The Gator Growls

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South Florida Water Management: FRIEND OR FOE

Last spring Collier County and most of Lee County experienced a drought that resulted in a water shortage. The Coastal Ridge Aquifer in Collier County registered critical salinity readings and golf course superintendents in the affected area, along with everyone else, were subject to Phase I restrictions of South Florida Water Management District's Water Shortage Plan.

Pumpage reports were required weekly and pumps were calibrated for improved accuracy as S.F.W.M.D. did a balancing act between supply and demand.

Although golf course superintendents in the drought-stricken counties responded positively to requests from S.F.W.M.D., there remained a degree of mistrust directed toward the district. Water Management controls and regulates the most essential element of a golf course and superintendents were reluctant to provide information that might adversely affect their livelihood.

Yet, according to Bruce Adams, a Water Use Planning and Management Division Coordinator, there is much that the District can do to help golf course superintendents.

"We appreciate what the golf courses do for the economy and ecology of a community," says Adams, who spends about 30% of his time, more during periods of crisis, working with the golf course industry. "We protect the superintendent's right to water use . . . and can show them the best way to survive a drought."

For an example of how the superintendent's right to use water might be contested, consider the following scenario from an article that appeared in the *West Palm Beach Evening Times* on December 12, 1985.

"Picture parched, clay-cracked earth. Fade out.

Now picture a golf course water sprinkler going full blast during a spring rainstorm.

Those images, or something like them, should turn every red-blooded South Floridian into a fist-banging water conservationist in just a few short years, if regional water managers have their way."

At best, the scenario is a reminder to superintendents that not everyone is a golfer. Particularly during Florida's dry spring season, there are those who cannot appreciate the need for watering a golf course.

At worst, the article is misleading due to the insinuation that regional water managers are going to use golf courses as an example of water waste.

Comments made by Adams indicate the opposite. "The gof course superintendent is a professional. Because budget is a primary concern for superintendents, they must get a maximum quality course for the least cost, and they use less water and fertilizer than homeowners . . . I'd like to see residents manage their lawns the way a superintendent does."

To emphasize his statements, Adams provided the following comparison on an inches-of-water-applied basis between single-family homes and golf courses.

An 18 hole golf course, 100 to 120 acres in size, uses 1¼ to 1¾ inches over the course per week. The average single-family home, about ¼ acre in size, uses 2 to 4 inches on a lawn per week.

Adams says there are about 350 golf courses, approximately 35,000 acres, under the jurisdiction of S.F.W.M.D. He conservatively estimates 50,000 acres of lawns for single-family homes.

Using those figures, single-family households have nearly twice the acreage and use about four times more water than golf courses.

Under normal circumstances, there is enough water for everyone, even though demand on supplies is increasing.

Florida has one of the highest rainfall rates in the world, avaraging 50 to 60 inches per year (equal to some tropical rain forests in South America and Asia). But, according to Adams, 40 to 45 inches are lost each year to evaporation and run-off, leaving about 15 inches to work with.

When droughts do occur, the District depends on accurate, timely information, such as weekly pumpage reports, so it will know how to react to prevent crisis.

Florida's approach to water management is unique. In other states, water rights have to be bought or water is supplied by river systems. Those who are last on the river

system when droughts occur are out of luck.

Water in Florida is owned by the state. The Governor appoints a governing board to each of the five regional Water Management Districts. The Districts are then charged with allocating water according to reasonable and beneficial use.

And although Water Management Districts are agencies of the state, they are not state agencies. They are not run out of Tallahassee, nor do they use state funds. This allows them a certain amount of independence from government.

Golf courses are required to obtain permits from the District which are usually renewed every 10 years. The permits generally contain about 10 special conditions, although there are exceptions. Golf courses located in reduced threshold areas, where water supplies are more critical, may have as many as 30 special conditions on their permits, which are renewable every 5 years.

Those courses using effluent or salt water (reverse osmosis) for irrigation purposes are exempt from the Water Shortage Rules; but the District still plans to interact with them.

This year S.F.W.M.D. will inventory water use to determine what is being used and abused. Adams believes it will help golf course superintendents to, "show people that they really don't use that much water."

Also, in January of this year, Dr. Bill Donovan, a Senior Water Use Specialist, was added to the staff. With a Ph.D. in Agronomy from Ohio State, Dr. Donovan will be working with urban landscape and horticulture and should be helpful to golf course superintendents.

In the future, Adams would like to promote the use of effluent as "part of the solution" to Florida's conservation effort. For those not using effluent, he would like to see more calibration of pumpage. He feels that many superintendents will be surprised at how little water they actually use.

Most important to Adams though, is that golf course superintendents realize that they have a friend in the District. "We need to be able to exchange information and points of view, and improve the communication process."

Hopefully, this spring there won't be any water shortages. But previous droughts occurred in the years 1970-71, 1980-81 and 1985. From those statistics, it would appear that there is a return frequency of five to ten years.

It is inevitable then that sometime in the future, superintendents will have to work closely with S.F.W.M.D. and open lines of communication will be advantageous for all concerned . . . .

It is also important to keep in mind that while the District does have control over the water that golf courses use, it also protects the users rights. And the information that the District provides during periods of crisis can be invaluable. ■