

Water Saving Tips

Facts

Did you know that more plants die from over-watering than from under-watering? That irrigation can be as much as 80% of a family's water consumption during the spring and summer months? And more than 40% of the City's total water demand is used for irrigation and outdoor activities?

The 2011 Statewide Drought showed how vulnerable water supplies are to extreme events. Establishing water conserving habits impact water demand and delivery today, but more importantly today's reductions in water use impact long range water supply infrastructure improvement planning.

Recommended Outdoor Conservation Practices

- Walk across the lawn, if you leave footprints, it's time to water.
- "Cycle and soak" – Water in two to three short cycles rather than in a single long period of time is more efficient and beneficial and allows the water to soak deeply into the ground between the cycles. For example, Water for four minutes, wait at least 60 minutes to allow soil to absorb the water. Then water another four minutes, and then wait again. If necessary, water another four minutes. Chances are you will see a significant improvement in your lawn's beauty and health.
- Position sprinklers so they're not water driveways and walkways.
- Follow the City's Water Conservation Plan and water only when needed on your two specific days.
- Hand-water with a hose where possible. Homeowners who water with a handheld hose routinely use one-third less water outdoors than those using an automatic sprinkler system.
- Water lawns when wind speed is low to reduce over spray.
- When the kids want to cool off, use the sprinkler in an area where your lawn needs it the most.

Automatic Irrigation System Operation

There are many ways to reduce the amount of water that goes through your irrigation system.

- Evaluate your irrigation system for water use efficiency – turn on the system and check for broken and misaligned heads.
- Inspect your system every month for leaks and spray head that need adjustment.
- Adjust your irrigation controller (timer) run time for seasonal changes in weather once a month. Making a monthly change to irrigation operation times can save a significant amount of water and money.
- Operate irrigation systems manually – automated irrigation systems can use more water than the plants actually need. Manual operation regulates efficient water use by watering only when the plants need it. For example, grass in the shade may need water only once per week; grass in the sun may need water only twice per week.
- Program your irrigation timer to water in two or three short cycles rather than a single long period of time. Allow time between the short cycles for the soil to absorb the water. For example, if you normally water for 15 minutes, this: water for four minutes, wait 60 minutes or more for it to soak in, then water another four minutes, then wait again, then, if necessary water another four minutes. Now you have watered for a total of 12 minutes rather than 15. Even with the reduced total watering time, chances are you will see a significant improvement in lawn health and appearance.
- Make sure tall grass, ground covers, shrubs, ornaments, or fixtures are not blocking or deflecting the water spraying from the sprinkler heads.

- Install a rain switch which is a simple rain sensor. When it detects measurable rainfall, it turns off automatic irrigation system. Engage your community – connect to news, events and information you care about.
- Replace old sprinkler heads as new models are much more water efficient.
- Switch to drip irrigation for watering shrubs. Drip irrigation is about 20% more water efficient than sprinklers.

Landscaping Ideas

Rainwater Harvesting

Rainwater harvesting is a technology used for collecting and storing rainwater from rooftops, the land surface or rock catchments using simple techniques such as jars and pots as well as more complex techniques such as underground check dams. The techniques usually found in Asia and Africa arise from practices employed by ancient civilizations within these regions and still serve as a major source of drinking water supply in rural areas. Commonly used systems are constructed of three principal components; namely, the catchment area, the collection device, and the conveyance system.

You can use rainwater harvesting for irrigation and save money on water costs.

Xeriscape

Xeriscape landscaping, quality landscaping that conserves water and protects the environment, is the most exciting concept to hit the landscape industry in decades. The term Xeriscape was coined in Denver, Colorado in 1978. Whether called Xeriscape, water-wise or water-smart landscaping, landscape and water industry professionals throughout the nation have embraced landscape water conservation through education.

Texas has more than 20 educational projects currently active. Demonstration gardens and tours, seminars, television programs and design contests are just a few of the methods used to make the Xeriscape concept familiar throughout Texas and the nation.

In an attempt to reduce the excessive water use, the Texas Agricultural Extension Service is educating Texans in Xeriscape landscaping. This concept is a first-of-a-kind, comprehensive approach to landscaping for water conservation. Traditional landscapes may incorporate one or two principals of water conservation, but they do not utilize the entire concept to reduce landscape water use effectively.

Xeriscape landscaping incorporates seven basic principals which lead to saving water:

- Planning and design
- Soil analysis
- Practical turf areas
- Appropriate plant selection
- Efficient irrigation
- Use of mulches
- Appropriate maintenance

By incorporating these seven principles, you can help preserve our most precious natural resource-water. Xeriscape landscapes need not be cactus and rock gardens. They can be green, cool landscapes full of beautiful

plants maintained with water-efficient practices. The same green Texas-style landscape which we are accustomed to can be achieved and still conserve water.

Texas A&M AgriLife Extension

Texas A&M AgriLife Extension has a wealth of information available for use to design and plan home gardens and landscapes.

Water Efficient Plant Selection

Water efficient plants are plants that either require little water to survive or are extremely tolerant of dry, desert-like conditions.

Refer to the Texas A&M AgriLife Extension's Earth-Kind Landscape Program before choosing water efficient plant materials suitable for the Rio Grande Valley area.

Household Tips

These are lots of small things the whole family can do around the house to conserve water.

In The Kitchen

- When washing dishes by hand, use a sink full of soapy water. Don't let the water run
- Scrape food from your plate instead of rinsing. Newer dishwashers and detergents get dishes just as clean without the need to pre-rinse.
- Chill drinking water in the refrigerator instead of running the faucet until the water is cold
- Don't use running water to thaw meat or other frozen foods. Defrost food overnight in the refrigerator or use the defrost setting on your microwave
- Wash vegetables and fruits in a bowl using a vegetable brush instead of letting the water run

Every Day Activities

- Turn off the water while you brush your teeth and save four gallons a minute. That's 200 gallons a week for a family of four
- If you turn off water while you shampoo and condition your hair, you can save more than 50 gallons a week.

Water Efficient Appliances

Look for the WaterSense_ Label. Products bearing the WaterSense label are products that are backed by third party testing and certified to meet the EPA's specification for water efficiency and performance. WaterSense products include:

- Toilets
- Bathroom sink faucets
- Urinals
- New home materials
- Showerheads

Water Efficient Tips

- Replacing older toilets with low-flow models can save up to 50% of water. Fixing toilet leaks. Plumbing leaks as a whole account for 14% of water consumed in the home, according to the AWWA.

- Installing water-saving showerheads that use two and a half gallons per minute or less can cut your shower water usage by two thirds.
- If you're thinking about buying a new washer, make sure it's a water-saving, WaterSense model
- Fix leaky faucets. A steady faucet drip can waste up to 20 gallons a day.

Water Leaks

Find your water meter. The first place to detect a leak is at the water meter outside. You can check yourself or call Utilities at 956-388-8212 if you think it is leaking. There may be two meters inside your water meter box. Yours is usually the one closest to your house (the other is your neighbor's).

Not sure which is which? Turn on a faucet at your house. When you see the numbers on the dial moving, you've found your meter. You can also match the meter number on your bill to the number on top of the cap covering the meter dial.

Examine Your Dial

Some meters have a leak detector besides the hand of the dial. If there's even a small amount of water going through the meter, the leak detector will turn. If there's no leak detector, you should see a sweep hand that you can watch for movement. Make sure all faucets are turned off inside your home, and no water is being used, then check the leak detector on your water meter for movement.

If it doesn't turn, you've got a leak. To find the source of the leak, check your toilet first, and then examine the pipes in and around the house. Damp spots underneath pipes may help you pinpoint the source of the leak. Outside, look for soggy areas around your foundation and irrigation system. Is it your toilet?

Toilets with leaky flappers can cost you money, and waste a substantial amount of water. To determine if you have a leaky flapper, drop special dye tablets or a little food coloring into the toilet tank. If the color appears in the toilet bowl, you probably have a leaking flapper.

Potential Savings

Even small leaks and drips add up fast. For an average Texas home using 9,000 gallons a month, a dripping faucet can cost over \$10 a month. If that leak worsens to a dribbling, steady stream, the cost rises to between \$50 and \$100 each month in wasted water. Have a worn out or defective toilet flapper that keeps your toilet constantly running? Expect to shell out another \$50 to \$100.

Your costs skyrocket when you're wasting hot water. Water, heating and wastewater costs for a small steady stream of hot water, just a quarter of a gallon per minute, can cost over \$200 a month. Keep putting off the repair, and you'll waste \$2,400 in a year.

Leak Repair

If you have a serious leak, we recommend you contact a plumber. However, some leaks can be repaired by the do-it-yourselfer. Local home improvement stores can assist repair instruction; some offer plumbing repair workshops.