No. 112: Texas Water Conservation

CASE STUDY





Texas: Water Conservation

Campbell instruments and city of Frisco help citizens water lawns wisely



The city of Frisco, Texas, sits in an area that experienced severe drought from about 2011 to 2015. They faced extremely restricted water supplies, and formulated programs to reduce unnecessary consumption.

Frisco's Smart Irrigation Program is an innovative approach to improve the community's outdoor water use practices and help manage summer peak demands. The program includes:

- Real-time weekly outdoor watering recommendations
- The installation of a weather station
- Outdoor water usage reports

- A rebate incentive to homeowners who replace their automatic irrigation controller with a weather-based smart controller
- An ordinance, adopted by the Frisco city council, requiring the installation of smart controllers in all new homes

Frisco's WaterWise emails provide lawn watering advice based on data collected from the city's weather station and rain gages. The weather instruments include datalogger, sensors, phone modem, and tower from Campbell Scientific. This weekly information can help citizens maintain their landscape and water more efficiently.

Case Study Summary

Application:

Monitoring weather and evapotranspiration to help consumers water wisely

Location:

Frisco, Texas, USA

Sponsoring Organization:

City of Frisco, Texas

Products Used:

CR800, TE525WS, LI200X, 05103, HMP45C, UT10, COM220, ENC12/14, PS100

Measured Parameters:

Precipitation, wind speed and direction, air temperature, relative humidity, incoming solar



Another popular, yet critical component of Frisco's Smart Irrigation Program is the free irrigation checkup. During a checkup, residents learn how to detect and repair broken or misaligned sprinkler heads, adjust system schedules and retrofit existing systems with "smart controller" devices. As of 2016, city irrigation specialist Mike Barth says he had performed approximately 3,500 irrigation system audits since the free program began in 2007.

"The program promotes using water wisely and efficiently," said city official Gary Hartwell. "It's not just about saving water next month or next summer. It's about making sure we have a water supply for future generations of the City of Frisco."







