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## TRACKING WATER USE

o you manage your irrigation water supply? Do you know how much water your irrigation system uses? Do you measure your irrigation water use? Do you know how much water your irrigation system uses per cycle, weekly, monthly or annually? Do you believe it's important to know how much water your system is using?

Many superintendents are aware of their water use by default. Most pump stations have a flow meter that is part of the logic process and determines when pumps should turn on and off. The amount of water being pumped is automatically recorded. Of course, if you never reset the totalizer or write down the use you still don't know how much water you're using.

As we all know, water is more and more of an issue in many parts of the country. It is not just a problem in the West, but in many other places, including areas that are considered water rich. In areas of the country, especially in the west, there is no requirement to measure or report how much water a golf course is using. In most eastern states, however, to pull water from the ground or from surface water, a water withdrawal permit is required. These permits are usually for diversions of 100,000 gallons or more on an average daily basis, which an irrigated golf course easily exceeds. Some states base their withdrawal permits on daily maximums or quantities lower than 100,000 gallons per day. For example, Connecticut requires a diversion permit for any use more than 50,000 gallons on any given day. As part of the withdrawal permit the amount of water used each month is reported either on a yearly or quarterly basis. Usually the state provides a form to report your use to them.

If you're not, then start monitoring your water use. Why? At some point you will be required to, no matter where your golf course is located. It's easier to water. There are some, though, most notably the Susquehanna River Basin Commission (SRBC), which impacts golf courses in New York, Pennsylvania and Maryland. Eventually, whether it is in five years or 50 years, there will be a cost associated with using ground and/or surface water in many other areas of the country.

When enacted, water withdrawal permit requirements are

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demonstrate how much water your system has been using over time than it is to have some regulatory authority tell you how much water you can use. Measuring and monitoring your water use is also the responsible thing to do. If you monitor your usage, you can tell when something has gone wrong or something is going wrong. If your water usage jumps up or your water use significantly decreases, it's a sign something in the irrigation system has changed. So monitoring water use can be used as a troubleshooting tool, as well.

Some superintendents believe how much water their irrigation system uses is nobody's business. Others are concerned if they report, their water will be cut or they will be charged for it. Currently, very few places charge for ground or surface similar from state-to-state. In addition to a reporting requirement, they will require the calibration - on a one or two-year basis - of the meter or meters measuring the water to make sure they are reading accurately. On golf courses with multiple water sources, multiple meters will be required. Groundwater wells will need to be individually monitored, and in some extreme cases stream levels - either on the property or coming in and out of the property - will need to be measured with weirs, too. In simple cases, only the amount of water pumped is monitored.

You may not like the idea of measuring and reporting your water use, but the time will come. The better idea you have now of how much water your system uses the better off you'll be in the future. **GCI**