### **Waterwise 101**

*NOTE: The information below can be used to help answer questions that may crop up on social media etc. Feel free to customize for your situation and reach out to Kim Wells if you need something more specific. Email* *kimwells@utah.gov* *or call or text 801-803-0336*

#### **Water use/abuse at institutional facilities**

* We all need to do our part to #SlowTheFlow and make changes where we can and where we have control. If you have changes you'd like to see made, contact your policymakers and let them know your concerns and provide waterwise recommendations and solutions.
* Large properties like parks, schools, government buildings, etc. can take many hours to water, making it impossible to water only during nighttime hours. They also water during the day to maintain water pressure at night when residential watering takes place.
* We all need to do our part to save water and focus on what we can do to #SlowTheFlow. For instance, we can turn the water off while shaving, soaping up, brushing teeth or washing veggies. Pointing fingers does nothing to save water. If you see water waste, report it to the [Hall of Fame or Shame](http://water.utah.gov/FameorShame) and we'll forward it to the local water provider for follow-up. (Reports are not shared publicly and are used to help educate and reduce water use.)
* It typically takes several weeks to test systems because of the size of the properties and staffing limitations, so people may see sprinklers running before the start of irrigation season in parks, government buildings, schools, etc.
* Sometimes early season watering takes place to water in fertilizer, test the system or establish new sod.
* It can take 18 hours for a large property like a park to cycle through all the zones, so watering during the day is unavoidable.
* Institutional properties often water during the day to help maintain water pressure at night when residents are watering.
* Smart controllers are available for institutional properties, but they are expensive.
* Large institutional properties are different from a residential backyard. It can take several days to manually turn sprinklers on and off, which makes it impractical to turn them off for a brief rainstorm.
* There is definitely room for improvement. Many institutions are switching to more advanced water timers that allow for control via WIFI connection. However, these are expensive and take time to implement.

### **Secondary Meters**

* Secondary meters are being installed and have helped reduce water use by 35-40% simply by raising awareness of how much water is being used. If you have secondary (untreated) water in your community, please reach out to your local water provider/policymakers and let them know you'd love to see this happen. The Board of Water Resources offers matching grants and low-interest loans for secondary water meters!

### **Stop sending Utah’s water to other states**

* The Colorado River compact and "the law of the River" limit the Upper Basin (Colorado, New Mexico, Wyoming and Utah) from withholding water to be sent to the downstream Lower Basin states (Arizona, California and Nevada). If it's there, we have to release it. More information [Colorado River Story](https://water.utah.gov/interstate-streams/colorado-river-story/)
* Utah does not sell any of its water to other states. The Colorado River's Upper Basin states cannot prevent water from going downstream. More information [Colorado River Story](https://water.utah.gov/interstate-streams/colorado-river-story/)

### **HOA**

* Many HOA boards are willing to change CCR's to accommodate alternatives to all-lawn. We know of several that have allowed waterwise landscapes and still have a lovely community.
* Please DM us and let us know what city you're in. We'd love to reach out. Also, we encourage people to let their local policymakers know about ordinance changes they'd like to see.

### **More rebates**

* We would love to expand the types of rebates offered and are working toward that goal. In the meantime, there are statewide rebates on smart irrigation controllers and low-flow toilets at [UtahWaterSavers.com](https://utahwatersavers.com/).

### [**Car Washes**](https://mde.maryland.gov/programs/water/waterconservation/pages/carwashing.aspx#:~:text=A%20standard%20garden%20hose%20uses,as%2070%20gallons%20per%20wash.)

* Car washes typically use less water than washing a car on a lawn. Many car washes clean and recycle the water used, which is about 15 gallons of water. (Not all car washes recycle water so choose carefully. Typically, the newer ones clean and recycle the water.) In contrast, a typical garden hose uses about **10 gallons** per minute. This means you use **100 gallons** of water for a 10-minute car wash. When you use an automatic shutoff nozzle on your hose, water does not flow continuously while you wash your vehicle, saving as much as 70 gallons per wash. Using a power washer can conserve even more water. Power washers use, on average, about 2 to 5 gallons per minute, with a potential savings of up to 80 gallons over using a standard house without an automatic shutoff nozzle.

### **Stop Growth**

* Utah is a great place to live, work, and play. The [2020 Census](https://gardner.utah.edu/census-2020-utah-fastest-growing-state-in-u-s/) indicates Utah is the fastest-growing state in the nation. While we don't have the highest in-migration, we do have the least amount of people leaving the state, so that means our kids and grandkids are staying as well as those who moved here. As a planning agency, our goal is to ensure Utah’s people, environment, economy, and agriculture have the water to thrive now and into the future. Finding that balance requires a combination of solutions, including increased conservation, improved system efficiency, agriculture conversion (as farmland is sold and the water is used for a new purpose) and water development projects. While finding that balance can be challenging, the Division is dedicated to working with agencies, organizations, and individuals to do what’s best for Utah.

We are working with the legislature to make meaningful changes on how we use water to ensure that we have it for generations to come. Growth and development are typically determined at the local level. I invite you to get involved in your community, contact your legislator and voice your concern and opinions to help direct how development occurs.

### **Localscapes**

* [Localscapes](https://localscapes.com/) is a statewide program that helps Utah residents create custom landscapes for where they live. They also offer free [online classes](https://localscapes.com/classes). Learn how to transition to a more water-efficient landscape. @Localscapes are designed for Utah and simplify irrigation, save water, and look great!

**Turf Removal**

**Ex. Las Vegas is ripping out grass. Why isn’t Utah?**

* Las Vegas has a very different climate than Northern Utah, but this is still a significant development for our southern neighbors. To be clear, @localscapes is not seeking to ban lawn (though getting rid of it in areas where it serves no recreational purpose is a definite goal). We're teaching Utahns how they can keep areas of lawn in their landscape, if they wish, in places it makes sense, while reducing the overall size and burden it creates for our water supply. Lawn should be a planned, designed part of the landscape, not a default groundcover.

**Toilets**

* Toilets are the biggest indoor water waster. True, the flushing problem was an issue when they first came out. But like a lot of things, they've gotten better over time. According to the @EPA, "Recent advancements have allowed toilets to use 1.28 gallons per flush or less while still providing equal or superior performance." To learn more, visit [https://www.epa.gov/watersense/residential-toilets](https://l.facebook.com/l.php?u=https%3A%2F%2Fwww.epa.gov%2Fwatersense%2Fresidential-toilets%3Ffbclid%3DIwAR2w8AxERVlVze5F5KLLS84f0v59AdXXPwyW3s7LCtd8PV1bEEQu8o9eqwg&h=AT390KydEIDGXPi_N_Y_xjI10qpfjiySihoJ44XRyVlZ6cnGzAE498j4eY-JMpObPbsR78ZARw0d-iqZveyldJYEs3tZ1paG3rB9lC68RhieAsb5CK2We-ydvQ9bkbK7Yas9_O4&__tn__=R%5D-R&c%5B0%5D=AT1pdazwq3s7nnsUuEc9w7-B0QbYuj_j9mnBH80LtgofIpEW7ewxTHUdU-v6xy4ZR4kfeeI4mEjZ8nZTEb6oHviy7gJQhNdCin2tJ4v4c9b9ZauzfcnPI5P7r87UfQOOjJYnWjLqwRGm_Xe9JxhdptZ8hLPOwhwn9QjRWQ-7yn-aL6nR-Cz_Jrj4JJo5g1g584gzkec8)

**Great Salt Lake**

**Ex. comment:** I'd be interested to know how not using the secondary water that is in the canal and ditch in my neighborhood will "save it for the future". If we don't use it it goes into the Great Salt Lake. Frankly I don't want it back later this year to put on my lawn after it goes into the GSL.

* The GSL is one of Utah’s most important water resources and contributes about $1.3 billion dollars to Utah’s economy. It also creates the right conditions for “lake effect” snow, which then falls in our mountains for world-class recreation as well as more spring runoff that fills out reservoirs. And every year 7.5 million birds consisting of 257 different species rely on Great Salt Lake to nest, breed and feast during migrations of thousands of miles.

**Hashtags To Use**

* #SlowTheFlow
* #SaveH2O
* #Waterwise
* #UtahDrought
* #Drought

WATER-SAVING TIPS

CATEGORIES

FIX LEAKS, H20 SAVING HACKS, TURN IT OFF WHILE YOU …, DID YOU KNOW?, WATER-SAVING DEVICES,

**OUTDOOR**

1. Water your lawn only when it needs it – Watering on a regular schedule doesn't account for cool spells or rainfall that reduces the need for watering. Use a smart irrigation controller to take the guesswork out. The state offers money-saving rebates that can cover the entire cost of some models. More information at [UtahWaterSavers.com](https://utahwatersavers.com/).
2. Is it time to water? – Step on your grass to see if it needs a drink. If it springs back when you move your foot, it doesn't need water.
3. How often should I water? – The [Weekly Lawn Watering Guide](https://conservewater.utah.gov/weekly-lawn-watering-guide/) is a great resource that helps you apply the right amount of water to your lawn. The guide is published during the irrigation season on the division’s facebook page and website and takes extensive weather data and simplifies it into how many days per week to water based on conditions in your county. (Microclimates may require adjustments to your watering schedule.) The guide helps avoid problems with pests and disease and reduces costs associated with overwatering, saving you time and money. The average quarter-acre yard uses about 3,000 gallons for each watering, so eliminating just one adds up to big savings! We estimate that Utah could save more than **20 billion gallons** of water every summer if everyone watered according to the guide.
4. Weekly Lawn Watering Guide Data Crunching – The [Weekly Lawn Watering Guide](https://conservewater.utah.gov/weekly-lawn-watering-guide/) takes extensive weather data and simplifies it into how many days per week to water based on conditions in your county. (Microclimates may require adjustments to your watering schedule.) One watering is the equivalent of 20 minutes for pop-up sprinklers and 40 minutes for impact rotors. That 20-minute recommendation is very general and means 20 minutes each time you water (and for each zone). So, if the guide says to water twice a week, that would be two days of 20 minutes per zone. Spray head sprinklers often apply water at a faster rate than rotor heads, so they could have a significantly less runtime. Rotor heads may need to run longer because they have a lower application rate.

The best way to determine how long your sprinklers should run is to do a water check. This calculates your water application rate, how evenly it is distributed, and how long each station should be run to apply a half-inch of water. We recommend applying a half-inch of water each time you water.

Water Checks are available through Utah State University Extension in some areas of the state. They are free and you’ll receive a watering schedule specific to your lawn. For more information and to sign up, visit: <https://cwel.usu.edu/watercheck>. If you'd like to do a water check yourself, instructions can be found here: <https://cwel.usu.edu/do-your-own-water-check>.

1. How much is enough? – According to [USU](https://extension.usu.edu/yardandgarden/research/basic-turfgrass-care), ideally, you should apply about ½ of water each time you irrigate. We have the technology to know the evapotranspiration (ET) rate, which coupled with your soil type, can reduce the required amount and collectively help save millions of gallons a summer. Remember to shorten and increase the number of irrigation cycles if puddling or runoff occurs.

Understanding your soil type and rate of application will help you determine what’s best for your lawn. Sign up for a water check to check your sprinkler efficiency or [DIY](https://cwel.usu.edu/do-your-own-water-check) if the program is unavailable in your area.

[Water Checks](https://cwel.usu.edu/watercheck) through the USU extension office are available through the summer months (beginning May 1st) for:

* Salt Lake City Department of Public Utilities service area (Salt Lake City, Millcreek, parts of Holladay, and Cottonwood Heights)
* Sandy City
* Eagle Mountain
* Cache County
* Iron County
* Washington County
* Davis County
* Weber County
* Morgan County
* Summit County
1. DIY Water Check -- We simplify the lawn watering guide so it applies (in general) to conditions in each county. With the extreme drought, we are following Governor Cox's recommended drought actions for 2x a week in northern Utah and 3x a week in southern Utah. You're right, there is more to watering than just the number of times per week. How long does your system need to run to apply ½ inch in each zone? This [DIY water check](https://cwel.usu.edu/do-your-own-water-check) uses tuna cans placed around the yard to catch and measure the water. Irrigating your landscape efficiently is doing your part to conserve water and save money.
2. Extreme Drought Watering Guide – A sprinkler performance test using catch cups will help you determine both the water application rate (essential for setting the irrigation time on your controller) and uniformity of application for your irrigation system. Catch cups distributed in a grid pattern across the landscape will measure the amount of water that actually lands on different places in the landscape. Since irrigation systems may use different types and brands of sprinklers in each portion of the landscape, it is important to conduct performance tests for each zone or station in the system.
3. The suggested depth of water application for Salt Lake County is 0.5 inch for each turfgrass irrigation event. Using the precipitation rate you calculated with the catch cup test, determine how many minutes to run the sprinklers in each zone to apply 0.5 inch of water. For example, if you’ve measured a precipitation rate of 1 inch/hour, it will take 30 minutes to apply 0.5 inch.
4. Does all this seem daunting to you? Hit this link [**https://cwel.usu.edu/watercheck**](https://cwel.usu.edu/watercheck) to have a team come to your property and audit your system- it's free.

Do you dig this discussion? Go for it and do it on your own. Here is a DIY guide. [**https://cwel.usu.edu/do-your-own-water-check**](https://cwel.usu.edu/do-your-own-water-check)

1. Big shout out to our friends at USU Extension Service for having these water wise resources available. Thanks to you all for a lively discussion.
2. Rebates save money and water – Check out [UtahWaterSavers.com](https://utahwatersavers.com/) to find out how you can qualify for a rebate up to $75 when you purchase a smart irrigation controller. Replacing a standard irrigation controller with a WaterSense labeled irrigation controller can save an average home nearly 8,800 gallons of water annually.
3. Deep-soak your lawn – When you water your lawn, water it long enough for water to seep down to the roots where it is needed. A surface sprinkle evaporates and is wasted.
4. Water between dusk and dawn – Watering when it’s coolest is more efficient because you don’t lose as much water to evaporation. Early morning can be better than nighttime because it helps prevent the growth of fungus. But if it’s really windy at night, you might lose more to wind than you would to evaporation, so adjust as needed. Don’t water between 10 a.m.-6 p.m. in northern Utah and 10 a.m.-8 p.m. in southern Utah.
5. Water plants not pavement – Position your sprinklers so that water hits your lawn or garden, not in areas where it does no good. Also, avoid watering on windy days when much of your water will blow onto the streets and sidewalks or evaporate.
6. Plant drought-resistant trees and plants – Many beautiful trees and plants thrive without irrigation. Check out [localscapes.com](https://localscapes.com/) for attractive waterwise ideas designed for Utah’s climate.
7. Mulch it – Add a layer of mulch around trees and plants. Mulch slows the evaporation of moisture and provides a barrier against water-stealing weeds.
8. Turn it off – Use a broom to clean driveways, sidewalks and steps. Using a hose wastes hundreds and hundreds of gallons of water.
9. Turn it off – Don't run the hose while washing your car. Use a pail of soapy water to lather it up. Then only use a hose to rinse the suds. Also, search for high-efficiency car washes and wash when you travel near them. Many car washes clean and recycle the water used, which is about 15 gallons of water. In contrast, a typical garden hose uses about **10 gallons** per minute. This means you use **100 gallons** of water for a 10-minute car wash. When you use an automatic shutoff nozzle on your hose, water does not flow continuously while you wash your vehicle, saving as much as 70 gallons per wash.
10. Check for leaks – Leaks from your outdoor pipes, hoses, faucets and couplings are easier to ignore since they don't damage the floor or keep you awake at night. But, they can be even more wasteful than inside leaks – especially when they occur on your main water line. Remember to check and fix leaks in pipes, hoses, faucets and couplings.
11. Be a drip – Convert plants to drip irrigation and use half the water regular sprinklers throw down.
12. Wait2Water – When the trees start to flower and the tulips bloom, you may be tempted to turn on your sprinklers. Hold off and let nature’s sprinkler system do your watering until temperatures are in the mid 70s for several consecutive days..
13. Lawn equipment:
* Using a typical gas-powered lawn mower for 1 hour emits as much smog-forming pollution as driving your car 64 miles.
* Using your gas powered trimmer for 1 hour emits as much as driving your car 136 miles
1. Fertilizer
* Fertilizer may leach into the ground water and cause contamination.
* The primary ingredient in most fertilizers is nitrogen. Excess fertilizer that runs off of lawns can lead to overgrowth of algae and bacteria in waterbodies, and are a contributing factor to the growth of harmful algal blooms.

**INDOOR**

1. Check for toilet leaks – Put a few drops of food coloring in your toilet tank and see if the color begins to appear in the bowl without flushing. If the dye begins to appear in the bowl, you have a leak that could be wasting more than 100 gallons of water a day. If your toilet is older than 1994, consider replacing it and qualify for a money- and water-saving rebate. If you find a leak and don’t want to replace the toilet, an inexpensive DIY fix is to replace the flapper. [utahwatersavers.com](https://utahwatersavers.com/)
2. Toilets aren’t trash cans – Stop using your toilet as an ashtray or trash can. Every cigarette butt or tissue you flush wastes a full flush! Depending on your toilet, this can be as much as seven gallons of water. Not only does this waste water, but it’s also bad for the pipes, pumps and plants that make up a sewer system. Only flush the three Ps: pee, poop and toilet paper. <https://www.nacwa.org/advocacy-analysis/campaigns/toilets-are-not-trashcans>
3. Put a plastic bottle in your toilet tank – If your toilet is pre-1994 and uses more than two gallons per flush, here’s a quick tip that reduces the amount of water needed. Add an inch or two of sand or pebbles in the bottom of a one-liter bottle. Fill the rest of the bottle with water and put it in your toilet tank safely away from the mechanical components. In an average home, the bottle may save five gallons or more of water every day without harming the efficiency of the toilet. If your tank is big enough, you may even be able to put in two bottles. Or consider replacing the toilet with a more efficient model. Check out rebates at [utahwatersavers.com](https://utahwatersavers.com/)
4. Shorter showers save water – Showers are typically the third-largest water user in the average home (toilet flushing and washing machines rank #1 and 2). Showers constitute about 17% of indoor water use, which is 40 gallons per day for the average family, or 1.2 TRILLION gallons per year in the U.S.!!! Limit your showers to the time it takes to soap up, wash down and rise off.
5. Install water-saving showerheads or flow restrictors – Install an inexpensive low-flow showerhead or flow restrictor and cut your shower flow to about three gallons a minute instead of five to ten. They are easy to install, inexpensive and your showers will still be cleansing and refreshing.
6. Soak instead of spray – A partially filled tub uses less water than all but the shortest showers. Treat yourself to a mini soak and conjure up images of your favorite spa.
7. Turn it off – Wet your toothbrush before brushing your teeth and fill a glass for rinsing. Turn off the faucet while brushing.
8. Turn it off – Save water while shaving by filling the bottom of the sink with a few inches of warm water to rinse your razor and keep the faucet off.
9. Check for leaks – Even a small drip can waste 50 or more gallons of water a day so check and fix leaky faucets and pipes.
10. Run full loads – Run your dishwasher when it’s full. Older models use as much as 10 gallons. Standards implemented in 2013 required dishwashers to cap usage at 5 gallons per load. Energy saving models can cut it down to 3 gallons, saving nearly 5,000 gallons a year! In contrast, hand washing dishes can use up to 27 gallons when you run the water to heat it and keep it running while rinsing.

 <https://cascadeclean.com/en-us/rethink-the-sink>

1. Run full loads – Only run your washing machine for full loads – unless you have a model that senses load size and adjusts accordingly. When it’s time to replace your washing machine, consider a high efficiency front loader that uses as little as 7 gallons per cycle. Traditional washers use up to 40 gallons per cycle – although there are some high-efficiency top agitator models that use as little as 19 gallons.
2. Turn it off – Don't let the faucet run while you wash vegetables. Instead rinse your vegetables in a bowl or sink full of clean water.
3. Turn it off – Keep a bottle of drinking water in the refrigerator so you don’t have to run the tap to cool it for drinking.
4. Turn it off – Don’t leave the water running for rinsing when you wash dishes by hand. If you have two sinks, fill one with rinse water. If you have only one sink, gather all your washed dishes in a dish rack, then rinse them quickly with a spray device or a pan of water.
5. Check for leaks – Leaky pipes and faucets waste water 24 hours a day, seven days a week. An inexpensive washer is usually enough to stop them. Do a simple leak check. Turn off all the water-using devices in your house. Look at your water meter and see if the needle is still running. If it is, you have a leak. If you can’t see the needle or numbers, you likely have an automated system. Call your utility company and see if your water is always running.