## **Build Water Smart Now**

We felt reassured by the fall rains, but most storms missed lakes Travis and Buchanan. Now the empty clouds of drought hover and the water supply clock ticks on. Drought again is a regular headline story: reservoirs are 38% full, driest January on record, hill country creek and river flows dwindle, most downstream farmers will not receive water for an unprecedented third year in a row, once—a-week lawn watering mandated for customers relying on LCRA supplies, increasing water rates with less use, and a threatened lawsuit to provide more fresh water to the river and bays to protect habitat.

Contrast woeful water news with the following stories: Forbes magazine ranked Austin as the fastest growing city for the fourth year in a row, realtors stating that we don't have enough houses to meet buyer demand, another industry is moving their headquarters to Austin, and the region's job growth will continue to spur new home and apartment construction. This growth tracks with State Water Plan projections that the central Texas population will double to over 3 million people by 2040.

While we continue to reduce our water use, demands increase every day with new homes of suburbia appearing on the horizon. Each will require more water, with a considerable amount going to establish and maintain hundreds of acres of new turf grass each year. In this region, traditional home lawns typically consume 25 to 35% of the annual treated water. Projecting into the future, new residential yards could require up to 30,000 acre-feet per year by 2040—enough water to meet about 20 percent of Austin's current demand.

Some call for a moratorium on new construction to end water demand growth until supplies rebound. But what is the economic impact of that drastic measure, both now and long-term? Others recommend that cities pay homeowners to remove turf grass and replace with native plants. Las Vegas has had success with such a strategy and Austin has a small-scale program but the program costs will be high to significantly shrink demands.

One tool now available to manage lawn watering at no cost to existing water customers is "conservation landscaping." It relies on deep, high quality soils combined with native plants, trees, mulched areas, and most importantly limited turf to reduce outdoor water use by almost seventy-five percent. Water quality is improved as limited to no lawn chemicals are necessary. These landscapes, designed for our climate, improve neighborhood appearance and marketability. A recent Statesman article highlighted one woman's natural yard in Manchaca: its summer-time color, neighborhood attraction, and, above all, that it doesn't require water even in the hottest months.

Conservation landscaping would be paid for by those that build homes rather than existing rate payers. It would, of course, be passed along to the cost of the home purchase. However, in only a few years, the water savings compared to a traditional lawn covers this increased installation cost.

Conservation landscaping is one option in the "Low Impact Development" (LID) toolbox that includes rainwater harvesting, permeable pavements, rain gardens, and others that help new developments use stormwater beneficially to reduce homeowner's water bills and protect aquifer and lake levels. The Central Texas Land Water Sustainability Forum (CTLWSF), a committee composed of private and public water resource professionals actively engaged in the LID water discussion, underscores that LCRA has offered conservation landscaping incentives since 2006 as part of their Highland Lakes water quality protection program. The CTLWSF believes all central Texas governing bodies should do the same through immediate action so new development will reduce its water use. This could be done through emergency rules and concise criteria to clearly define incentives and methods to facilitate permitting and construction.

The benefits will be both immediate, for the ongoing drought, and long-lasting, as annual demands remain more stable. When the next drought returns, as is inevitable, we will not be asked to drastically change our water use as it will already be used wisely. By managing our water growth today we can reduce future water supply needs and rate increases.

We ask that you join with the CTLWSF and encourage cities and utilities to require all new homes and buildings to use conservation landscaping. What have we got to lose? Our water, our economic future?

Tom Hegemier is the Chair of the Central Texas Land Water Sustainability Forum and a senior consulting water resources engineer at RPS.

http://www.texaslid.org/single.php?page=chapters