ng water while maintaining a healthy landscape

Florida is one of the wettest places in the USA. But it's important to realize that the weather can go from storm to drought conditions at the turf level very rapidly. These rapid changes can make it difficult to maintain a green and healthy turf. We will show you how to easily manage this with minimal effort while lowering your irrigation and landscape maintenance costs.

How to maintain a healthy turf?

Even with our typical annual rainfall, South Florida's weather can quickly change from deluge to drought. That's why conserving water year round is an integral part of managing and protecting South Florida's water supplies today and for our future generations.

Every type of field will have different needs but the same principles will apply to all.

Water is essential to plant growth but also for

conditioning the turf to handle and recover from stress caused by heavy use and harsh environmental conditions.

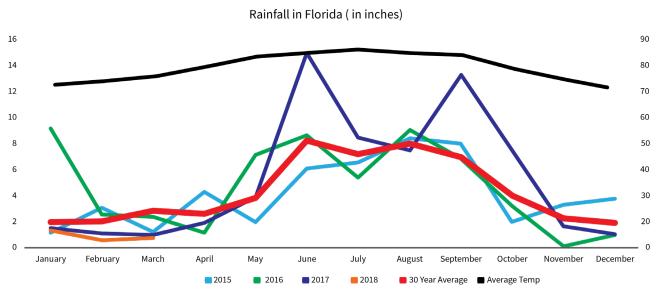
How much water?

Turf should receive about 1" to as much as 2" of water per week during the growing season. A rain gauge is a very inexpensive management tool that can be used to monitor rainfall. →

If rainfall provides ½" you will have to provide the additional amount of water depending on your soil and grass and evapotranspiration amount or ET. When watering an established lawn, it's typically recommended to water until the top 6-8 inches of soil (where most turfgrass roots grow) is wet. Be sure not to overwater your lawn.

Most lawns need 1 inch of water per week, either from rain or watering, to soak the soil 6-8 inches deep. The inch of water can either be applied during a single watering or divided into two 1/2-inch waterings during the week.

Source: Cornell University (http://safesportsfields.cals.cornell.edu/watering) and Scotts.com (https://www.scotts.com/en-us/library/lawn-care-basics/lawnwatering-tips-when-best-time-water-your-lawn)



Data from South Florida Water Management District

The Sunshine State also has incredibly high temperatures even in the winter and spring which are mostly dry seasons. In the graph on top, we can clearly see the months where the rainfall is under 4" for the month which shows the need for supplemental water. At the beginning of 2018, we observe that the rainfall is less than the past few years and the 30yr average.

When to water?

Deep and infrequent watering, once or twice a week, is preferred unless you are in sandy soil that needs more frequent irrigation. Another time when more frequent watering will be necessary is at the time of establishment. At this time it will be critical to keep the seedbed moist to ensure germination and may require daily watering, even several times a day. While it may seem like you can head out to water your lawn anytime during the day, your lawn actually needs more specific care.

Watering in the morning (before 10 a.m.) is the best time for your lawn; it's cooler and winds tend to be calmer so water can soak into the soil and be absorbed by the grass roots before it can

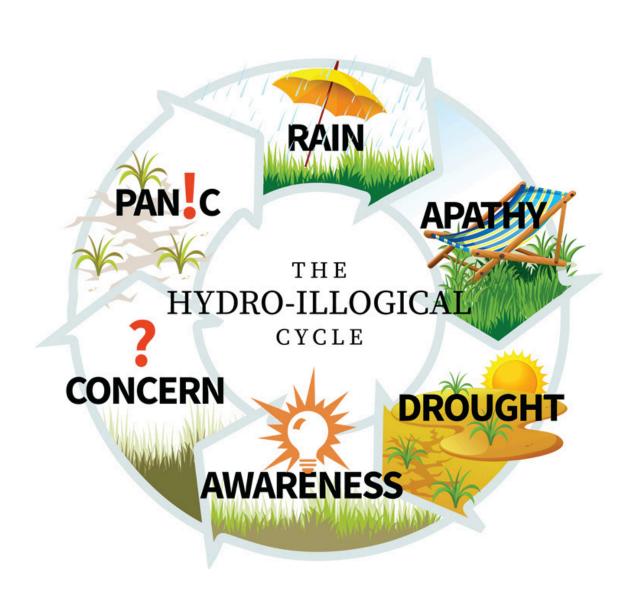
eVaporate. Source: Cornell University (http://safesportsfields.cals.cornell. edu/watering) and Scotts.com (https://www.scotts.com/en-us/library/lawn-care-basics/lawn-watering-tips-when-best-time-water-your-lawn)

Your regional water management district and/ or local governing authority has more restrictive rules of when you are permitted to irrigate. You can find your water management district below: https://floridadep.gov/water-policy/water-policy/ content/water-management-districts#SF

Are you living in the Hydro-Illogical Cycle?

- Does it make sense or is it even realistic to expect your irrigation provider to manage your watering needs to provide optimal turf appearance and health throughout the community without having confirmation of how the irrigation system is doing its job?
- Is doing a "wet check" every 30 days enough to find those field problems that are preventing the turf from getting the water it needs to develop a healthy root system and thrive? (Which then helps drive out weeds and pests lowering those associated costs of services to control those problems.)

While areas that show signs of stress may cry for help, it may be noticed too late and result in costly sod replacement in addition to the needed repairs; treating false assumptions or symptoms (not the root cause) of what caused the problem may prolong the issue; or, it may have recently rained thus hiding the ineffective irrigation taking place.



Hoover makes it easy for you

Flowguard's 24/7/365 monitoring will give your community and service provider the simple, user-friendly tools at one's fingertips to verify that every zone is running at the required flow/pressure needed for proper coverage, watering duration/amount, and can integrate all weather activity into the scheduling so your field gets what it needs when it needs it. Without seeing what the entire system is asking for and validating what it is receiving, it all remains a guessing game.

Let Flowguard® do the job that for you as your irrigation system works throughout the night – when no one can see what is happening.

What is enough and what is too much? Rainfall, turf type, soil type (ex. sandy/loamy/clay), shading, wind, water quality, former land usage (ex. agriculture), and many more all have an impact on your irrigation needs. The ONLY one you have full control of is your irrigation. Simply making sure you are getting the water you need where you need it and when you need it can also overcome challenges created by those other variables. There is no one else in the industry that has the capabilities of making this all happen from the water source to the valve to the sprinkler heads.

Flowguard®, water windows, and daily usage alerts

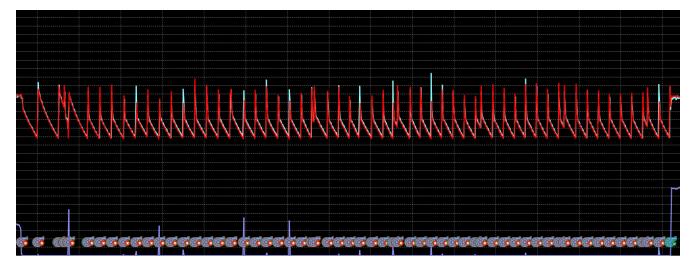
Flowguard® allows the use of water windows and the set-up of daily usage alerts.

Water windows enable you to only have your pump station working when you need it. Without water windows, your pump station is constantly open to the field and works hard to keep it pressurized. This forces the motor to start and stop (called cycling). Cycling reduces dramatically the useful life of a pump station and also waste a lot of water.

Daily usage alerts are made to let you know when too much or too little water was used to water your landscaping. The daily usage alerts are made possible with the water report usage also provided by Flowguard®.

The water usage report provides the data you need to report to the regional management district and offers a quick glimpse of your activity. This report shows the amount of water used during the month. In the images below you can see the before and after using water windows. Using water windows enabled this community to cut more than 50% of their wasteful water usage. (from 172,850 to 82,940 Gallons)

| Recording: Monthly Report Due: Quarterly | | | 3. Recording: Monthly | | |
|---|---------|---------|--------------------------|--------|---------|
| 5. Reported Period: | | | 4. Report Due: Quarterly | | |
| 5. Reported Period. | | | 5. Reported Period: | | |
| 3/1/17 | 21,030 | GALLONS | 3/1/18 | 13,620 | GALLONS |
| 3/2/17 | 47,180 | GALLONS | 3/2/18 | 0 | GALLONS |
| 3/3/17 | 29,380 | GALLONS | 3/3/18 | 0 | GALLONS |
| 3/4/17 | 14,670 | GALLONS | 3/4/18 | 13,200 | GALLONS |
| 3/5/17 | 15,660 | GALLONS | 3/5/18 | 110 | GALLONS |
| 3/6/17 | 2,490 | GALLONS | 3/6/18 | 14,270 | GALLONS |
| 3/7/17 | 2,830 | GALLONS | 3/7/18 | 0 | GALLONS |
| 3/8/17 | 2,220 | GALLONS | 3/8/18 | 13,680 | GALLONS |
| 3/9/17 | 3,730 | GALLONS | 3/9/18 | 0 | GALLONS |
| 3/10/17 | 16,700 | GALLONS | 3/10/18 | 0 | GALLONS |
| 3/11/17 | 16,960 | GALLONS | 3/11/18 | 13,630 | GALLONS |
| | | | 3/12/18 | 110 | GALLONS |
| | | | 3/13/18 | 14,320 | GALLONS |
| TOTAL MONTHLY PUMPAGE | 172,850 | GALLONS | 3/14/18 | 0 | GALLONS |
| 6. Accouting Method: Magnetic Flow Meter | | | TOTAL MONTHLY PUMPAGE | 82,940 | GALLONS |
| Date of last Calibration: Februar | y 2017 | | | | |





With Flowguard®, it is easier to see when an irrigation system is experiencing issues.

In the first image, we can identify that the pump is starting and stopping rapidly (Cycling). This can indicate a leak in the field and the need to set-up water windows to prevent the abusing cycling. In the second image, we can see that there is a constant 9 gallons per minute flow that usually indicates a stuck valve. Both of these issues will have increasing costs if left alone.

Flowguard® can easily identify inconsistencies and help to correct a problem before something suffers and costs you more money in sod replacement and additional repairs.

If you are a Flowguard® customer – Let us show you how to optimize this powerful tool. If you are new to Flowguard®, give our experts a chance to show you more about how this tool pays for itself over and over as your other irrigation/landscaping costs diminish.

Now that you know Flowguard® exists, the question you have to ask now is:

How did you survive without it for so long?

Contact us to learn more 800.548.1548 www.HooverPumping.com

