

Texas A&M University, Texas AgriLife Research

TEEA 2019 Winner: Water Conservation

BV WaterSmart



BV WaterSmart is an educational partnership created in 2010 between Texas AgriLife Research, the Texas Center for Applied Technology, agencies of the Texas A&M University System, Brazos Valley Groundwater Conservation District, and the City of College Station.

The main goal of the program is to conserve water by improving residential outdoor water use efficiency and reducing the wasteful overwatering of landscapes. In the surrounding areas, residential water use accounts for about 70 percent of total annual water consumption; almost 50 percent of which is for outdoor use. The BV WaterSmart team believed savings could be substantial if the community became more efficient in their usage of outdoor water.

The team created six programs, which include weather stations and a corresponding website, personalized weekly watering notifications, residential water budgets, free residential irrigation system inspections, water conservation seminars, and public service announcements. Each program focuses on a different part of outdoor water usage and educates the community on ways to conserve.

Researchers in the program use a network of 20 weather stations to measure daily and weekly evapotranspiration and rainfall in the area, create average benchmarks for customers' water bills (according to weather conditions and residential lot size), conduct seminars, and broadcast public service announcements to offer information on irrigation repair and tips to conserve outdoor water usage.

Since the program's inception, the cumulative reduction in water use in the community is over 630,000,000 gallons of water—even with a population growth of 26 percent in the area. Program-

provided water budgets have reduced the number of high-volume single-family residential consumers in College Station by almost 50 percent.

The project reflects a commitment to water conservation in the community and a willingness to change for the benefit of the community and the environment.