Should I Keep Irrigating with all this Rainfall?

By James "Nik" Nikolich, Collier County Urban Mobile Irrigation Lab (MIL) Coordinator, with assistance of Mary Jane Cary, Master Gardener

The best way to know when to irrigate is to record all the rainfall you receive for each day in a month. The cost of a rain gauge is cheap compared to high water costs, and even pumping costs if you're on a well pump system. Our Frugal Gardener says you can re-purpose a clear bottle or jar to assist you with manual rainfall tracking, or purchase a digital rain gauge which tracks daily, weekly, monthly and accumulated rainfall amounts for you at the touch of a button. Digital gauges, like the one in the photo at right, run on batteries, are typically self-emptying, and are widely available for under $ 40. Listen to UF's Gardening in a Minute Rain Gauges podcast for tips on locating and using a rain gauge in your yard.

Whether homemade or digital, a rain gauge assists us in tracking rainfall

What about rain sensors? Florida law requires that all new irrigation systems have them, and they do reduce irrigation costs and system wear. For additional information, go to UF's Gardening in a Minute Rain sensors podcast site. But rain sensors tend to dry out quickly on our hot sunny days, which can mean your system may be irrigating again soon after a nice shower. A better practice to save water, fertilizer, and money is to manually shut off your irrigation system. It's simple: just track your daily rainfall using a rain gauge, and if you receive an inch that week, then do not irrigate with your sprinkler system that week.

Click on image above to view video describing a soil sensor and its operation

I know, easier said than done, especially when you have a winter home in Florida, and spend summers up north. There are other alternatives, such as soil sensors and smart controllers. Soil sensors consist of a moisture sensor (bottom component in image at left), which is set at a specific depth in the lawn, and a controller (top component in image at left) which serves as a switch, calling for or bypassing an irrigation application based on information provided by the soil moisture sensor.

Smart controllers, such as those shown in the image at right, are simple to set for turf and plant types. These controllers use evapotranspiration (ET) rate data: the moisture in the air is measured along with wind and temperatures to calculate a percentage of the run time based on other than the whole amount. These smart controllers are connected to a weather station or to a network which supplies this ET data. Bear in mind that the closer the weather station is to your home site, the more accurate your system will be.

Click on image above to view video explaining ET controllers and their operation

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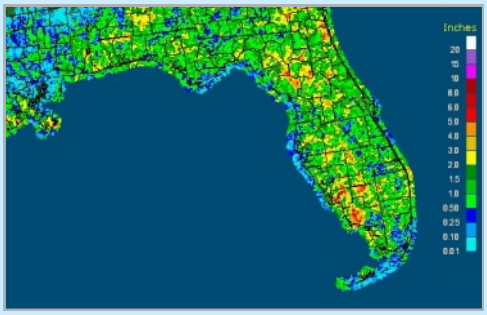

Click on the above map to see rainfall amounts in last 7 days

Leaving irrigation controllers set at three irrigation cycles per week may appear reasonable, but it's not cost effective during the summer, and can lead to increased weeds, pests and diseases in turf and landscape plantings. South Florida usually receives 50 - 60 inches of annual rainfall, with most occurring between May and October. This information should be considered whenever you are setting your weekly irrigation schedule.

The best way to control weeds, pests and diseases is to maintain healthy, vigorous turf and landscape plantings. Irrigation controllers set for three watering cycles per week year-round typically over-water turf, resulting in thin turf with about 30% weed infestation. So you are paying twice: first, you pay for the water to irrigate the weeds, and second, you pay your lawn care professional to eliminate these weeds, and to apply fertilizer to restore turf quality. It's a vicious cycle, and the last thing you want to do is cause pesticide and fertilizer runoff into swales and stormwater retention areas.

Controllers should typically be set to run no more than twice a week. It may be time to improve your system's efficiency instead of increasing run times and adding watering cycles. Landscape zones should also be separate from turf zones, and using different, more effective nozzles for landscape plants may conserve water. Request UF article AE472 Residential Irrigation Maintenance Problems to learn what to do about these issues.

Click on image above to view a narrated presentation on irrigation scheduling

UF's Florida Automated Weather Network (FAWN) also developed this Urban Irrigation Scheduler tool, which provides irrigation system recommendations to homeowners and landscape professionals, based on real-time weather conditions in their zip code. And if your landscaping is well established, you probably don't need to irrigate those zones at all during the summer.

Need your irrigation system checked? Homeowners and community associations can request a *free* system evaluation by the Collier County Soil and Water Conservation District's **Urban Mobile Irrigation Lab (MIL)** by calling **239 455 4100**. MIL technicians provide written evaluations, with recommendations for irrigation system efficiency improvements..

To learn more about identifying and correcting irrigation issues, request UF article AE451 Basic Repairs and Maintenance for Home Irrigation Systems. As Florida grows, simple steps like these will enable us all to enjoy the bounty of natural resources Florida has to offer.

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