Outdoor Water Conservation Tips

The DWRe has focused their water conservation efforts primarily on residential water use with an emphasis on outdoor landscapes because this category has the greatest potential for water conservation. The amount of water that should be applied to plants and a lawn is determined by the evapotranspiration (Et) for a given region and plant types. Et is defined as the amount of water a plant and its environment loses from evaporation and transpiration. The factors that affect Et are temperature, wind, humidity, solar radiation, and precipitation. The DWRe has found that Utahns are applying about 30% more water on our landscapes than the Et requirement. **The most important factor in watering more efficiently is utilizing water wise landscape principles. This does not mean you have to have a desert landscape! Water wise landscape principles incorporate thoughtful landscape concepts with appropriate plant selection, maintenance and irrigation.**

SIMPLE STEPS FOR A HEALTHIER LAWN AND TO SAVE WATER:

- Raise the height of your lawn mower to 3”.
- Add more days between irrigations.
- Don’t water during the hottest part of the day.
- Check and repair any sprinkler heads that are leaking or are tilting to the side.
- When watering, break up the zone times by “cycling” your sprinkler system.
- Add a pressure reducer to your sprinkler system.
- Add a “Smart Controller Timer” to your sprinkler system

One thought:
If you are only “using” your lawn areas of your landscape when you walk over it with the mower, you could probably put other plantings there that use less water.
For example,

1) Grass Park Strips use a lot of water but get little use. Consider replacing it with water wise plants.
2) Consider adding more enjoyable patio space to reduce grass areas.

TIPS FOR A WATER-WISE LANDSCAPE

- **Analyze Your Soil**. Using a soil probe or shovel, analyze the type of soil you have in your landscape. Determining your soil type will help you make informed decisions as to appropriate plants for your yard.
- **Plan It Before You Plant It**. Be sure you are familiar with your landscape’s many attributes. For instance, note which areas get more or less shade, which areas have reflected heat from the patio or house, and any other features you may encounter.
- **Use Grass Wisely**. Take into consideration the different activities that will go on in your yard. A good rule of thumb is *"If the only time you walk on it is to mow it, you probably don’t need it"*.
- **Water Wisely**. Group plants according to their water needs. This will help you avoid over-watering some plants and under-watering others. Putting shrubs and perennials on separate sprinkler zones from your lawn will help avoid severe damage to your plants due to excess water. Use drip systems to water bushes, perennial flower and garden areas, where appropriate.

- **Just Mulch It**. Using mulches to reduce evaporation from the soil also helps prevent weeds from growing in areas where water is needed for ornamental plants.
- **Keep It Up**. While using these principles helps reduce maintenance time, it does not completely eliminate it. Use of good preventive maintenance will reduce the need for costly and time-consuming maintenance later on.
- **Use Appropriate Plants**. Different plants have different requirements for optimum health. To use water more efficiently, choose plants that do not require much water, and are adapted to our arid climate.

Did you know that every time you eliminate one irrigation of a 1/4 acre lot - you can save about 3,000 gallons of water! In some areas that’s a savings of about $5.00 every time you water!

VISIT A LOCAL WATER-WISE DEMONSTRATION GARDEN:

There are many water-wise demonstration gardens located throughout the state. In addition to seeing how beautiful and maintenance free these types of landscapes can be, most of the sponsoring agencies offer free classes on how to conserve water indoors and outdoors. Also, Utah State University Extension offers classes at ***www.extension.usu.edu.***

- **Central Utah Gardens**
  355 West University Parkway
  Orem, UT 84057
- **The Garden**
  1851 Dixie Drive at Tonaquint Park
  St. George, UT 84771
- **The Greater Avenues Water Conservation Demonstration Garden**
  11th Avenue Terrace Hills Drive
  Salt Lake City, UT 84115
- **Jordan Valley Water Conservation Garden Park**
  8215 South 1300 West
  West Jordan, Utah 84088
- **Sego Lily Gardens**
  1472 East Sego Lily Drive (10200 South)
  Sandy, UT 84070
- **Utah Botanical Center Home**
  725 Sego Lily Drive
  Kaysville, UT 84037
- **Weber Basin's Water Conservation Learning Garden**
  2837 East Highway 193
  Layton, UT 84040

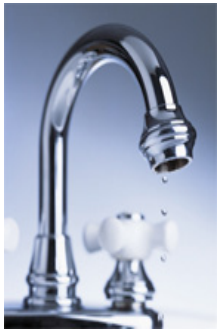
LAUNDRY:

Washing your clothes is a necessity. However, keep in mind that laundry uses 22% of all water used in your home. In order to maximize the efficiency of your laundry, only do full loads!

LAUNDRY CONSERVATION TIPS:

- Ask yourself, "Does this really need washing?"
- Update old washing machines with a newer Energy Star ® water-efficient machine, they use approximately 20 gallons less per load than a typical older models and save energy as well. Don't forget to check with Questar® Gas about rebates.

LEAKS:



You may not see them, but leaks can be a significant portion of your indoor water use within your home. On average, leaks make up about 14% of all indoor water use. If you have leaks, fixing them is a great way to save water, indoors!

How Much Water Does It Take?	
Activity	Gallons
Brush Teeth	1.0 – 2.5
Flush Toilet	1.28 – 7.0
Automatic Dishwasher	15 – 60
Wash Car	100
Bath	15 – 70
Washing Machine	30
Shower (per minute)	2.5 – 6.0
Leaking Faucet (per day)	10
1 day use (indoor per person)	60
Watering Lawn (1/4 acre lot)	3,000

LEAK DETECTION TIPS:

- Test to see if you have any leaks in your house by performing these tasks:
  1. Turn off all water-using devices.
  2. Find your water meter (ask your water provider), remove the lid to see the dial.
  3. If the dial is moving then you either have a leak or a water-using device is still active.
  4. If it is a leak, fix the leak.
  5. If you can't find the leak contact a professional to perform a more detailed investigation.
- Check for leaks in the most common places, toilets (flappers get old and wear out), faucets (cartridges need periodic replacement) and under sinks (water supply lines sometimes leak).

Indoor Water Conservation Tips

KITCHEN:

The average household uses about 11% of its total indoor water in the kitchen. Water is used in the kitchen in a variety of ways: washing dishes (in a dishwasher and by hand), and for general cooking and cleaning purposes. By carefully planning your activities, you can reduce water used in the kitchen significantly!

Children can learn about using water wisely at ***www.watereducation.utah.gov***

KITCHEN CONSERVATION TIPS:

- Make sure when you wash dishes you are doing full loads, this saves energy and water.
- Keep a gallon of water in the refrigerator for drinking water.
- Identify activities you could perform without the water running, for instance, filling the sink with a little bit of water to wash vegetables is much more efficient than letting the faucet run.
- Consider buying a new Energy Star ® dishwasher that uses less water and energy than older models.

BATHROOM:

You use more water in the bathroom than in all of the other rooms combined! This is where you shower, shave, wash hands, brush teeth and flush the toilet. There are many things you can do to save water in the bathroom.

BATHROOM CONSERVATION TIPS:

- Turn the water off while you brush your teeth.
- Fill the basin to rinse your razor when you shave.
- Take shorter showers, this saves water and energy.
- Install faucet aerators, they can reduce output from 2.5 gallons per minute (gpm) to 1.5 gpm.
- Install Low-Flow showerheads, they can reduce output from 5 gpm to 2.5 gpm and also saves energy.
- Upgrade your existing toilet to an Ultra-Low Flush Watersense® toilet, reducing water use down to 1.28 gallons per flush (gpf), older models use 3.5 gpf.
- Check with your local water provider about rebates.

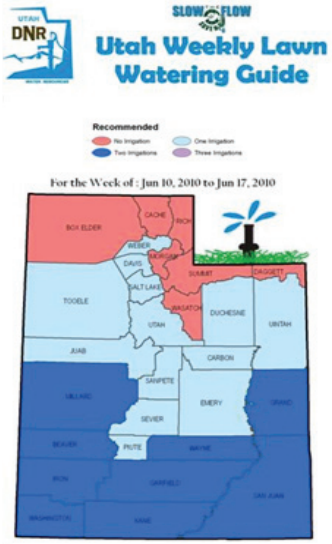
FREE WATER CHECKS:

A Water Check analyzes the performance of your automated sprinkler system. It is offered for free June through August. A trained representative will come to your house and will test the soil type, grass root depth, sprinkler distribution uniformity and water pressure. They will provide a customized watering schedule and tips on how to improve your sprinkler system. The free Water Check takes about an hour and will save you a lot of water over the watering season. The Water Check program is sponsored by the Jordan Valley Water Conservancy District, Central Utah Water Conservancy District, Washington County Water Conservancy District, Sandy City, Murray City, Salt Lake City, Metropolitan Water District of Salt Lake and Sandy, Central Iron County Water Conservancy District, USU Extension and the DWRe.

You can set an appointment for your free water check by signing up online at **www.slowtheflow.org/watercheck** or by calling **1-877-728-3420**

LAWN WATERING GUIDE:

The DWRe has created a water conservation webpage that helps citizens save water It also serves as valuable resources for water agencies. One of the newest DWRe website features is a weekly lawn watering guide that assists residents in determining how many times they need to water their landscapes. The guide is updated every Thursday during the growing season and is based on a statewide network of weather stations that monitor ET. The DWRe presents the information in a user friendly lawn watering guide that is separated by counties. Using the color code water users can see if they need to water their lawn once, twice, three times or not at all during the week. This weekly guide is available on ***www.conservewater.utah.gov*** as well as on DWRe.s Facebook® page and Twitter® feeds.



The Lawn Watering Guide featured on the web page informs residents throughout the state how many times they should water in a given week.

WATER-WISE PLANT TAGS:

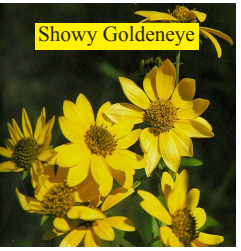
The DWRe, in cooperation with USU Extension, Bureau of Reclamation, and various water providers, have developed a water-wise plant tagging program to promote the use of native and other well-adapted plants in Utah landscapes. Look for the tagged plants the next time you shop for plants. These water-wise plants will help you save water. Remember to group plants together with similar water needs and adjust sprinklers to provide only the required amount of water for those plants. You can check out these plants before you buy them at ***www. waterwiseplants.utah.gov.***

Look for the Yellow Tags!

They indicate Water Wise Plants!

www.waterwiseplants.utah.gov

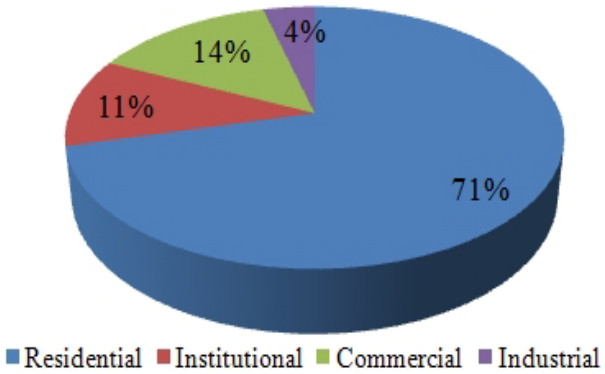
Water-Wise Plant Tag identifies a plant that is either native to Utah or well adapted to Utah's climate.



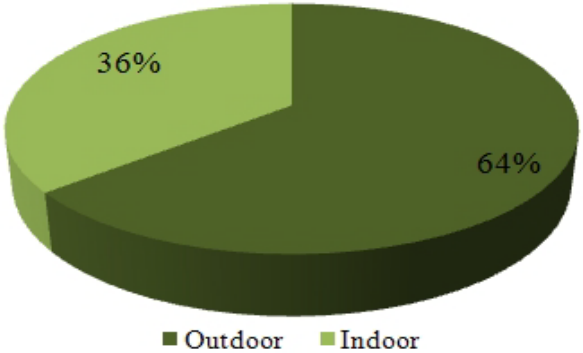
How do We Use Water in Utah?

Utahn's are becoming more aware of the need to conserve water. Even with this awareness, Utah continues to be one of the top water users in the nation. In the first chart, water use is shown by category. As the chart shows, we use most of our water in and around our homes (about 185 gpcd). The next chart shows the residential water use divided between indoors and outdoors. Most of our water use, nearly (2/3), is used to irrigate our landscapes. This is mainly due to climactic conditions and Utahns' water use habits. Therefore, the most potential Utah has to reduce overall water use is in efficient outdoor water use habits. Of course, if the 25% reduction goal is to be reached, indoor water use will also have to be reduced. The last chart shows a breakdown of our indoor water use. Utah's indoor water use (about 60 gpcd) is approximately the same as the rest of the nation. As can be seen, the majority of our indoor water use occurs in the bathroom.

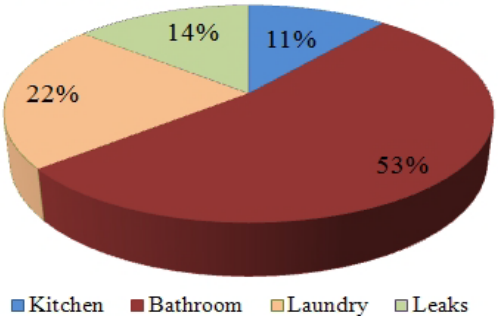
Utah's Total Public Water Use (260 gpcd)



Utah's Residential Water Use (185 gpcd)



Utah's Residential Indoor Water Use (60 gpcd)

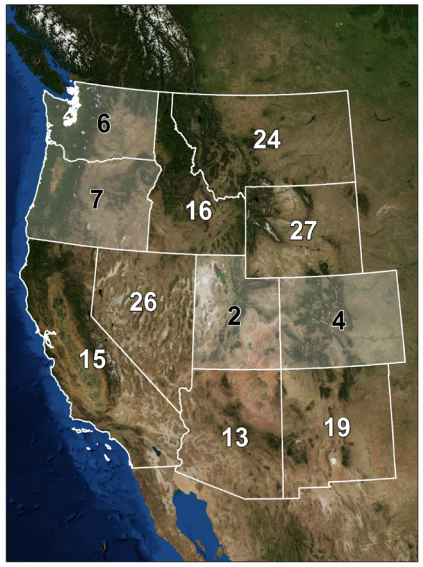


Highest Water Users in the Nation	
State	**gpcd (2005)**
Nevada	280
Utah	**260**
Hawaii	205
Arizonia	197
California	193

Source: USGS 2005 Estimated Use of Water in the United States of public water systems.

Why We Need to Conserve Water?

Utah is one of the three fastest growing states in the nation. From 2000 to 2010, Utah's population increased by more than 500,000 people to about 2.8 million. At this rate, Utah is adding another city about the size of Salt Lake City every three years. According to the Governor's Office of Planning and Budget, Utah's rapid growth will continue, with the population more than doubling to 6.8 million by 2060. Because of this rapid growth there will be an increase in demand of all natural resources, especially water. The Utah Division of Water Resources (DWRe) plans to meet future water demands by using several strategies. The most cost effective of these strategies is water conservation. The state has a goal to reduce per capita water use by at least 25% by the year 2025. This would reduce our per person water use (gpcd) to a more sustainable 220 gpcd. It would save over 500,000 acre-feet (ac-ft) every year. That is almost enough water to fill Jordanelle and Deer Creek reservoirs!



Note: Population growth ranking are estimated from 2000-2010.

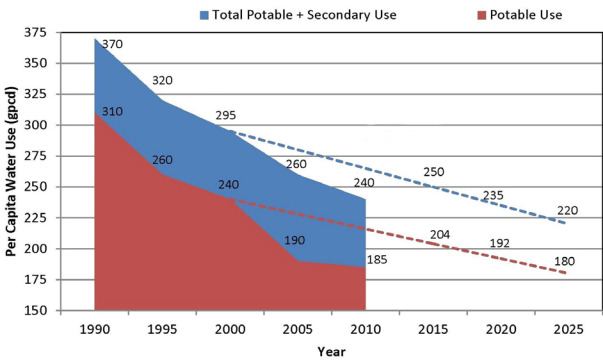
Utah's Water Conservation Goal: 25% reduction in Municipal & Industrial water usage by 2025 to a more sustainable 220 gpcd

Reasons to Conserve Water

- **Limited water supply in Utah.**
- **Help meet future water demands.**
- **Postpone large water projects from having to be constructed.**
- **Delay expensive capital investments to upgrade or expand existing water facilities.**
- **Improve water levels in reservoirs.**
- **Conserve energy as less water needs to be treated, pumped and distributed to the consumer.**
- **Reduce sewage flows, delaying the need for more wastewater treatment facilities.**
- **Lessen the leaching of chemicals and sediments into streams and aquifers.**
- **A more sustainable way of life, balancing human needs with that of the natural environment.**

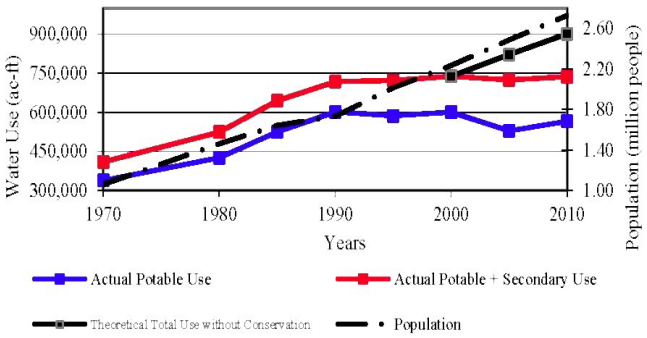
Utah's Water Conservation Progress Thus Far

Utahns are on their way to reducing their water use by at least 25 percent. The DWRe conducts a statewide water use study every 5 years. The latest 2010 study, indicates that water use statewide is at 240 gpcd. This is about a 18 percent reduction from the year 2000 (295 gpcd) water use. The data shows that the state is ahead of the projected reduction trend line.



However, a lot of work still need to be done in order to reach our statewide goal! Prior to 1990, water use steadily increased with the state's population. However, efforts by the DWRe, the state's major public water suppliers, the creation of the "Slow the Flow: Save H2O" campaign and the push for Utah residents to conserve water, total M&I water use no longer increases as the population grows. If Utah's residents still consumed the same amount of water as they did in 2000, public water system deliveries would be about 162,000 ac-ft/yr more than the actual current amount of about 738,000 ac-ft/yr. This amount of water is greater than the capacity of Pineview Reservoir, (110,000 ac-ft) near Ogden. Utahns have responded well to the water conservation efforts. However, more needs to be done to reach the State's 25% reduction goal!

Total Utah Public Community System Water Use



SLOW THE FLOW SAVE H2O

Please try and do your part: "Slow the Flow: Save H_2O."

Remember "If we each save a little we all save a lot!"

For more information on water conservation visit these water conservation websites:

www.water.utah.gov
www.conservewater.utah.gov
www.slowtheflow.org
www.waterwiseplants.utah.gov
www.watereducation.utah.gov

Utah Division of Water Resources
1594 West North Temple
Salt Lake City, Utah 84116
Phone: 801-538-7230
Fax: 801-538-7279

Your Guide to Water Conservation in Utah

www.SlowTheFlow.org
www.ConserveWater.utah.gov