

TEXAS A&M AGENCIES REQUEST FUNDING TO ADDRESS WATER RESOURCE MANAGEMENT

With the drought of 2011 exposing the frailty of Texas water supplies and management, highlighting the state's future challenges, three of the nation's preeminent research and education agencies—the Texas A&M AgriLife Extension Service, Texas A&M AgriLife Research and Texas A&M Engineering Experiment Station—are aligning their expertise and outreach capabilities in water resource management to benefit Texans.

The agencies are requesting \$20 million for an exceptional appropriations item from the 83rd Texas Legislature for fiscal years 2014–2015 that focuses on aggressive research and extension education about water. The objectives of the requested exceptional item are to 1) leverage Texas' agricultural and life sciences expertise to address urban and rural surface water, groundwater and reusable water issues through research, technology development and best practices and 2) improve municipal, manufacturing, irrigation, recreational and agricultural water utilization and conservation.

Benefit to Texans

According to the exceptional item, which is part of the budget requests by the agencies to the Legislative Budget Board, county-by-county needs assessments conducted in 2011 involving stakeholders, producers and residents, identified water as the top statewide priority. There is an urgency to develop and implement new technologies and best practices in both rural and urban environments, the exceptional item states.

How and when water is used or reused in homes, businesses or industries—including landscapes and production agriculture—require both research and education to reach a high-quality water future. Supplies must be assessed and managed with emphasis on such factors as bacteria, nutrients, stormwater runoff, routine conservation and treatment/reutilization strategies.

According to the item, this requested investment in water research and education will make a critical difference in the state's ability to increase the efficiency and utility of its water resources. It will also facilitate research to develop advanced technologies and next-generation best management practices for water in Texas.

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Initiatives

Initiatives funded by the request would include the following:

- Develop models that predict the potential impact on water supplies due to drought, land use and municipal water use under different climate scenarios.
- Accelerate development and adoption of innovative conservation technologies that solve water supply problems and secure future supplies.
- Develop, educate and assist in implementing more comprehensive practices for managing irrigation water use and water-capture methods to improve efficiency across cropping systems, residential and business areas, urban landscapes and forage production. These practices will include alternative sources such as saline water, reclaimed water, graywater, and wastewater and expanding AgriLife's existing Evapotranspiration Network to use weather data and soil and crop conditions for real-time decision making to maximize crop production with minimal irrigation.
- Deliver water use and conservation education to Texas residents, water districts and municipalities via four regional training teams and through online courses.
- Target modern plant breeding and biotechnology to develop geographically appropriate drought-tolerant and water-use-efficient plants.
- Develop efficient, cost-effective advanced irrigation, water capture and treatment technologies.
- Analyze the economic impacts and policy implications of water investments in the agricultural sector across both rural and urban Texas
- Analyze the adoptability, return on investment and environmental benefit of new water technologies.

To read the complete exceptional item, visit agrilife.org/agrilife-offices/externalrelations/.

To understand more about the Texas funding process, visit senate.state.tx.us/SRC/pdf/Budget_101-2011.pdf.