

Water Conservation Field Day Held at Hays

The city of Hays hosted the first annual Conservation Field Day for public water suppliers on October 13, 2017, at the Agriculture Research Center Auditorium in Hays. The event was co-sponsored by the Kansas Water Office's Smoky Hill-Saline Regional Advisory Committee (RAC). While conservation field days have been common for agricultural uses, such as irrigation, this was the first such event promoting conservation practices being implemented by municipalities and rural water districts. It is hoped that this concept will bring public water suppliers together to learn about which conservation efforts are working in other parts of the state.

It was fitting that the inaugural event be held in Hays, which has been on the cutting-edge of water efficiency for 25 years. A severe drought in the early 1990s impacted the city's main source of groundwater at their Schoenchen well field south town and served as a wake-up call. This area had already been closed to new appropriations and with no time to secure an alternate source, the town had to act quickly to make more efficient use of their existing resource. The city implemented an afternoon watering ban from treated municipal supplies and private wells. They also implemented an incentive program to help citizens replace clothes washers, showerheads and toilets with modern low-flow devices. The city implemented a successful "cash for grass" program, borrowed from Las Vegas, to incentivize the conversion of lawns from cool-season water-thirsty lawns, to more climate-appropriate warm-season turf grasses, such as Buffalograss and Bermudagrass that have deeper root systems and can be maintained with much less irrigation. Xeriscaping was incorporated to reduce the overall area of grass needing watered throughout town. The city has also adopted a "green plumbing code," for new construction and remodeling, which among other things, requires that hot water heaters be located near the point of use, such as a shower, so less water is wasted waiting for hot water to arrive. Plans for new lawn irrigation systems must be submitted to the city for review and approval. A city ordinance was adopted to prevent the wasteful watering of sidewalks and streets. The first violation will generally result in a warning, but tickets with fines of \$50 (or more) can be issued by the Hays police department for repeat violators. A city sales tax was adopted in 1995 to help fund re-drilling and optimization of the existing wellfield and to procure new sources of water.

At first, there was significant public pushback to many of these initiatives. To garner public buy-in, Hays made a point of leading by example. City facilities, such as the public



Xeriscaping is landscaping and gardening that reduces the demand for irrigation. Pictured is one of the winners of Hays' 2017 Water Smart Landscape Awards.

library, were retrofitted with low flow toilets and urinals. Ice machines in city facilities were converted from water-cooled to air-cooled. Mixers were added to city water storage to reduce the need to flush water from water towers. Aubel-Bickel Park was converted from irrigated turfgrass to non-irrigated Buffalograss. Xeriscaping was also used on city properties and the Hays made a point to provide signs or labels so that citizens could identify the various native drought-tolerant plants being used. A water reuse program has also been implemented in Hays. The city golf course and neighboring sports park are all irrigated with treated effluent.

These programs appear to have been very successful. In 1983, with a population of approximately 15,000, the city pumped 3,600 acre-feet of water. Today, with a population of 21,000, the city reports averaging just over 2,000 acre-feet of water per year, or roughly 92 gallons per person per day. Although the city has explored a number of other water sources and is working through the regulatory processes to convert irrigation water rights at the R9 Ranch in Edwards County, for delivery to Hays, they indicate it is important to not lose focus on their efficiency efforts, which have helped the city of Hays thrive for nearly a quarter-century.

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