Recreation, Park and Tourism Sciences Extension

Texas Coastal Watershed Program

tcwp.tamu.edu

WaterSmart Landscaping

Making a Difference

The Issue

Urban landscapes are *the* low-hanging fruit for reducing water use and curbing water pollution. At least half of municipal water supplies in Texas are consumed by residential and commercial landscapes. Almost all urban waterways in Texas are significantly impacted by runoff from these same landscapes. Incredibly, at least one million new lawns are expected in Houston alone between now and 2040. Improving the resource efficiency of landscapes in Texas will have a very high return on investment.

What we do

The Texas Coastal Watershed Program is demonstrating that **resource-efficient or WaterSmart landscapes** can be both functional and beautiful. WaterSmart landscapes use much less water, up to 75% or more versus conventional landscapes, and they use little or no pesticides or soluble fertilizers.

TCWP's WaterSmart Program provides workshops, seminars, print publications, and a trail-blazing website, www.watersmart.cc. The Watersmart program pioneered the use of on-the-ground demonstrations of resource-efficient landscapes in the Houston area, with more than a dozen publically accessible landscapes available for viewing and teaching.

- A standout project is the *Chrysalis Healing Garden* in the Texas Medical Center, a landscape that demonstrates the power of landscapes to heal both earth and spirit, and is emblematic of the work of the WaterSmart Program.
- The WaterSmart Program of the TCWP is the leading the way promoting the adoption of rain gardens, a unique kind of landscape that retains and cleans runoff from landscapes. Practitioners in the Houston area have 'learned by doing", building themselves TCWP's demonstration rain gardens. .
- The TCWP works with a wide variety of partners to promote resource-efficient landscapes at all levels, from large commercial to small residential. The TCWP is also very active in the policy arena, working with local governments to ensure that landscaping ordinances do not inadvertently inhibit resource efficient landscapes

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Our Impact

The WaterSmart Program's on-the-ground demonstrations throughout the Houston region have inspired thousands of citizens and the professional landscaping community to make large and small changes in their landscapes. Watersmart landscapes are now widely recognized in the greater Houston area as a very attractive alternative to conventional landscaping.

As a result of our work, the City of Houston and other smaller cities in the region have implemented ordinances enabling or clarifying how WaterSmart and other naturalistic landscapes can fit into the urban environment without becoming nuisances, thus removing a major barrier to the adoption of resource efficient landscapes.

Economic Impact

The Region H Water Plan (Houston and surrounding region) (regionhwater.org) projects the need for an additional 1.15 million acre-feet of water per year over the next 50 years. The cost to provide this additional water will be $12 billion, for a yearly per acre-ft cost of $160. New municipal supplies required will be about 800,000 acre-ft. At least half of that amount will go to residential and commercial landscaping. The cost for water for just *new* landscaping will be on the order of $130,000,000 per year.

At least half of the new demand for landscaping, or 200,000 acre-feet could easily be conserved using WaterSmart methods. At $160 per acre-foot, that would account for about 1.5 billion dollars of what will be required for new water supplies in this region over the next 50 years. This amount of conservation could be achieved with far less money than $160/acre-ft/ year. Values in the literature are around $60-$80/acre-foot for conservation.

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