Protecting and Conserving Texas' Vital Water Resources

Economic Impacts of Extension Education

Water-Use Efficiency and Quality

- Population growth, increasing water demand, contamination issues, and drought have placed the state's water supply under tremendous stress.
- Water demand in Texas is projected to increase by 17% from 2020 to 2070.
- Protecting water resources and utilizing conservation practices will be essential to sustaining the state's water demand-supply balance.

AgriLife Extension's Response

The Texas A&M AgriLife Extension Service delivers a wide range of programs focused on research-based water conservation and water quality practices, watershed protection, onsite wastewater treatment systems, private water well screening, and soil nutrient management.

- These programs teach participants about efficient water use, sustainable practices, watershed management, and environmental stewardship.
- AgriLife Extension's conservation programs focus on reducing household water use and improving irrigation efficiencies in lawns, landscapes, and agricultural production systems.
- Urban water issues are being addressed through the Texas Water Star program, which includes popular water-use efficiency efforts such as Earth-Kind® landscaping and strategies for in-home water savings.
- Through 5,350 educational events, planning meetings, and workshops in 2017, AgriLife Extension achieved more than 1.3 million educational and other contacts to increase public awareness and adoption of practices that are vital to improving and sustaining the state's water demand-supply balance.

Economic and Environmental Impacts

The benefits of these programs are measured in terms of water saved, water-cost savings, number of jobs and annual wages for trainees in the landscape-irrigation profession, and externally funded grant dollars received and spent locally to implement watershed protection and educational programs.

- Water conservation programs have resulted in a potential savings of 2.1 billion gallons annually (enough to supply 13,300 households), valued at $7.6 million (using municipal water rates).
- Water quality restoration efforts in the Attoyac Bayou, Copano Bay, Cibolo Creek, Mission River, Aransas River, Matagorda Basin, Lavaca River, Tres Palacios Creek, Arenosa Creek, Carancahua Bay, Little River, San Gabriel River, Big Elm Creek, Navasota River, Arroyo-Colorado River, Brownsville Resaca, Mill Creek, and the Geronimo and Alligator Creek watersheds follow the Plum Creek Watershed model. In 2011, the Plum Creek watershed was removed from the EPA's list of impaired water bodies.
- To leverage state resources, $9.8 million in externally funded grants has been obtained to support critical water quality protection activities and educational programs and to identify sources of watershed contamination.
- Programs that provide certification in landscape irrigation, onsite wastewater systems management, and water quality directly support over 1,440 jobs, with $42.2 million in annual wages.
- The ultimate societal benefit to Texas is the protection and more efficient use of scarce water resources.

Texas A&M AgriLife Extension is an equal opportunity employer and program provider.
The Texas A&M University System, U.S. Department of Agriculture, and the County Commissioners Courts of Texas cooperating

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