



WATER SAVING TIPS

**IN DROUGHT
CONDITIONS**



EVERYONE CAN PLAY AN IMPORTANT ROLE IN SAVING WATER DURING A DROUGHT

Drought conditions pose a problem for you, your family, and the entire community. But there are steps you can take to reduce your water consumption in a time of drought and to prepare your home in advance. In this booklet we outline the steps—from easy lifestyle changes to more involved home repairs—that can save water. You can play an active role in making sure your community has enough water during a drought.

WHAT YOU CAN DO NOW

Educate

Don't underestimate the power of education! Make your community members aware of their own water use, any drought predictions, and the local climate. Even before a drought arrives, it's useful to get into good habits and set goals to save water every day. Educating your community will inspire the adoption of water-saving tips and promote water-saving practices in homes, workplaces, and schools.

Be a Responsible Consumer

Even if your area is not experiencing drought conditions at the moment, it's important to remember that fresh water is a valuable resource and we shouldn't waste or pollute it. During a drought, maintaining clean land and groundwater is essential. Don't forget to throw your trash in the proper receptacle. Trash left on the ground can end up in your local water supply. And don't pour anything down the drain that you wouldn't drink. Chemicals, medicines, and certain oils can contaminate local freshwater supplies, too.





WATER CONSERVATION EASY TIPS

Be a conscious consumer and use water wisely all the time! Saving water is essential during drought conditions but is also beneficial to do year round. Water conservation during normal conditions allows freshwater reservoirs and ground-water aquifers to restore themselves to pre-drought levels.

On average, a family of four uses about 300 to 400 gallons of water each day at home. That's about 75 to 100 gallons per person per day. Most families can save a lot by taking simple steps to reduce their water use. Toilets, clothes washers, faucets, leaks, showers, and gardens account for most of the water used at home. Check your family's water usage on your next monthly bill and talk about setting conservation goals. Start by making small changes to save water and to save money, too! No matter your situation, making small changes to save can really add up. These don't involve expensive equipment, and they won't take a lot of time.



IN THE KITCHEN

- **Run the dishwasher only when it's full.** Don't rinse dishes before putting them in the dishwasher, just scrape them! If you don't have a dishwasher, fill up the sink with wash water and then with rinse water. Soak hard-to-clean pots and pans instead of letting the water run. Typically, dishwashers use less water than washing dishes by hand.
- **Keep a pitcher of drinking water in the fridge** instead of running the tap to get cold water.
- **Don't cook food in an excess of water.** This will save water and keep more nutrients in the food. And use the proper pan size for cooking. Larger pans may require more water than actually needed.
- **Defrost food in the refrigerator.** Don't use running water or fill the sink with water to defrost food.

IN THE BATHROOM

The shower, toilet, and faucet in your bathroom use a lot of water. The toilet alone accounts for about 30% of indoor water use in an average-size home. Turning off the tap while you brush your teeth is a good start, but there are lots of other ways to save in the bathroom, too.

- **It's better to take a shower** instead of a bath.
- **When taking a bath, make sure you plug the bathtub** before you turn on the water and adjust the temperature as it fills up.
- **Don't use the toilet as a trash can.** Flushing trash like tissues or expired medicines wastes water and can cause problems for sewers and wastewater treatment plants.
- **Make sure the tap is off** when brushing your teeth and shaving. You can use a cup or basin of water when shaving to rinse your razor. Don't let the water run!
- **Make sure your toilet and sinks are not leaking.** Check for leaks at least once a year. To check the toilet, put food coloring in the tank; if it seeps into the bowl without flushing, there is a leak. You can save up to 2,700 gallons per year by fixing a leaky faucet—that's about 150 showers' worth of water!
- **Install low-flow showerheads.** Water-efficient showerheads can help you to save up to 750 gallons per month!



IN THE LAUNDRY ROOM

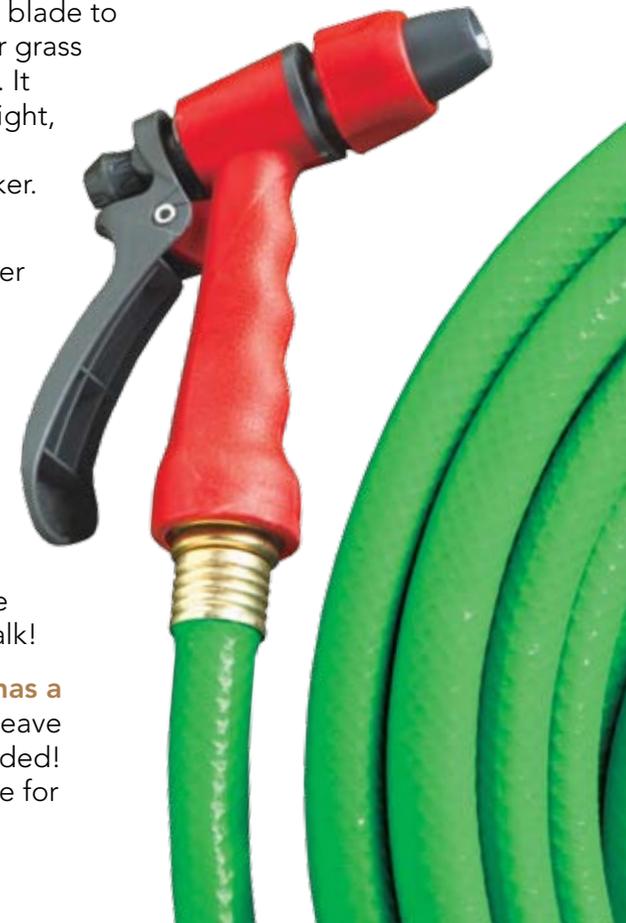
Washing machines use both energy and water. Try these tips to reduce your monthly bills:

- **Use the washing machine wisely!** Wash full loads only. Wash your darks in cold water and make sure your settings are correct according to the load size.
- **Use a laundry line to air-dry clothes** instead of using the clothes dryer. When you want to use the dryer, use the high-speed spin cycle on your washing machine to extract as much water as possible from your clothes so they won't need as much time in the dryer. You can also reuse items like towels if they aren't that dirty, or wear clothes more than once.

OUTSIDE

Evaporation and over-watering are common ways that water is wasted outside. Try these ideas to waste less:

- **It's best to water outdoor plants in the early morning or evening** when the sun isn't out and the temperature is lower. Don't water on very windy days. This will help reduce evaporation rates. Remember not to water outdoor plants if it is going to rain or after a rainstorm. Make sure to adjust watering based on weather and seasonal changes. It's also helpful to water plants deeply but infrequently, which promotes a greater tolerance for changes in soil moisture.
- **Don't over-fertilize.** Fertilizer will increase plants' water intake. If you need to fertilize, try slow-release fertilizers instead.
- **If you have grass in your yard, don't cut it too short.** Raise the mower blade to its highest level. Longer grass holds in more moisture. It also absorbs more sunlight, allowing your grass to grow stronger and thicker.
- **Make sure to reduce weeds** to conserve water for surrounding plants. Keep up with plant maintenance! Trim plants lightly in the winter or dormant season.
- **Make sure your sprinkler is watering the plants only,** not the street, house, or sidewalk!
- **Make sure your hose has a shutoff nozzle.** Never leave a running hose unattended! Check your garden hose for leaks.





WATER CONSERVATION DURING A DROUGHT

Being aware of your water use is even more important when your area is experiencing a drought. Remember to be aware of regional and city-wide water restrictions such as no-watering days and water irrigation schedules. Along with water-saving tips for every day, try these tips to save even more.



WHAT YOU CAN DO INSIDE

- **Wash produce, fruits, and vegetables in a pan of water** instead of letting the water run. You can then use the water to water your houseplants!
- **Use fallen ice cubes** to water plants rather than throw them in the sink. Never put clean water down the drain; find another use for it! Water your plants, give it to your pets, or make ice cubes.
- **Take short showers.** Aim for five minutes or less. If you need to take a bath, don't fill the bathtub all the way. Fill it halfway or less. To save even more, you can turn off the water while washing your hair and turn it back on to rinse. This can save up to 150 gallons of water per month! You can even capture cold water from the shower in a bucket or bin while you're waiting for it to warm up. You can use this water to water your plants in the garden.
- **Turn on the water only to rinse your hands.** Leave the water off while you lather with soap.
- **Install a toilet displacement device.** After every flush, your toilet's tank refills with water. Many toilets have tanks that are unnecessarily large and use a lot of water each time you flush. To reduce the amount of water stored in the tank, look into installing a toilet displacement device, which takes up room inside the tank so it doesn't have to refill with as much water. Toilet displacement devices can be made from common household items and are available commercially, too. They are an easy, low-cost way to save water with every flush.



WHAT YOU CAN DO OUTSIDE

Using water outdoors for landscaping, irrigation, and recreation accounts for a large portion of residential water use. Choosing drought-tolerant, native plants and designing a water-smart landscape, along with maintenance and water-efficient irrigation methods, will allow you and your family to save water outside year-round!

- **Water the lawn in shorter more frequent sessions** rather than one long session to avoid runoff. However, if the drought is very severe, let the lawn die and preserve your trees and larger plants.
- **Use a broom instead of a hose to clean driveways, sidewalks, or patios.** Wash your car, bike, or boat using a bucket and sponge, not a running hose. You can even wash your car or bike on the grass. This way you'll be watering the lawn, too!



- **Plant drought-resistant trees and plants according to your area's climate.** Every time you water, this can save between 30 and 60 gallons per 1,000 square feet. To design a water-efficient yard or garden, choose plants that are defined as drought tolerant for your region. For example, if you live in a desert region, don't plant tropical flowers that require lots of water! Some areas in your yard may have lots of sun while others may be in the shade. Design your available space based on these microclimates. Group plants according to their water needs, and be aware of site conditions such as light and shade, windy areas, and soil condition. It's also important to minimize steep slopes to reduce runoff and erosion.
- **Limit your grass.** Lawns can be costly in time, money, and water to maintain. Use water-efficient grass varieties according to your local climate. Alternatively, use pebbles, wildflowers, or plants that require less water instead.
- **Keep your soil healthy.** Soil health can influence water retention, water drainage, microbes, and nutrient flow. Aggregate your soil. Aggregated soil aids in water storage, decreases evaporation, and helps root growth, as well as soil, water, and nutrient movement throughout.
- **Put a layer of mulch around trees and plants to reduce evaporation from the soil.** Mulch also keeps the soil cooler. A thick layer of mulch (about 3 inches) will reduce evaporation, maintain soil temperature, and protect plant roots. Mulch also reduces the growth of weeds. Organic mulches add nutrients to soil as they decompose. Do not put mulch on trunks of trees, as this could cause disease.
- **If you have a pool, use a pool cover to reduce water and heat loss.** Check for and repair leaks. You can do this by checking the pump, heater, valves, and ground for excess moisture. Don't heat your pool too often. Warmer water evaporates more quickly. Avoid using fountains or waterfalls. And keep the pool water in the pool by not splashing around so much! You can also plant small trees and shrubs around your pool to block the wind and reduce evaporation rates.
- **Consider catching rainwater.** Install rain barrels at the ends of downspouts. You may use this water for irrigation or household use.



UPGRADE AND SAVE

When it's time to remodel or replace parts of your home or apartment, consider choosing water-smart fixtures, appliances, and systems. These updates will save you money in the long run and conserve water, too.

- **Install aerators** on bathroom and kitchen faucets. Aerators add air and reduce the flow of water coming out of your tap.
- **Use water- and energy-efficient appliances.** A water-efficient washing machine could save up to 16 gallons per load! Use a water- and energy-efficient dishwasher to save up to 8 gallons per load. An Energy Star-qualified water heater can help save money in the long run, too.
- **Install a high-efficiency toilet** or a dual-flush toilet. Dual-flush toilets give you two flush options: a half flush for liquid waste, and a full flush for solid waste.
- **Consider installing a water-efficient irrigation system** such as a drip irrigation system for trees, shrubs, and flowers. Drip irrigation systems deliver water and fertilizer to the soil surface, directly onto the roots of plants. The system consists of a network of plastic tubing with small holes to release water. This method delivers water to plants slowly, consistently, and very effectively. Water and fertilizer are easily absorbed and erosion is decreased, leading to less nutrient depletion. Drip irrigation systems are gravity driven and are not time or labor intensive. You can also integrate a weather-based irrigation controller that adjusts the watering time and frequency based on your yard's soil moisture and evaporation rates.
- **Install a graywater system.** This system captures used water from your washing machine, sink, and shower, and recycles it back into your home's nonpotable systems. If you already have a graywater system, check that it is functioning properly, make sure there are no leaks, and clean and replace the filters regularly.
- **Design your own rain garden.** Rain gardens are designed to trap runoff water from your sidewalk or driveway. Rain gardens reduce flooding and drainage overflow, and protect surrounding waterways such as rivers, streams, and lakes from storm-water pollution. When water runs over nonporous surfaces during big storms, it may pick up harmful chemicals such as fertilizers, pesticides, oil, and vehicle fluids, as well as trash and plastics, that can then end up in nearby waterways. An alternative method to reduce runoff is to install porous walkways and patios. This will keep the water in your yard and reduce wasteful runoff.



WATER AND YOUR COMMUNITY

Water saving is great at home, but it's even better to get everyone in the community involved! Remember, you can work with your family and community to take steps to reduce the effects of a drought. Small changes to save water can really add up!

- **Organize water audits** for homes, businesses, and schools. Get in contact with your local water agency. Some offer free water-use inspections and can help you check for leaks and offer additional tips on how to save water and lower your monthly bill.
- **Report any broken pipes, hydrants, or sprinklers** to local authorities or to the home owner. Also ask them to ensure that fire hydrants are tamper-proof.
- **Look into incentive programs and water-saving rebates** for homeowners and businesses. These savings can encourage water-saving practices such as replacing old appliances with water- and energy-efficient ones.
- **Be aware of dust-related health problems.** Long periods of dry weather can cause an increase in fine particles in the air, which may cause health problems for some people. Also be aware of heat-related illness, such as heat stroke. Dehydration during very hot weather can be dangerous for small children and older adults.
- **Be aware of burn-ban rules.** Fires can spread quickly during a drought.



RESOURCES

National Oceanic and Atmospheric Administration

<http://water.weather.gov>

Natural Resources Conservation Service, U.S. Department of Agriculture

www.nrcs.usda.gov

WaterSense, U.S. Environmental Protection Agency

www.epa.gov/watersense

The National Integrated Drought Information System, U.S. Drought Portal

www.drought.gov

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