

Texas Water Fact Sheet



s residents of the second most populous state in the country, Texans have a large and continually growing demand for water. According to the Texas Water Development Board, by 2060 the state's demand for water is likely to increase by 27 percent compared to its demand in 2000.



To help counteract this projected increasing in demand, the nearly 100 WaterSense partners in Texas are working hard to bring water-efficient products to market and to spread the word about the need for smart water use. All Texans can help preserve water for future generations by incorporating water efficiency into their everyday lives.

Water Sources Dwindle

The majority of water used in Texas (59 percent in 2003, according to the state's 2007 water plan) is supplied by groundwater. Texas is home to nine major aquifers that supply much of this groundwater, including the Ogallala-High Plains Aquifer that stretches beneath eight states. With increased development and the growth of irrigated agriculture, the water withdrawal rate from the aquifer has greatly increased. In some areas, water levels have declined more than 100 feet and continue to drop.

The Gulf Coast Aquifer, stretching from Florida to Mexico, supplies 54 Texas counties with all or part of their water supply. It is also in danger of being overdrawn; its supply is expected to be reduced 12 percent between 2010 and 2060.

Urbanization exacerbates this trend by increasing the demand for water and blocking the natural replenishment by paving over ground that previously was permeable to water, allowing it to percolate down to recharge the aquifer. So much water has been removed from the Gulf Coast Aquifer without being replenished that sinking of the ground—or subsidence—of as much as 13 feet deep has occurred in some parts of Harris and Galveston counties.

To counteract this trend, the counties, including the City of Houston, are gradually increasing water supplies from surface water sources. Surface water will cost customers two to four times the cost of groundwater, largely due to the infrastructure needed to make the switch; surface water generally requires more purification than groundwater and longer pipes for transportation.

In other areas of Texas, the majority of water used already comes from surface sources. The City of Dallas, for example, withdraws only one percent of its water from the ground. While this helps alleviate demand on aquifers, it can place a heavy burden on lakes, rivers, and streams, especially during droughts.

Growing Need for Savings

Municipal needs such as residential water use account for about 25 percent of Texas' water supply, but that share is expected to grow dramatically over the coming decades as population increases. The U.S. Census Bureau has predicted that Texas will increase its population by 56 percent between 2000 and 2030. Providing water for such substantial growth will require a combination of additional water supplies and increased conservation. By 2060, Texas' total supply of water from existing sources will be 18 percent smaller than it is today.

To meet growing water needs, Texas will need to develop 3.85 million acre-feet of additional water supplies by 2060. Regional water planning groups estimate the total cost of implementing strategies to keep water flowing will be approximately \$30.7 billion over the next 50 years.

The state has already taken actions to prepare for future shortages, recently approving the construction of 19 new reservoirs, as well as the launch of an advertising and awareness campaign to emphasize the importance of conservation.

How Texans Can Help

An April 2007 report by the National Wildlife Federation shows how reasonable water-saving measures could preserve more than 1 million acre-feet of water per year statewide—an amount equal to that supplied by all 16 new dams recommended in the 2007 State Water Plan.

There are many measures that Texans can take to contribute to saving water for future generations. By watering lawns and gardens more efficiently, Texas residents can potentially save more than 300 million gallons each day—twice the amount needed to supply Fort Worth's Tarrant County for a day.

If just 20 percent of households in Texas retrofit with water-efficient fixtures and appliances, they could save more than 50 billion gallons per year—enough to fill the new Dallas Cowboys stadium, the largest domed structure in the world, more than 60 times. And if just one in five house-

holds in Texas replaced their older, inefficient toilets with WaterSense labeled models, the savings would be about 19 billion gallons per year—enough water for every Texas resident to take a shower every day for more than six weeks!

San Antonio has demonstrated just how successful water efficiency can be. Thanks to a variety of programs, total water use in the region has remained fairly constant since the early 1980s, even though nearly 300,000 customers were added to the city's water utility. San Antonio reported that for every \$1 spent on conservation, the city avoided \$7 in new water supply costs.

The City of Dallas, in addition to print, radio, and outdoor advertising about WaterSense and water efficiency, offers vouchers and rebates on highefficiency toilets and provides free installation of faucets and showerheads that save water. The city has already encouraged the purchase of more than 15,000 WaterSense labeled toilets, through the New Throne for Your Home program.

Fix a Leak Week in Dallas

EPA estimates that easy-to-fix leaks can waste more than 1 trillion gallons of water across the country each year—that's more than enough to supply every home in Texas with its annual water needs! Household leaks occurring in Texas alone could waste more than 90 billion gallons annually.

The City of Dallas' Minor Plumbing Repair Program fixes minor plumbing problems and fixtures for qualified low-income residents and provides WaterSense labeled products to the customers receiving repairs. The program is in such high demand that the city had a backlog of more than 100 service requests. As part of the WaterSense Fix a Leak Week, March 15 to 21, 2010, the City of Dallas and local groups organized the "Great Dallas Fix a Leak Roundup" to complete all the projects on the program's wait list. Dallas anticipates saving more than 2 million gallons of water per year through this effort, and it showed consumers how finding and fixing leaks can save more than 10,000 gallons per year per household.

