

Landscape and Irrigation

Outdoor water use can account for more than half of residential water use. Much of that water is lost due to irrigation system inefficiencies and controller management issues. Save water, and potentially money, with routine irrigation maintenance and efficient irrigation settings.

Irrigation Maintenance

The best way to catch maintenance problems quickly is to operate and observe the irrigation system at least quarterly. Run the zones one at a time and visually inspect each sprinkler head looking for these common problems:

Missing or Leaking Heads

Irrigation heads can be damaged by lawnmowers, cars, feet or just routine wear and tear. Look for waterspouts or water gushing from the base of the head. A damaged head can result in the loss of thousands of gallons per irrigation event. Irrigation heads are replaced easily and are available at most hardware or irrigation supply stores. Replacement heads should match the delivery rate (gallons per minute) and spray pattern (full circle, half-circle, or quarter circle) of the head being replaced.

System Leaks

If the one of more heads in your irrigation system are failing to fully pop, there may be leak reducing overall pressure in the system. Signs of a leak somewhere in the water line might include unusually low, muddy or wet spots on your lawn that don't disappear in dry weather, or grass in an area that is noticeably greener than other areas in the yard. Assistance may be necessary to locate and repair irrigation system leaks.

Overspray or Misdirected Heads

Look for wet hard surfaces such as roads, sidewalks, patios, or structures. Watering these surfaces wastes water and dollars and can contribute to their deterioration. Frequently, all that is necessary is to rotate the existing hed a bit, or it may be necessary to install a nozzle with a difference spray pattern.

Obstructed Heads

When irrigation heads are behind or under shrubs, trees or other landscape features irrigation cannot reach all the plant materials in the zone with enough water. In a zone where only well-established plants are growing, capping those heads is a possible solution. Where obstructed spray heads are intended to deliver water to sod areas, a small PVC extender can be added below the irrigation head to raise it above the obstacle. In sodded areas, trimming new growth from around and over irrigation heads increases their efficiency.

Rain Device Missing or Not Working

Florida law requires a working rain sensor or other rain-sensing technology, such as a soil moisture sensor or weather-based device, for all automatic

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irrigation systems. Generally, a standard rain sensor will be mounted along the roof edge in an area adjacent to the irrigation controller location. Rain sensors have a lifespan of 3 to 5 years in our mid-state climate. For best results, the sensor should be set to bypass an irrigation cycle after 1/4 to 1/2 inch of rainfall **and** it should be mounted in an upright position where it is unobstructed by any other structures or tree cover. Test the rain sensor in this way:

- Use the manual program start setting on your irrigation controller to turn on any irrigation zone other than the one that is adjacent to the sensor's location.
- Use a hose to direct water to the top of the sensor. If the sensor is working properly, the controller should automatically stop the irrigation taking place.

Efficient Irrigation Settings

How Much Run Time is Needed

For this region, the suggested amount of irrigation per event is 3/4 inch of water. Use this method to calculate how much run time is required to apply 3/4 inch:

For a site-specific calculation, use a standard catch-can test to calculate how much water each zone in your system applies per minute.

- Gather 5 to 10 coffee cans, tuna cans, jars, or other straight-sided containers that are 3 to 6 inches in diameter. All test containers should be of the same type.
- Place the containers in Zone 1, scattering the cans randomly throughout the zone. Manually operate the zone for 15 minutes.
- Use a ruler to measure the depth of water in each container. The more precise the measurement, the better your calibration will be. Measurements to the nearest 1/8 of an inch should be adequate.
- Find the average depth of water collected in the containers by adding up the depths and dividing by the number of containers.
- To determine the irrigation rate in inches per hour, multiply the average depth of water times by 4.

When to Irrigate

Irrigation restrictions are in place in Pasco County for all water resources. When irrigating with potable, well or surface water, irrigation is permitted one time a week only. Irrigation with reclaimed water also is allowed once a week only. Regardless of the water source, no irrigation is permitted between 8 a.m. and 6 p.m. Irrigation days are allotted based on the numerical portion of the street address. Please visit our Water Restrictions page for specific information about Pasco County's water use restrictions.



Check irrigation controllers periodically. Power outages and surges may cause your irrigation controller to default to factory settings, resulting in unintended water use.

Sod vs. Landscape

Irrigation systems should be zoned separately for turf and ornamental plants since water requirements differ for the two. This allows for the proper amount of water to be distributed to the plants. Where possible, work to either remove or reduce zones irrigating landscape with varying water needs. This will improve irrigation efficiency and reduce the potential for overwatered plant materials ultimately attracting pests or disease.

Controller Errors

One of the most-frequent causes of irrigation inefficiency is controller programming errors. These types of errors can contribute to overirrigation as well as unexpected water use and associated costs. We recommend that homeowners review their controller settings to look for the following:

- **Memory retention failure**. Some controllers are equipped with a non-volatile memory. Others are equipped with a memory system that operates off either a 9V or a lithium battery. Memory retention prevents the controller from returning the factory default settings after a power surge or power outage, which can lead to unexpected water use and potential costs. Consult your user manual for information about battery location and replacement.

- **Multiple programs in use.** Most modern irrigation controllers are equipped with a multiple programming feature, which allows users to program up to 3 different irrigation patterns. When settings are in place on multiple programs, an error can take place allowing the controller to initiate irrigation for all programs regardless of which program is shown in the display window. For best results, we recommend that only one program be used to avoid unintentional irrigation and potential water costs.

- **Multiple start times.** When setting irrigation start times, it is not necessary to set more than one. If more than one start time is set, the controller will start on the earliest time set, cycle through all zones that are active and then cycle through additional start times. Essentially you will have irrigation run times that are stacking one after the other, until all additional start times have been initiated and completed.

Send water conservation questions to SaveH2O@MyPasco.net

Find us online at PascoCountyUtilities.com

Follow Irrigation Restrictions

Irrigation days are assigned by the last number of your street address as follows:

Potable Irrigation Allowances

- Addresses ending in 0 or 1 = Monday
- Addresses ending in 2 or 3 = Tuesday
- Addresses ending in 4 or 5 = Wednesday
- Addresses ending in 6 or 7 = Thursday
- Addresses ending in 8 or 9 = Friday
- Mixed addresses or locations with no address irrigate on Friday

- **Locations irrigating with well or surface water irrigate on the same schedule in place for potable water irrigation. Irrigation is not permitted between 8 a.m. and 6 p.m.**

- **Reclaimed Irrigation Allowances**

- Addresses ending in 0 or 1 = Monday
- Addresses ending in 2 or 3 = Tuesday
- Addresses ending in 4 or 5 = Wednesday
- Addresses ending in 6 or 7 = Thursday
  Addresses ending in 8 or 9 = Friday
- Mixed addresses or locations with no address irrigate on Friday

- **Irrigation with reclaimed water is permitted between midnight and 8 a.m. only.**

Additional information about water use restrictions in place year around for Pasco County can be found online at bit.ly/PascoWatering

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