

Meeting the Growing Demand for Water through Conservation Education

- Population growth, drought, and increasing water demands have added stress to Texas' water supply.
- Water demand in Texas is projected to increase by 17% between 2020 and 2070.
- The 2017 State Water Plan includes more than 800 water management strategies developed to balance the projected water demand and supply.
- Municipal water conservation is expected to account for approximately 7% of new water supplies by 2060. Part of this conservation will be achieved through education.
- In urban areas, about 25% of water use is attributable to landscape irrigation, and approximately 50% of irrigation water applied is lost due to inefficiencies and improper operation of irrigation systems.

AgriLife Extension's Response

- Earth-Kind® Landscaping uses research-proven techniques to provide maximum garden and landscape enjoyment while preserving and protecting the environment.
- The best organic and traditional gardening and landscaping principles are used to create a horticultural system based on real-world effectiveness and environmental responsibility.



- Earth-Kind® Landscaping encourages (1) water conservation, (2) reduction of fertilizer and pesticide use, (3) landscaping for energy conservation, and (4) reduction of landscape wastes entering landfills.
- The program also focuses on (1) using native plant species to provide habitat and reduce water requirements and (2) minimizing the use of potentially harmful chemical fertilizers and pesticides.
- In 2017, Earth-Kind® reached more than 95,000 contacts through 537 educational events.

Economic Impacts

- Of the 14,000 Earth-Kind® participants since 2009 who completed the program evaluation, 44% indicated that they would adopt one or more water conservation practices, reducing their annual landscape water use by 20%.
- This reduction in landscape water use results in a potential annual savings of 4,400 gallons per household and 29.2 million gallons for all participants who responded. The estimated water-cost savings to these users as a whole is \$106,000 per year, based on average municipal water rates.
- In addition, more than 8,000 participants anticipate a cost savings of \$217 per year, or \$1.6 million in total, associated with reducing their use of pesticides and fertilizers.
- The ultimate societal benefits to Texas are protection of the environment and a more efficient use of scarce water resources.