WATER CONSERVATION GUIDE

how to do your part





florida's water

it's worth saving

SAVING **water resources**

Water is a resource shared by all, and as Florida's population increases, so does the need for all of Florida's residents to conserve. Water conservation may seem unnecessary in a state surrounded by water, but not all of that water is readily available for drinking or irrigation.

More than 90 percent of the water used in the St. Johns River Water Management District comes from groundwater, water drawn from underground aquifers. Though Florida usually receives about 50 inches of rain each year, only about 13 inches of water seeps into the ground to replenish underground aquifers. This source will not be able to meet all future demands, which makes water conservation a key strategy to sustaining this source for as long as possible.


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saving water OUTDOORS

More than half of residential water use in Florida occurs outdoors. Watering wisely outside the home promotes healthier lawns and landscapes, and conserves our precious water resources.

Water your lawn only when it needs it.

The amount of rainfall your area receives should dictate how often you water your lawn and how much water you apply. A hearty rain eliminates the need for watering for as long as two weeks. Overwatering your lawn results in shallow root systems, which means your lawn is less drought- and stress-tolerant. Overwatering also promotes weed growth, disease and fungus.

Water your lawn only when it shows signs of stress.

Signs of stress include the lawn turning a bluish-gray color and lingering tire tracks or footprints. Leaf blades folded in half lengthwise is another sign. The soil around the root zone may feel dry.

Follow watering restrictions.

The St. Johns River Water Management District restricts when you may water your lawn. During daylight saving time (the warmer months), you may water only two days per week. Those residences with odd numbered or no addresses may water only on Wednesday and Saturday, and those with even numbered addresses may water only on Thursday and Sunday. During Eastern Standard Time (the cooler months), the District allows watering only one day per week, on Saturday at odd numbered or no addresses and on Sunday at even numbered addresses.

Nonresidential properties may water only on Tuesday and Friday during daylight saving time, and only on Tuesday during Eastern Standard Time.

Exceptions are made for new lawns, watering in chemicals and fertilizers, and system repair and maintenance. Watering with a hand-held hose is allowed at any time, as is irrigation with reclaimed water. A few other exceptions apply. For more details on watering restrictions, visit *floridaswater.com*.

Water lawns before 10 a.m. or after 4 p.m.

The District restrictions allow watering only before 10 a.m. or after 4 p.m. year-round, with a few exceptions. Watering during the early morning or early evening hours reduces losses from evaporation and wind that can occur during the middle of the day. This also allows the water to seep into the ground to the grass and plant roots, promoting healthier plants with deep root systems.

Apply moderate amounts of water.

The District limits watering to three-quarters of an inch of water per application, and irrigation can occur for no more than one hour per day per zone. For most Florida soils, applying no more than three-quarters of an inch of water per application is enough to revitalize the grass. Saturate the root zone, then let the soil dry to encourage healthy, deep root growth.

Use the “catch” can method to help determine how much water to apply.

Place five to seven wide-mouthed, flat-bottom cans (cans about the size of an average tuna can) throughout the zones to be irrigated. Irrigate each zone as you normally would. When you have finished irrigating a zone, measure the depth of water in each can. Average the measurements and use this number to determine how long you need to water to apply three-quarters of an inch of water in each irrigation zone.

Position sprinklers to water only the landscape.

Position sprinklers so that you water only the lawn and shrubs, not the street, driveways, walkways or other paved areas.

Use the appropriate sprinkler head for the irrigated area.

Install sprinklers that are the most water-efficient for each use. Rotors or spray heads are good for turf areas, but don't use both in the same zone. For even distribution, flow rates must be consistent throughout the zone. In planting beds, use microirrigation, which includes drip and soaker hoses. Also, use spray heads designed for planting beds.

Set automatic irrigation system timers correctly.

Make sure the timer is set so that the irrigation system will water before 10 a.m. or after 4 p.m. Set the controls to water no more than the two designated days per week for your address during daylight saving time, and no more than the one designated day per week during Eastern Standard Time (watering once every 7–14 days during the cooler months is often sufficient). Allow the system to operate only long enough to apply three-quarters of an inch or less of water. Check timing devices regularly to make sure they are operating properly, and turn the system off when adequate rain has fallen.

Maintain your irrigation system.

Watch for broken or misdirected sprinklers. Check for leaks and clogged spray heads. Soft, wet spots around the in-ground sprinkler could indicate a leak is being absorbed into the ground.

Install a rain sensor.

Be sure your automatic sprinkler system is equipped with a working rain shut-off device, which overrides the system when enough rain has fallen. Rain sensors are required by Florida law on all automatic sprinkler systems installed since 1991. To ensure proper functioning, the sensor should not be installed in an area that is blocked by roof overhangs, bushes or trees. Check regularly to make sure the device is working properly.

Jim Phillips

Use a soil moisture sensor.

Soil moisture sensors will turn off your automatic irrigation system when there is enough moisture in the soil for your plants, saving water and money.

Collect water in a rain barrel to use to water your plants.

Rainwater is free and is better for your plants because it doesn't contain hard minerals. Planter beds, vegetable or flower gardens and potted plants can easily be irrigated with water from a rain barrel. Rain barrels are easy to construct following directions available from the Florida Yards and Neighborhoods Program.

Fertilize only as needed.

When fertilizing, using the correct amount of fertilizer can save water and result in a healthier landscape. Overfertilizing will aggravate pest problems, stimulate excessive plant growth, and demand frequent irrigation. Use fertilizers only when specific nutrient deficiency symptoms are evident. These deficiencies can be determined by conducting a soil test or analysis. Only fertilize when plants are actively growing; the most active growth period is May through July.

Apply fertilizers sparingly.

Florida-friendly lawns require only moderate amounts of supplemental fertilizer once they are established. The amount of fertilizer to apply depends on a number of factors, such as grass species, soil type and permeability, and your location in the state. Follow the manufacturer's directions on the bag, in terms of the amount per application. Know exactly the square footage of your lawn that the bag of fertilizer is intended to cover.

Use a “slow-release” fertilizer.

The best fertilizers for healthy landscapes and the environment are those that contain a high percentage of slow-release, water-insoluble nitrogen. Slow-release products stay in the soil to supply nutrients to plants over a longer period of time. The product label will say organic, slow-release or controlled-release, water-insoluble nitrogen, sulfur-coated, IBDU (15N-isobutylidene divrea), or resin-coated.

Use a “no phosphate” fertilizer.

Florida soil is naturally high in phosphorus, and a “no phosphate” fertilizer is appropriate for most mature lawns. Apply a phosphate fertilizer only if a soil test demonstrates the need. For information specific to your area, contact the local County Cooperative Extension Service.

Cut your grass at the right height.

Cut your grass at the highest recommended height for your turf species or the highest setting on your lawn mower. Cut no more than one-third of the grass length at one time to encourage grass roots to grow deeper.

Keep mower blades sharp for a clean cut.

Dull blades tear grass, opening it to disease and increasing its need for water. Leave short grass clippings where they fall. The clippings reduce the lawn's need for water and fertilizer. Remove thick patches of clippings so that the clippings will not kill the grass underneath.

Plant drought-tolerant or Florida-friendly grasses, ground covers, shrubs and trees.

Once established, they do not need to be watered as frequently and they usually will survive a dry period with little or no watering.

Get a soil analysis.

Collect soil samples from various areas of your yard and have them analyzed by your local County Cooperative Extension Service. Information from the analysis will help you decide which plants will work best in your yard and how much fertilizer to use.

Plan your landscape and choose the proper plants.

Evaluate the conditions in your yard, such as sunny and shady areas, how you will use sections of the yard and how large you want mature plants to be. Choose the proper plants. Determine each plant's need for sun, shade, soil and water, and its tolerance for cold or salt. Match the plant's needs to the appropriate spot in your landscape.

Use grass wisely.

Grass is often your yard's biggest water user. Save grass for areas where children or pets will play. In other areas, consider alternative ground covers or mulch.

Irrigate efficiently.

Group landscape plants that have similar moisture needs together in areas separate from grass. Use sprinklers that are the most water-efficient for each use. Zones of in-ground irrigation systems should be separate for turf and non-turf areas. Use appropriate matching spray heads throughout the zone.

Use mulch.

Using mulch helps retain soil moisture and moderates temperature. Mulching also helps to control weeds that compete with plants for water. Spread several inches of mulch, such as wood chips, pine straw or leaves, around shrubs, trees and flowerbeds.

Pay attention to your hose.

Left unattended, a garden hose can pour out hundreds of gallons of water in an hour. Check all hoses, connectors and spigots regularly to make sure they are in good working order. Use hose washers between spigots and water hoses to eliminate leaks. Replace or repair damaged or leaking hoses, nozzles, spigots and connectors.

Use a broom to clean leaves and other debris from sidewalks and driveways.
Using a hose to clean a driveway can waste hundreds of gallons of water.

Outfit your hose with a spray nozzle.
A spray nozzle allows you to adjust water flows as needed. When finished, turn it off at the faucet instead of at the nozzle to avoid leaks.

Wash your car efficiently.
Consider using a commercial car wash that recycles water. If you wash your own car, park on the grass and use a hose with a spray nozzle.

Install only fountains that recycle.

If you install ornamental water features, such as fountains, make sure they are designed to recycle water.

Use water-saving pool filters and pool covers.

If you have a swimming pool, consider a new water-saving pool filter. Cover your spa or pool to reduce evaporation.

saving water INDOORS

Saving water inside the home is simple. Following are a few easy water conservation tips. Fixing leaks and replacing old water-guzzling plumbing fixtures with water-saving ones could save you thousands of gallons of water each year.

Find out if you have a leak in your home.

Read your water meter before and after a one-hour period when no water is being used. (Remember to wait for the hot water heater and ice-cube makers to refill, and for regeneration of water softeners.) If the readings are different after the one-hour period, you have a leak. If you have a well, listen for the pump to turn on and off while the water is not in use. If it does, you have a leak.

Check your toilet to see if it is low-flow.

Since the mid-1990s, toilets have been redesigned to conserve water. Low-flow models use 1.6 gallons per flush and new, high-efficiency toilets use 1.0 to 1.28 gallons per flush. Older models use 4 gallons per flush. You may want to consider purchasing a newer model.

Fix leaking toilets.

Toilet leaks occur when the flapper does not form a tight seal, allowing water to flow continually from the tank to the bowl. They are often silent, allowing loss of water to go undetected for long periods of time. To detect silent leaks, remove the lid from the toilet tank, remove any colored cleaning agents, flush to clear water in the bowl, then add dye tablets, leak detector fluid or a few drops of food coloring to the tank. If the tank is leaking, color will appear in the bowl within 30 minutes. Flush as soon as the test is complete. Some toilets may produce a running water sound that is easy to hear. Some leaks are visible as a small trickle running from the rim to the water in the bowl. The average leaky toilet can waste about 200 gallons of water per day.

Avoid flushing the toilet unnecessarily.

Dispose of tissues, insects and other such waste in a trash can rather than in the toilet.

Install low-flow showerheads.

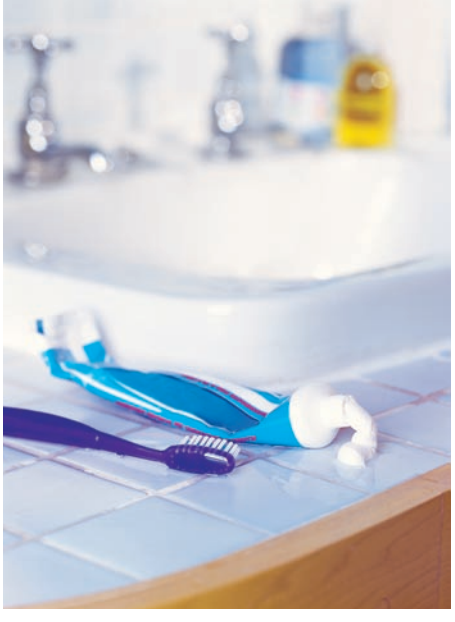
The older the showerhead, the more water it uses. Most new showerheads deliver 2.5 gallons of water per minute. Some new models deliver less than 2.0 gallons per minute. Older fixtures can deliver as much as 8 gallons per minute. Pressures have been adjusted to the low-flow fixtures to deliver as good a shower as the higher flow showerheads.

Check your showerhead for leaks.

If your showerhead is leaking, make sure it is screwed tightly and check the washer for wear. In the shower, turn water on to get wet, turn off to lather up, then turn back on to rinse off. Take shorter showers.

Fill bathtubs only one-third full.

Use the minimum amount of water needed for a bath by closing the drain first and filling the tub only one-third full. The initial burst of cold water will be warmed by the hot water as the tub fills. When adjusting water temperatures, instead of turning the water flow up, try turning it down to balance the temperature.



Turn off the faucet.

Turn off the water as you brush your teeth, wash your face or shave. Faucets left in the open running position waste from several hundred to several thousand gallons of water per day.

Check faucets for leaks.

A leak at the rate of one drop per second can waste up to 2,700 gallons per year. Check faucets regularly for leaks at the faucet head and seepage at the base and its connections. Repair leaking faucets by replacing washers and by tightening or repacking the faucet stem.

Check the amount of water flowing from each faucet.

You can do this by opening the faucet and allowing the water to flow into a container for 10 seconds. Multiply the amount of water in the container by six to determine the per minute flow. If your existing bathroom faucet flows above 2.5 gallons per minute, install a low-flow aerator or replace the faucet with a model that uses less than 1.5 gallons per minute. Faucet aerators are circular screened disks, usually made of metal, that are screwed onto the head of the faucet to reduce flow. For a bathroom faucet, a 1.5 gallons per minute flow will provide enough water for personal hygiene needs. For a kitchen faucet, you will want 2.2 gallons per minute of flow to make sure the flow of water is enough to wash and rinse dishes. You may want to use a low-flow aerator with an on/off flip handle that allows you to increase or reduce the flow as needed. Faucet aerators require periodic cleaning of grit and scale buildup that may inhibit flow.

Set clothes washers for the appropriate-sized load.

For washing machines with variable settings for water volume, select the minimum amount required per load. If load size cannot be set, operate the washer with full loads only. Check hoses regularly for leaks.

Use the shortest wash cycle for lightly soiled loads.

Normal and permanent press wash cycles use more water. Pretreat stains to avoid rewashing.

Use water efficient clothes washers.

When you replace your clothes washer, consider a water-efficient model that uses an average of 18–25 gallons of water per load or a front loader that uses 15–25 gallons per load. Older and non-water efficient washing machines can use as much as 40 gallons of water per load.

Other ways to save water indoors

- Operate the dishwasher only when you have a full load.
- When purchasing a standard-size dishwasher, consider a model that uses 6.5 gallons of water per cycle or less. Compact models should use 4.0 gallons per cycle. Older models can use 11 gallons per load.
- When washing dishes by hand, fill one sink or basin with soapy water and fill the rinsing sink to one-third or one-half full. Avoid letting the water run continuously in the rinsing sink.
- Do not use running water to thaw meat or other frozen foods. Defrost food overnight in the refrigerator or by using the defrost setting on your microwave.

- Install instant or on demand hot water in the kitchen so you don't have to let the water run while it heats up.
- Insulate your water pipes. You'll get hot water faster plus avoid wasting water while it heats up.
- Avoid installing a water-to-air heat pump or air-conditioning system. Newer air-to-air models are just as efficient and do not waste water.
- Install water-softening systems only when necessary. Save water and salt by only running the minimum amount of regenerations necessary to maintain water softness. Turn softeners off while on vacation. Also, consider installing a system capable of using potassium instead of sodium with demand-based regeneration.
- Never put water down the drain when there may be another use for it such as watering a plant or cleaning.
- Store drinking water in the refrigerator instead of letting the tap run while you wait for cool water to flow.
- Replace leaky drain plugs in sinks and bathtubs.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Florida Water Star℠

Florida Water Star℠ is a point-based, home certification program, similar to the federal Energy Star® program. The program encourages water efficiency in irrigation systems, landscapes, household appliances and plumbing fixtures.

Florida Water Star℠ standards ensure water conservation and give homeowners an opportunity to save money on utility bills, as well as have confidence in knowing that quality is built into their new home.

If you are building a new home or planning to renovate your home, ask your builder for a certified Florida Water Star℠ home. Enjoy the peace of mind that comes with knowing that you have minimized impacts on water resources with your home construction.

For more information about Florida Water Star℠, visit floridawaterstar.com.

St. Johns River
Water Management District

St. Johns River Water Management District
Office of Communications and Governmental Affairs
4049 Reid Street | P.O. Box 1429
Palatka, FL 32178-1429
(386) 329-4540 | (800) 451-7106

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