

SUPPORTING EFFICIENT IRRIGATION MANAGEMENT THROUGH THE TEXAS HIGH PLAINS EVAPOTRANSPIRATION NETWORK

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SUMMARY

The Texas High Plains is the most intensively irrigated region in the state. With limited and declining water resources in the region, efficiency in irrigation management is especially important. Evapotranspiration (ET) based crop water use estimates are key to optimizing irrigation scheduling. High quality, local meteorological data and ET estimates also are crucial to management and interpretation of results from agricultural research programs and to application of numerous crop management and water use models.

The Texas High Plains Evapotranspiration (TXHPET) Network provides meteorological data and crop water use estimates to support efficient irrigation management and associated research and education efforts throughout the region. The network delivers data by fax or e-mail to subscribers. The primary delivery mechanism, however, is the TXHPET website - <http://txhighplainset.tamu.edu/>.

Through the website, users can access information from any or all of 17 weather stations in the regional network through one common searchable database. Users can access data from one or multiple weather stations, over any time in the period of record. They can choose to access daily or hourly data and select whether the data are presented in English or metric units. Retrieved data can be presented in graphical, text, or data table formats. These features and online educational materials greatly enhance the utility of the data and simplify data analysis and interpretation. Outreach education efforts targeting traditional and new stakeholders are increasing awareness of TXHPET and promoting application of this valuable information for improved irrigation and water resources management.