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Water Conservation Tips: Inside & Outside the Home

Water Conservation Tips – Inside the Home

Verify your home is leak free.

Read you 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 maker to refill, and for regeneration of water softeners before recording the first reading.) If the meter does not read exactly the same, there is a leak somewhere.

If you have a well, listen for the pump to kick on and off while the water is not in use. If it does, you have a leak.

Faucets

Turn off the water while brushing your teeth, washing your face or shaving.

Repair leaks by replacing washers and by tightening or repacking the faucet stem. Repair kits with detailed instructions can be found at home improvement stores.

Check the flow rate of each faucet by opening it all the way and allowing the water to flow into a container for ten seconds. Multiply the amount of water collected by six to determine the flow per minute. If your existing faucet flows above 2.5 gallons per minute, consider installing a low-flow aerator or replace the faucet with a model that uses less than 1.5 gallons per minute. For a kitchen faucet, a higher flow rate of 2.2 gallons per minute is desired to make sure the flow of water is enough to wash and rinse dishes.

Faucet aerators are circular screened disks that screw onto the head of the faucet to deliver a strong spray while reducing water consumption. Aerators for kitchen faucets are available with a variety of spray patterns and some contain an on/off handle that allows you to increase or decrease the flow as needed.

Faucet aerators can reduce faucet water use by 50 percent.

Showers

Check your showerhead for leaks – make sure it is screwed tightly to the wall and check the washer for wear. You may need joint sealer or plumbers tape to repair leaks.

Install a low-flow showerhead. These work by mixing air into the water flow (like an aerator), which is restricted to increase the water pressure. For the best efficiency, choose a low-flow showerhead that delivers 2.5 gallons of water per minute or less and has a shut-off valve. This allows you to turn off the water while soaping up and turn it back on instantly without readjusting the temperature. **Shower water use can be reduced 50% with a low-flow showerhead, and can save up to 20,000 gallons of water per year!**

Time your showers to five minutes or less. Turn the water on to get wet, turn off to lather up, then turn back on to rinse.

Toilets

Toilets are one of the greatest water users in the home. Low-flow toilets use 1.6 gallons per flush and can reduce water use by 23 - 46%, compared to conventional models that use 3.5 to 5 gallons per flush.

Some toilet leaks are visible as a small trickle of water running from the rim while others may go undetected for long periods of time. Since the average leaky toilet can waste about 200 gallons of water per day, it is best to do a simple check. First, remove the tank lid and any colored cleaning agents in the tank. Flush to clear the water in the bowl (as needed) and then add a few drops of food coloring to the tank. If the food coloring appears in the bowl after 30 minutes, the tank is leaking and repairs should be made immediately. *Note: Flush the toilet as soon as the test is complete to remove the food coloring from the tank and bowl.

Avoid flushing the toilet unnecessarily; dispose of tissues and other waste in a trash can rather than in the toilet.

Add a toilet tank displacement device or toilet dam for added savings. Newer models have been redesigned to conserve water, so this technique works best for older models. The height of the water in the toilet tank is what causes the bowl to flush. Adding a displacement device (bag or plastic bottle) or a toilet-tank dam will reduce the amount of water used per flush. Be sure the displacement device does not interfere with the operation of the tank. **A toilet-tank displacement device can cut water use by 40 percent.**

Hot Water Recirculation Pump

This system provides hot water almost immediately. It circulates ambient temperature water in the hot water pipes back to the water heater. No extra plumbing is required and it is designed to use with any hot water system. Visit www.gothotwater.com for more details about hot water recirculation pumps. *Disclaimer: this is a recommendation for a TYPE of product that may help you conserve water and energy and is NOT an endorsement for a particular brand.

Washing Machines & Dishwashers

Operate the washing machine and dishwasher only when you have a full load.

When washing clothes, pre-treat stains to avoid rewashing and use the shortest wash cycle for lightly soiled loads. Normal and permanent press wash cycles use more water.

When you replace your clothes washer, consider a water-efficient model that uses an average of 15-25 gallons of water per load. (Older models can use as much as 40 gallons of water per load.)

When washing dishes, avoid pre-washing and let your dishwasher do the work. Another option is to soak dishes in soapy water rather than letting the water run continuously.

When you purchase a dishwasher, consider a model that uses 6.5 gallons of water or less per cycle. Compact models should use 4.0 gallons per cycle verses older models which use 11 gallons per load.

Additional Tips

When hot water is needed, collect cold water in a water jug or other container while waiting for the water to warm. This water can be used to water plants or placed in the refrigerator for later drinking.

Insulate your water pipes – you'll get hot water faster and avoid wasting water while it heats up.

Do not use running water to thaw meat and other frozen foods. Use the defrost setting on your microwave or place it in the refrigerator overnight to thaw.

Never put water down the drain if there may be another use for it – watering plants, cleaning, soaking dishes, etc.

Replace leaky drain plugs in sinks and bathtubs.

Note: There are many devices that can be installed in your home to reduce the amount of water that is used. Some of them can be installed by homeowners, and others need professional installation. If you are replacing an appliance in your home, be sure to research all available techniques and choose the right one for your home.

Disclaimer: The use of trade names is solely for the purpose of providing specific information. It is not a guarantee of warranty of the products names and does not signify they are approved to the exclusion of others of suitable comparison.

Landscapes

When you understand your landscape's environmental needs and tailor your lawn care practices to suit local conditions, you get a healthy, environmentally friendly lawn. Design your yard so it thrives on rainwater alone, without additional irrigation.

For a complete guide to designing a Florida yard, check out the Florida Yards and Neighborhoods website: http://fyn.ifas.ufl.edu

Water-Saving Tips for Your Landscape

Right Plant, Right Place

Choosing plant material suited to the site conditions will reduce the need for water, as well as fertilizer, pesticides and pruning needs. Plant drought tolerant, Florida-Friendly plants that can survive on rainwater once established. In addition to plant selection, you can conserve water in the landscape by grouping plants in beds according to their water requirements. There are many attractive, drought-tolerant plants to choose from and many are underutilized in landscapes. For a guide to selecting Florida-Friendly plant material, visit http://floridayards.org/fyplants/.

Mulch your garden and landscape beds.

Maintaining a 2-3" layer of mulch (after settling) around trees, shrubs and bedding plants will help keep the soil moist plus reduce erosion and inhibit weed growth. Mulching plants is important but over-mulching can be damaging. Mulch piled too high will repel moisture during a light rain and hinder oxygen exchange to roots. Mulch piled against plant stems and tree trunks will hold moisture against the trunk and promote root rot. For more info on mulch, visit http://livinggreen.ifas.ufl.edu/landscaping/mulch.html

Water at the right time.

Watering in the early morning (4-7 am) when temperatures and wind speeds are the lowest will reduce water loss through evaporation. Also, grasses are less susceptible to fungus if water is applied at the time that dew normally forms. Watering restrictions are now in effect and regulated by the St. Johns River Water Management District. Residents within the district are allowed to water one to two days per week, depending on the time of year, but not between the hours of 10 a.m. and 4 p.m.

Follow Watering Restrictions

Watering restrictions are now in effect and regulated by the St. Johns River Water Management District. These restrictions are aimed at saving Florida's fresh water and keeping our landscape healthy. The following table can be used as a guide to determine your landscape watering schedule but homeowners should note that there are certain exceptions to these rules. For a complete list of exceptions, contact the Baker County

Extension Service or visit the St. Johns River Water Management District website at http://sjrwmd.com.

The following table from the St. Johns River Water Management District should be used as a guide to determine your landscape watering schedule.

Time of Year	Homes with odd numbered addresses (or no address)	Homes with even numbered addresses	Non-residential properties
Daylight Saving Time	Wednesday / Saturday	Thursday / Sunday	Tuesday / Friday
Eastern Standard Time	Saturday	Sunday	Tuesday

- Daylight saving time: Second Sunday in March until the first Sunday in November
- Eastern Standard Time: First Sunday in November until the second Sunday in March
- An odd numbered address is one that ends in 1,3,5,7, or 9.
- An even numbered address is one that ends in 0,2,4,6, or 8.
- Water only when needed and not between the 10 am and 4 pm.
- Water for no more one hour per zone and apply no more than three-quarters of an inch of water per zone per irrigation day.
- Restrictions apply to private wells and pumps, ground or surface water and water from public and private utilities.

Position sprinklers properly.

Make sure the water lands on your plants and grass and not on paved areas.

Calibrate your irrigation system.

Be sure to calibrate your irrigation system to determine how long to run the system so that it delivers the amount of water recommended for your area. Irrigation systems can be very different and could be delivering too much, not enough, or just the right amount of water, depending on the type of irrigation system and the zone being watered.

Lawns only need about ½ to ¾ inch of water in one watering session. Place empty tuna cans or measuring cups around the yard (all within range of the sprinkler, some close, some farther away). Turn on the sprinkler for 30 minutes. After 30 minutes, measure the amount of water collected in each can/cup. Check to see if there was even distribution of water in all the cans/cups. If the cans/cups collected ¾ inch of water, then you know you need to water for 30 minutes. If the cans/cups collected more or less than ¾ inch of water, then calculate approximately how long you need to water your landscape so that it receives ¾ inch of water in each watering session.

Install a rain shutoff device.

If you have an automatic irrigation system, install a rain shutoff device that will override the system when it rains. Set this device to shut off your system when half an inch of rain has fallen. Florida law requires rain shutoff devices on all automatic sprinkler systems installed since 1991. However, in some cases, these devices are installed incorrectly and are placed too close to the eave of the home where it does not come into contact with water when it rains. Check to make sure your sensor is properly placed and working correctly. A certified irrigation professional can provide technical assistance if needed.

Install a soil moisture sensor.

Soil moisture sensors can be used in addition to rain shutoff devices for automatic irrigation systems. These sensors are placed in the root zone of your lawn or landscape plants and measure the amount of moisture in the soil. If the moisture in the soil is high enough that your plants would not benefit from extra water, the sensor will not allow your irrigation system to turn on, even though it is scheduled to run. If the soil is dry and water is needed, it allows the system to run as normal. A single sensor can be used to control the irrigation for many zones and the zone that is normally the driest, or most in need of irrigation, should be selected for placement of the sensor in order to ensure adequate irrigation in all zones.

Since soil moisture sensors must be installed and calibrated properly in order to work correctly, it is best to have an irrigation contractor do the job for you. For more information, visit edis.ifas.ufl.edu/AE437.
Soil moisture sensors can save up to 40% more water than a rain shutoff device alone.

Check your irrigation system for leaks.

Prompt repair of irrigation system problems prevents loss or damage to landscapes and wasted water. If you find an area in the landscape that stays dry, simply setting the irrigation time to run longer will not make up for dry areas occurring from leaks, clogs or broken irrigation pipe. Some irrigation system problems are easily fixed, but they have to be identified to be repaired. Other problems may require the help of an irrigation contractor. For more information on basic repairs and maintenance for home landscape irrigation systems, visit edis.ifas.ufl.edu/AE451.

Use micro-irrigation hoses.

Micro-irrigation systems deliver small volumes of water directly to the root zone through low-flow-rate emitters, such as micro-spray jets, bubblers or drip tubes. These hoses can lie above ground or slightly buried and allow for water to seep through to a plant's roots over a longer period of time. Micro-irrigation is not recommended for irrigating turf.
*Note: Although micro-irrigation equipment releases small amounts of water, it does not prevent overwatering and therefore must be used responsibly.

Make the most out of rainwater.

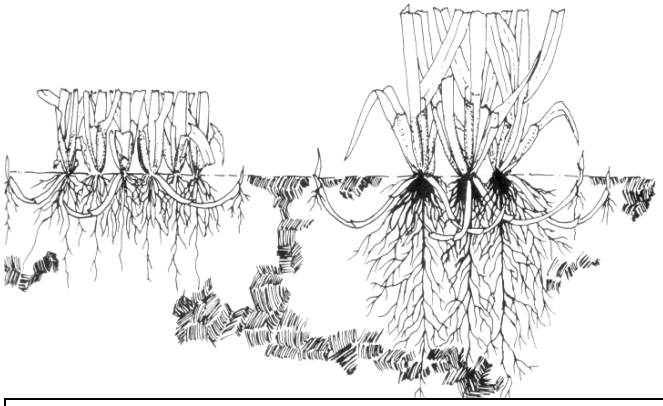
If rain is predicted within the next 24 hours, don't irrigate. Turn downspouts from rain gutters towards areas with plantings. Purchase a rain gauge to keep track of how much rain has been received. This will tell you whether your plants received enough water or whether they need a little more.

Install a rain barrel.

Since we usually do not receive the exact amount of rain we need at the exact time we need it, saving the rain can be very beneficial. Consider installing a rain barrel which can collect and store rainwater for dry spells. Rain barrels can be purchased, but are also very easy to make. For more information on rain barrels, contact the Baker County Extension Office or join us for a "Make & Take" Rain Barrel Workshop. We will teach you everything you need to know, provide materials and help you build!

Mow your grass to the right height.

The taller the grass, the more extensive the root system becomes. Grass with deeper roots is more drought-tolerant. If the grass is mowed very short, it will put most of its energy into growing new leaf blades, and less energy into growing a root system, thus creating a shallow root system. So don't mow your lawn too short.



Influence of mowing height on rooting depth.

Turfgrass Species	Optimal Mowing Height (inches)
Bahia	3 – 4
St. Augustine	3 – 4
St. Augustine dwarfs	2.5 – 3
Centipede	1.5 – 2
Bermuda	0.5 – 1.5

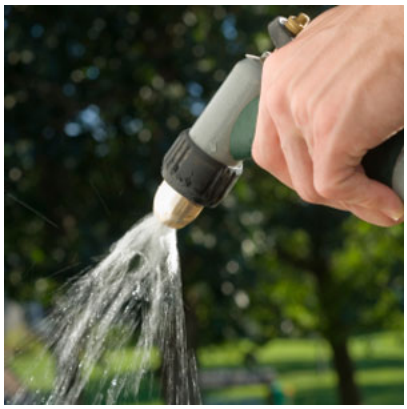
Keep mower blades sharp.

When mower blades become dull, they tear the leaf blade rather than making a sharp, clean cut. Torn leaf blade edges are jagged and have more surface area for water to be lost. Keeping mower blades sharp will help your lawn conserve its available water.

Let your lawn tell you when to water.

Your lawn will give you at least one of three signs when its time to water. If you notice your lawn has a bluish-gray color, leaf blades are folded in half, and/or footprints remain in the grass, then its time to water. Water again only once symptoms reappear.

Additional Tips



Connect a shut-off nozzle to your hose so that no extra water is lost if the hose is dropped or accidently left unattended. Outfitting your hose with a spray nozzle that can be adjusted will allow water to be used only as needed. When finished, turn the water off at the spigot instead of at the nozzle to avoid leaks.

Check all spigots, hoses and connectors regularly for leaks and replace or repair as needed. Use hose washers between spigots and water hoses to eliminate leaks.

Use a broom and dustpan instead of a hose to clean debris off the patio, sidewalk, and driveway.

Wash your car while it is parked on the grass and use a hose with a spray nozzle.

Cover your swimming pool or spa to reduce evaporation and consider a new water-saving pool filter.

If you install a fountain or other water feature, make sure they are designed to recycle water.

Calculate Your Daily Water Use

Visit the St. Johns River Water Management District website at http://www.sjrwmd.com/floridaswater/conservation/survey.html to take their Home Water Survey.

This interactive survey is quick and easy to use and will do the math for you to determine how many gallons your household uses each day! You just may be surprised!

Become an involved citizen!

Report all significant water losses, including broken pipes, errant sprinklers, open hydrants, etc.