**SUMMER WATER CONSERVATION**

In the summer, outdoor water use can account for 50-80 percent of home water use.

Texans must use their precious water resources more efficiently, or we will have longer, more frequent water shortages, especially during droughts and hot Texas summers. Much of the water used outdoors is wasted through inefficient landscape watering practices. By reducing the amount of water we waste, we will save money and protect the quality of life for future Texans.

**TAKE THE RIGHT STEPS FOR WATER-WISE CONSERVATION:**

Many Texas water utilities charge higher rates during the summer, or increase rates in increments based on use. Reducing your outdoor water use by following these steps can produce substantial savings in your water bill:

- Determine how much water your landscape needs to stay healthy
- Use water-efficient landscape practices such as proper mowing, mulching, and moderate fertilizing
- Design a water-efficient landscape by planting drought-tolerant grass and choosing plants that are native or well adapted to the climate conditions in your area

**GET THE DIRT ON DIRT:**

Besides rainfall, soil is an important ingredient in determining the suitability of an area for particular plants. Some soils have high clay content and drain slowly but retain water; clay soils take longer to absorb water but keep it longer. Other soils are sandy, draining well and absorbing water quickly, but not holding it as clay soils. Plants in sandy soils need less water more often. Loam soil has characteristics in between those of clay and sand. Landscapes built on loam need moderate amounts of water, and loam retains moderate amounts. Water can be applied less often to clay and loam soils than to sandy soils, but it should be applied more slowly to prevent runoff.

**Watering Guide**

Did you know that by 2016, the population in Texas is expected to double and existing water supplies to decrease by nearly 20 percent. If we cultivate good watering habits just as we cultivate our gardens, we can use water to sustain our plants and promote healthy growth while conserving supplies for future use. The key to watering the Texas landscape wisely is:

- Choose plants adaptive to conditions in your area of the state
- Measure the amount of water needed to irrigate your landscape
- Use the right tools and methods to deliver the optimal amount

You don’t have to give up having an aesthetically pleasing lawn to conserve water. It is important for homeowners who want to enjoy lawns but are concerned about conservation to realize lawns don’t waste water, people do! Lawns actually benefit the environment by harvesting water to recharge ground-water resources. Moreover, turfgrass entraps organic pollutants, protects against soil erosion, reduces climatic temperature, and protects structures from fire by making a noncombustible green zone. Strategic planning for lawns and landscaping requires watering practices and the right plants to make the difference between waste and conservation. Resources are available to help you choose the best plants for your region. The Texas AgriLife Extension Service has offices throughout the state and specialists who know about each region. For more information, visit them online at http://agrilifeextension.tamu.edu or stop by your local nursery and ask for gardening or composting advice.
Soils can be improved by topdressing the entire lawn with about a half inch of compost per year after aeration. If you are establishing a new lawn, consider blending topsoil with about 25 percent compost. Soil testing offered through the Texas AgriLife Extension Service can help determine the best product for your lawn. Soil test kits may also be found at many local nurseries.

A soil test is the number one key to establishing and maintaining all landscape plant materials to ensure the soil has adequate amounts of nutrients.

**SPREAD THE WORD - MULCH:**
The use of mulch—a protective ground cover that reduces evaporation of soil moisture, helps maintain uniform soil temperatures, reduces soil erosion, controls weeds, and, in the case of organic mulches, enriches the soil—is vital in Texas. Removing weeds and applying mulch help conserve water directing it to the plants you want to protect.

Three to four inches of mulch should be maintained around plants and trees. Mulch around trees should be applied in a V-shape, building in thickness away from the bark of the tree so that the moisture does not cause decay at the base of the trunk. Some examples of organic mulches include pine bark, newspaper, compost, sawdust, and straw. The best mulch for your area is that created from native sources.

**DESIGN A WATER-WISE LANDSCAPE**
Plant water-efficient, well-adapted, and/or native shrubs and trees. Bermuda, buffalo, and zoysia are drought-tolerant grasses. Choose plants that are drought tolerant (or at least have low water requirements) and heat tolerant and can survive the minimum winter temperatures in your local area. Native plants are also more resistant to diseases and pests.

Put drought-tolerant groundwater instead of grass in areas that are narrow, small, sloping, odd-shaped, or close to pavement. Limit turf areas to those needed for practical uses.

Contact your County AgriLife Extension Agent, your water-wise landscape professional, or your City or water supplier for recommendations of water-efficient plants that are adapted to your areas of the state and additional information on efficient landscape water use.

**WATER-WISE LANDSCAPING**
Learning to landscape in a way water-wise way not only saves the environment, it can save you money as well.

**HOW OFTEN SHOULD YOU WATER?**
Only water when needed. One inch of water, once a week, should be sufficient to keep most Texas lawns healthy.

Proper watering will help grass and shrubs develop deep roots (it is especially important to start this during the spring when root growth is at its peak.)

Over-watered turf will have a short root system and will not be drought tolerant. By slowly adjusting to successively longer periods between waterings, the turf can grow deeper roots and become drought tolerant.

**WHAT TIME OF DAY SHOULD YOU WATER?**
Early morning or late evening during hot summer months. Otherwise, the water can simply evaporate between the sprinkler and grass.

**WHAT SHOULD I WATER?**
Only your plants. Don’t water the sidewalks and the driveways. Use a broom to sweep debris away.

**HOW CAN I USE RAINWATER?**
Harvest it. Funnel the water from your gutters into a barrel or cistern, building in thickness away from the bark of the tree so that the moisture does not cause decay at the base of the trunk. Some examples of organic mulches include pine bark, newspaper, compost, sawdust, and straw. The best mulch for your area is that created from native sources.

**WATER-WISE LANDSCAPE MAINTENANCE**
When to mow?
Only when the grass is dry. And don’t cut more than one-third of its length at one time. Taller grass holds moisture better, encourages deeper root growth, and is less susceptible to browning. Keep grass three inches tall during the summer (taller than three inches stresses the grass.)

What to do with my grass clippings?
Mulch or compost clippings. Grass clippings break down quickly and provide valuable nutrients.

How can I conserve soil moisture?
Use lots of mulch. It will make your shrubs and young trees more tolerant to the scorching Texas heat.

One to three inches of mulch:
- retains moisture
- reduces runoff
- helps moderate soil temperatures
- aids in root development
- reduces erosion
- slows weed growth
- prevents soil compaction
- makes your landscape beautiful

Place mulch directly on the soil or weed barrier fabric that can “breathe.” Avoid using sheet plastic in planting areas.

Apply a thin layer of compost to the lawn. It functions like mulch, increases organic content, and protects grass roots.

**WHAT SHOULD I KNOW ABOUT FERTILIZING?**
Apply fertilizer in the spring and fall. It helps develop good root systems to keep your grass m ore drought tolerant.

Don’t overfertilize because it can run off and pollute local waterways. Too much fertilizer will also increase the grass’s need for water. Contact your County AgriLife Extension Service or local nursery professional for a soil kit and recommendations for fertilizer.

**HOW ELSE CAN I IMPROVE MY LANDSCAPE?**
Improve the soil. If the soil is rocky, sandy, shallow, heavy clay, or has little organic matter, it can be improved by adding several inches of high-quality loam soil and two to three inches of organic matter such as mulch or compost.

High quality soil helps reduce irrigation needs by retaining water better when added to sandy and clay soils. Unless the soil is damaged or depleted, native and well-adapted plants may not require imported soil. Aerate the lawn once a year. Weed the lawn and garden as needed. Weeds rob plants of valuable water.

**HOW ELSE CAN I MINIMIZE WATER USE?**
Don’t forget your pools, spas, and fountains.
- Cover pools and spas when not in use to lessen evaporation
- Backwash your filter only as necessary
- Turn off decorative fountains on windy days and during drought

**WATER-WISE IRRIGATION EQUIPMENT**
**WHAT IS THE MOST EFFICIENT IRRIGATION SYSTEM FOR NONTURF AREAS?**
Drip irrigation. It is the most efficient method of watering bedded plants, trees, or shrubs. Soaker hoses are an easy and inexpensive alternative to drip irrigation.

**WHAT TYPE OF SPRINKLER SHOULD I USE FOR THE LAWN?**
One that produces large drops of water close to the ground. Don’t use a sprinkler that produces a mist or fine spray. Use a timer so you don’t forget to turn the sprinkler off.

**HOW SHOULD I MANAGE MY AUTOMATIC SPRINKLER SYSTEM FOR WATER EFFICIENCY?**
Adjust the settings as needed. Don’t just set it in the spring and leave it on all season. Automatic sprinkler systems provide an efficient method of watering awns. Their controllers use timers to turn off the system when a measured amount of water is used, and rain shut-off devices prevent watering in the rain.

Not all plants have the same watering requirements. Reduce the run time of sprinklers on shrubs, which may not need as much water as grass. Shady areas may not need as much water either. Contact a professional landscape irrigation specialist for a maintenance check.

**WHAT MAINTENANCE IS REQUIRED FOR MY AUTOMATIC SPRINKLER SYSTEM?**
Check sprinkler heads regularly. Remove dirt or debris that may be clogging the nozzle and make sure the heads are working at the proper pressure and not leaking. RepeaT or replace broken heads, valves, seals, and pipes. Once a month run the sprinklers for a short time on each cycle while you are at home to make sure they are working properly.

**WHAT FEATURES SHOULD I LOOK FOR IN AN AUTOMATIC SPRINKLER SYSTEM?**
Options that will help you save water. The controller of new sprinkler systems should have these features:
- A multiple scheduling option
- A rain shut-off device
- A water budget feature (which allows percentage adjustments without having to reprogram)
- Test functions
The population in Texas continues to grow and existing water supplies will decrease. If we cultivate good watering habits just as we cultivate our gardens, we can use water to sustain our plants and promote healthy growth while conserving supplies for future use.