## **IRRIGATION ISSUES**



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## **ARE WE GETTING IT?**

n today's golf business you cannot pick up an industry trade magazine, attend a conference or log into an Internet site without the mention of water and the fact that it is a dwindling/precious resource.

All of the Golf Course Superintendents Association of America (GCSAA) surveys for the last umpteen number of years have identified water as superintendents' No. 1 issue. It's also quickly becoming an issue for a golf course's management as a whole and not just the superintendent.

Last November, for example, the USGA hosted a Water Summit in Dallas to discuss golf's water use. Golf Course Industry itself devotes one whole issue a year just to water issues, specifically how to more effectively and efficiently use this resource. It's obvious that water use on golf courses is an issue. But do we really get it, or are we just giving it lip service?

In 2001, the GCSAA and the Irrigation Association (IA) recognized that water use on golf courses was becoming an issue and jointly developed a seminar called "Golf Irrigation Auditing." This two-day seminar discusses the relationship between the soil and plant and how they influence an irrigation schedule. The participants in the seminar go out to a golf course and audit an existing irrigation system. Auditing involves, among other things, putting out catch cans and measuring sprinkler uniformity and sprinkler spacing and taking pressure readings. The data collected provides with a little math, the lower quarter distribution uniformity (DULQ) and the net precipitation rate (PRNET) of the feature that was audited.

Auditing helps irrigation managers understand the interaction of the irrigation system with the soil, what the turf's water needs are and can provide solutions to why an irrigation system has poor uniformity. A golf course should strive for DULQ's of 0.7 to 0.8. The net precipitation rate provides the actual rate at which the sprinklers apply water and is much more accurate than the precipitation rate that is in your central control database, which is a theoretical calculation. The audit gives immediate visual and quantitative information on an individual feature or on a comparison basis.

The auditing seminar in addition to being

offered at the annual Golf Industry Show was/is available to chapters to be taught locally.

When the seminar was first developed, the classes were very full at each year's GIS show. Some years, there were two separate seminars. Very few GCSAA chapters however offered the seminar and last year the golf irrigation auditing seminar was not offered at GIS. This year (2013) the seminar was offered, but was cancelled due to low enrollment. I, for one, am having a hard time understanding how a seminar specifically designed to show people how to better understand the soil/water/plant relationship and how to irrigate more efficiently is getting so little interest from superintendents.

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Through my consulting work to do many audits, and the results are always eye opening to the superintendent. For example, I recently audited a green that had a precipitation rate of one inch per hour, but was being watered under the thinking that the irrigation applied less than ½ inch per hour. Audits are very educational for both superintendents and their staff and not very time consuming to perform. Once you know how to audit, it can be a valuable tool in a superintendent's tool box.

As time passes and this issue becomes more pressing, you will never have enough knowledge about water. The more you know about how your golf course uses water and how you can better utilize and reduce that consumption, the better off you will be. In the end, it won't matter what type of water you are using.

All water types are under scrutiny, with potable water uses becoming vulnerable in the near future. The more education we can receive the better off you and your golf course will be. Therefore, it would seem that taking an auditing seminar is a good way to increase that knowledge.

So, the bottom line: We hear about all of these water issues, but are we really getting it? **GCI**