

Issues Led to Water Loss

- The state of landscape-irrigation design, operation, and management in Texas has historically been poor. Approximately 50% of irrigation water applied was lost due to inefficiencies and improper operation.
- The State of Texas, through the Texas Commission on Environmental Quality (TCEQ), now requires licensing and continuing education for landscape irrigators, irrigation technicians, and inspectors. These requirements are aimed at improving the operational efficiency and management of landscape irrigation.

AgriLife Extension's Response

- Established in 1994 by the Texas A&M AgriLife Extension Service, the School of Irrigation was created to promote landscape-irrigation auditing and management in Texas through training and certification.
- In conjunction with the school, AgriLife Extension used irrigation courses and materials to create an irrigation-management program based on evapotranspiration (ET).
- The school provides quality irrigation education through a variety of courses on subjects that include (1) irrigation water management and scheduling, (2) drip irrigation, (3) ET- and sensor-based irrigation



controllers, (4) irrigation computer-aided design, and (5) landscape-irrigation auditing and management.

- The courses are designed to teach licensed irrigators and other landscape professionals (including conservation directors) about new irrigation technologies, design, installation and management procedures, and regulatory issues, while meeting TCEQ continuing-education requirements.
- Since 2008, the School of Irrigation has provided continuing education and irrigation auditor certification to more than 5,000 individuals.
- The school also provides valuable professional development to municipal employees, parks and grounds managers, and conservation directors of public agencies.

Economic Impacts

- By providing high-quality landscape-irrigation courses that meet the state's continuing-education requirements, this educational and training effort directly supports 1,192 jobs in the landscape-irrigation industry, with an estimated annual wage base of \$33.9 million.
- The school's certified irrigation auditors conduct an estimated 2,550 landscape-irrigation audits annually for a variety of water users, including schools, churches, businesses, apartments and townhomes, residential homes, and municipalities (parks, esplanades, and golf courses).
- The average water savings resulting from landscape-irrigation audits ranges from 12% to more than 30% (depending on the type of user), leading to a savings of more than 1.1 billion gallons annually. The estimated value of this water is \$3.9 million annually, based on average municipal water rates.