

Turfgrass Irrigation A Supplementation Between Rains

By: Wayne Slaton, Golf Course Superintendent

As we know here at our golf course, rain is the best thing for any turf grass. Unfortunately, here in Central Texas we seem to get too much or too little rain; therefore, we need irrigation to be supplemented to keep the health of the turf grass and our playing conditions until the next rain. That next rain as we know can sometimes feel like it will never rain again. The drought of 2011 was something to be seen at our golf course. Back then we had dependency on well water and supplementation of some potable water believe it or not. I recall that year only having a rain total of less 13 inches for the Calander year, and it all came at the end of the year to break the drought. We also had record heat with over 100+ degrees for more than 65 consecutive days. We had to carefully ration our irrigation water to just keep our greens alive. We were hand watering only the greens and some of the tees with hoses. In the middle of summer, the fairways looked golden yellow like our typical wintertime conditions. We replaced time typically spent mowing with hand hose watering greens. We were cart path only to protect the stressed fairways, yet also emphasized people safety not to dehydrate in the 100+ degree heat came first, so carts were allowed to drive on drought stressed turf which negatively affected us the next two years to recover turf coverage after the drought. Ok, I was just giving you a history lesson about the challenges of the year of record drought here in 2011. If you are curious about more of the data, here is a good link for you to check out below.

<https://senate.texas.gov/cmtes/82/c510/0110BI-JohnNielsen-Gammon.pdf>

Now after some history, it emphasizes the importance of irrigation. How many times have you seen one of our Golf Course Maintenance (GCM) team or yours truly digging up irrigation lines or sprinklers to repair? Many! My favorite question is, what are you doing? So don't mind our funny replies of "looking for gold", "we are digging for oil", or "looking for Jimmy Hoffa", funny youngsters must google who is Jimmy Hoffa. We might need to laugh because when we're digging a hole fixing an irrigation problem, we kind of need to laugh, because we are too busy to cry.



The entire system consists of irrigation controllers, central computer, water source, pumping stations, good mainlines, irrigation piping systems, isolation shut off valves, sprinklers, field controller boxes, and central timing control irrigation at our golf course. The skilled staff on the GCM team work to resolve issues as soon as they arise. We appreciate you reporting the occasional geyser from a broken irrigation head and noticing pooling that is often sign of an underground break. USGA link below about modern irrigation systems.

<https://www.usga.org/content/usga/home-page/course-care/green-section-record/60/12/golf-course-irrigation-systems---there-s-more-than-meets-the-eye.html>

Any golf course, and definitely our golf course, would be direly affected without water with an impact to all turfgrass, playing conditions and ultimately the bottom line. Our roughs, fairways, tees and greens playability would go into a negative regression that could take up to two to three years to recover back to where it was. None of us want to see our golf course go in that direction. A good water source for irrigation is reclaimed non potable water. It's the best irrigation water source for sustainability for the future of not only our golf course, but other golf courses around us, the

state and the nation. Potable water, and well water sources, could become a thing of the past or will be extremely expensive and have cost effects that are passed down to the customer at the counter which means higher fees for all. In addition to increasing use of non-potable sources such as the reclaimed water, new types of turfgrasses are being used and developed to sustain playability for the future of golf such as the paspalums that are high salt tolerant and can still perform using the reuse water that has high salt content as an irrigation water source. Quality turf that will perform as an excellent playing service for the future with non-potable irrigation water sources is the future of golf. The USGA link below is a great read. I hope this has been informative and hope to see you soon on our golf course.

https://www.usga.org/content/dam/usga/images/course-care/water-resource-center/Water_Conservation_Playbook/12-24GS_15-30-45_Playbook_UsingRecycledWater.pdf