

Water Conservation for Home and Gardens

Making Every Drop Count

The Earth might seem like it has abundant water, but in fact less than one percent is available for human use. The rest is either salt water found in oceans, fresh water frozen in the polar ice caps, or too inaccessible for practical usage. While population and demand on freshwater resources are increasing, supply will always remain constant. Although it is true that the water cycle continuously returns water to Earth, it is not always returned to the same place, or in the same quantity and quality.

Simple Ways to Save Water

Here are three ways you can help protect our local water supply!

Turn off the Tap!

Just by turning off the tap while you brush your teeth in the morning and before bedtime, you can save up to 8 gallons of water! That adds up to more than 240 gallons each month. The same is true when you wash dishes. Turn off the tap! Scrape your dirty dishes into the trash before you put them in the dishwasher.

Fix That Leak!

Fixing a toilet leak is a great way to reduce household water use and boost water conservation.

If your toilet has a leak, you could be wasting about 200 gallons of water every day! That would be like flushing your toilet more than 50 times for no reason! Try this experiment to test for leaks. Place a drop of food coloring in the toilet tank. If the color shows up in the bowl without flushing, you have a leak!

Shower Power!



Taking a shower uses much less water than filling up a bathtub. A shower only uses 10 to 25 gallons, while a bath takes up to 70 gallons! If you do take a bath, be sure to plug the drain right away and adjust the temperature as you fill the tub. To save even more water, keep your shower under five minutes long.

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Our Water Use

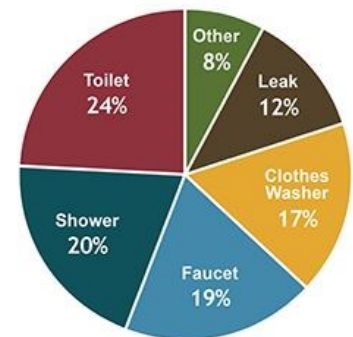
On average, people in Dane County use 100 gallons of water per person every day. Our water consumption increases by 25% or more in summer months.

We wake up in the morning, take a shower, brush our teeth, grab a cup of coffee, and head out for the day. Water is an important part of our daily lives and we use it for a wide variety of purposes, but do we really understand how much we use?

The average American family uses more than 300 gallons of water per day at home. Roughly 70 percent of this use occurs indoors.

Nationally, outdoor water use accounts for 30 percent of household use yet can be much higher in drier parts of the country or in more water-intensive landscapes.

How Much Water Do We Use?



Source: Water Research Foundation, Residential End Uses of Water, Version 2. 2016



Install Water-Saving Devices and Track Use



Making these changes will provide you with long term water savings.

Faucet aerators and low-flow shower heads can save thousands of gallons of water a year and cut down on your hot water bill.

A family of four can conserve 6,000 gallons of water a year and save energy by investing in a high-efficiency washing machine. Making the switch to a water-efficient dishwasher can save 1,000 gallons a year.

Toilets are by far the main source of water use in the home, accounting for nearly 30 percent of an average home's indoor water consumption.

Older, inefficient toilets that use as much as six gallons per flush also happen to be a major source of wasted water in many homes.

Recent advancements have allowed toilets to use 1.28 gallons per flush or less while still providing equal or superior performance.

Several municipalities in Dane County offer toilet rebates for water efficient models. Check if your municipality offers water conservation rebates.

Most people don't know how much water they use nor how much they waste.

Track your water use with the City of Madison's online conservation tool at <http://www.cityofmadison.com/water/sustainability/track-your-water-use-online>

We can live without a lot of things, water isn't one of them.

Additional Ways to Slow the Flow

You can change a few habits without changing your lifestyle to save water at home. Consider some of these tips:

- Turn off the faucet while you shave or brush your teeth.
- Avoid running water in the shower while you are shampooing or soaping.
- Don't use the toilet as a wastepaper basket to dispose of cigarette butts or tissue paper.
- Chill tap water in the refrigerator for drinking.
- Minimize use of in sink garbage disposal and compost materials instead.
- Wash only full loads of laundry or dishes.
- Use a broom to clean off sidewalks and driveway instead of a hose.
- Wash your car with soap and water from a bucket and use a hose with shut-off nozzle to rinse it.

What to Plant?

Before you select plants, examine the conditions of the site. How many hours of light does the site get? What type of soils are present? How wet or droughty is the site?

Matching site conditions to plants that flourish there will help their growth. Northern and eastern exposures tend to be both cooler and moister and southern and western exposures are warmer and dryer.

Determine how you and your household desire to use the landscape. Do you desire lawn, vegetable garden, herb beds, fruit trees or flowers?

Let your outdoor environment echo the natural world of your region. Native plants are adapted to local conditions so they require far less water while providing habitat for birds and other wildlife, food for pollinators, and beauty for you.

Native species can be found for wooded areas or sunny spots. Once established, native plants generally require less maintenance than other plants.

Finally, place your plants so that you create your desired effect while also ensuring that the plants are grouped by their light and moisture needs. Create watering zones. This reduces watering needs and saves you time and resources.



Outdoor Water Conservation Tips

About 50% of residential water usage during the growing season goes into maintaining landscapes. About half of that amount is considered to be applied unnecessarily. Here are strategies to conserve water on your home landscape:

- Keep lawn 3-4.5" high when you mow. Longer grass develops longer more drought resistant roots.
- Don't water turf during a drought, let the grass go dormant. This is less stressful for it.
- Design gardens so plants with similar water needs are grouped together so you can more efficiently water areas.
- Use mulches in gardens to cool and protect the soil, reduce weed growth, and minimize evaporation.
- Chose appropriate plants for the site's light, climate, and soil conditions. Native plants are adapted to local conditions.
- Create a rain garden to capture roof top runoff and allow it to water your plants and lessen storm water.
- Improve your soil with organic matter such as compost. It holds plant nutrients and water that will enable you to water less.
- Provide your plants with routine maintenance to keep them healthy and competitive (pruning, weeding and watering as needed).
- Use a rain gauge to determine if you need to water as most plants need 1" of water per week.
- Have an "oasis" zone (for plants that need the most water) located close to a water source to make watering more efficient.
- Consider installing a drip irrigation system for your "oasis" zone, fruit trees, or vegetable garden.
- Water in the morning to avoid excessive evaporation and plant diseases.
- Water infrequently (once a week) but deeply (1" per week) to encourage well developed root systems.
- Install rain barrels to catch rooftop rain for plant use.



Benefits of Water Conservation

By following water conservation practices in and around your home, you will not only help the environment and save money, but also can increase the value of your home.

Water conservation also helps prolong the life of septic systems and it puts less of a burden on municipal wastewater systems.

As Dane County encounters more intense storms, hotter weather and a steady population growth, these practices help put us in a position of strength and resilience to meet the future's changing conditions.

Conservation can be part of a long-term healthy lifestyle that helps both you and your community.

Additionally supporting public investment in maintenance and upgrading of our water infrastructure will help minimize leaks and breaks in water and sewer lines and build more resiliency into the system for future growth and weather extremes.





Conserving Dane County Water

Groundwater supplies nearly all of the water for our domestic, commercial, and industrial uses in Dane County.

Groundwater also feeds our wetlands, streams, and lakes during dry periods, which supports aquatic life. Dry weather flows in streams around Madison are estimated to have decreased by 50% or more from natural conditions from groundwater withdrawals.

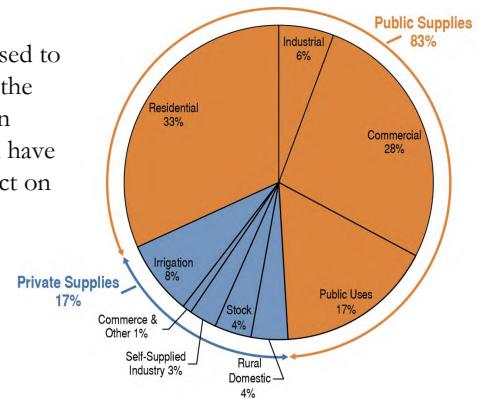
Water conservation will help minimize further impacts to these ecosystems as Dane County's population continues to grow.

Groundwater that is withdrawn and used in Dane County is for the most part recharged locally from infiltration of precipitation.

Practices that promote infiltration, such as rain gardens, help maintain our water supply and the aquatic ecosystems that depend on groundwater.

Water conservation also saves energy. Next to home heating, your water heater is the greatest user of energy in your home.

Energy is also used to pump and treat the water. Reduction in water use can have significant impact on energy use.



More publications on water quality for surface and drinking water along with a whole series of lawn and garden publications can be found at: <https://learningstore.extension.wisc.edu/>

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