexMesonet earth observation network to provide high quality data to support flood monitoring and flood forecasting efforts. The goal is to create a “network of networks” from existing weather station networks and fill in areas throughout the state lacking coverage. Over 3,000 existing stations owned by other entities and 107 stations owned and operated by TWDB are currently displayed within the TexMesonet. Stations and collected data within the TexMesonet are mostly used to observe and track weather events for flood monitoring and forecasting.

During the 88th Legislative Session, HB 2759, “Establish the TexMesonet Hydrometeorology Network and create the TexMesonet Advisory Committee” passed which furthered 2022 WCAC legislative recommendations to:

* Grant TWDB the statutory authority as the lead agency to ensure the longevity and reliability of the statewide TexMesonet earth observation network;
* Grant TWDB the statutory authority to incorporate reference evapotranspiration in its mission to further develop and expand the TexMesonet; and
* Grant TWDB the statutory authority to collaborate and contract with local, state and/or federal agencies and other entities, at TWDB’s discretion, to provide technical assistance and to develop and disseminate products to maximize the impact of the TexMesonet and a statewide evapotranspiration network for the people of Texas.

However, the 88th Legislature did not appropriate funds that had been requested by the TWDB to support an expedited build-out of the Texmesonet or the incorporation of ET data in the network.

With the direction of the TexMesonet established, expanding the program could create products for additional economic sectors such as irrigation scheduling recommendations. However, agency resources are currently limited to incorporate a statewide ET network into the TexMesonet. Based on current budget and staff levels, approximately 20 TWDB-supported TexMesonet stations are scheduled to be installed each year. Incorporating ET data collection involves adjusting the siting and installation parameters of new stations and, where feasible, modifying existing stations. Collaborating and contracting with other local, state and/or federal agencies and other entities, at TWDB’s discretion, can also provide essential technical assistance to maximize the impact of the TexMesonet. With dedicated funding, a sustainable statewide ET network is within reach for the people of Texas with the benefits positively impacting water conservation throughout the state.

Outdoor water use for growing agriculture crops and maintaining landscapes is significant. Efficient irrigation best management practices and technology improvements have proven to be effective tools with quantifiable water saving results. The use of ET data through dedicated weather stations and connected networks is critical to maintaining current best management practices and advancing future conservation success. A full expansion of an ET network within the TexMesonet, available to all water users, is vital in supporting water conservation efforts and meeting the future water needs of Texas.