

The Politics of

Water

Should superintendents irrigate for the lush, green look to keep golfers happy? Or should they decrease irrigation for the environment's sake and risk losing their jobs?

BY LARRY AYLWARD, EDITOR

It was an arid 2001 in upstate New York, with a desert-like dry spell that superintendent Rick Slattery won't soon forget. "It was one of the driest years we've had in a long time," says Slattery, superintendent of Locust Hill CC in Rochester, N.Y.

The parched period caused Slattery to experience something he's never encountered before in his more than 30-year career — a freshwater shortage so serious that several area golf courses ran out because irrigation lakes and creeks dried up. "A lot of superintendents were forced to purchase municipal water at huge costs to refill their ponds," Slattery says.

The situation reminded Slattery that fresh water — whether it comes from the ground, a river or a reservoir — is a precious commodity. It also made him realize the United States and the world may be on the verge of a serious potable and freshwater crisis the golf industry can't escape.

The world's pundits predict a dire water crisis in the next five to 20 years. If people don't begin conserving fresh water, they say, their lives will change for the worse. These authorities

aren't just alarmists trying to create melodramatic headlines. Consider:

■ According to a 1998 report from The Johns Hopkins School of Public Health, demand for fresh water is soaring as the population grows and water use per person rises. By 2025, more than 2.8 billion people will live in 48 countries facing water stress or water scarcity. Forty of the countries are either in the Near East and North Africa or in sub-Saharan Africa.

The United States is experiencing freshwater problems, according to the report. Groundwater reserves are being depleted in many areas where the use rate is 25 percent greater than the replenishment rate. In the West, groundwater aquifers are being depleted at even faster rates, including the massive Ogallala aquifer, which lies under parts of six states.

■ In his 1998 book, *Tapped Out: The Coming World Water Crisis and What We Can Do About It*, former U.S. Senator Paul Simon says, "Within a few years, a freshwater crisis of catastrophic proportions will explode on us unless something happens to stop it." In a recent interview with *Golfdom*, Simon said the situation has deteriorated since he wrote the book (see sidebar on page 32). Simon says communities in many so-called "wet" states including Michi-



gan, Nebraska and Minnesota have already experienced water-shortage problems.

■ Ronny Duncan, professor of turf breeding at the University of Georgia, says the freshwater shortage in the United States will get worse in the next five to 10 years, and drinking-water prices will skyrocket.

“Fresh potable water for human consumption will become gold,” Duncan says. “Fresh-water demands are doubling every 20 years. Alternative water will become mandatory for use on turf.”

Duncan’s last statement doesn’t surprise Slattery. “There’s no doubt in my mind that water is going to be the most restricted resource for turfgrass management in the future,” he says, the assuredness evident in his voice.

On the other side of the country in Scottsdale, Ariz., Mark Clark, who’s accustomed to a dry climate year around, seconds Slattery’s opinion. Clark, certified superintendent of Troon

Golf & CC, predicts politicians will debate water issues for years to come. “This will make oil look like nothing,” he says.

It’s no secret that the golf industry uses its share of fresh and potable water. The problem is when superintendents irrigate their courses according to the criteria of the infamous “Augusta Syndrome.” Golfers watch The Masters and other PGA tournaments on TV, see the glorious conditions of the courses and demand similar conditions at their clubs. Hence, some superintendents feel the pressure and cater to golfers’ requests, which often means over-irrigating to keep the course the greenest green, even in the midst of drought.

While superintendents have heard the claims of a potential and critical freshwater shortage, some ignore the issue because of pressure from golfers, greens committees and owners to keep courses in choice condition. These superinten-

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Rick Slattery, superintendent of Locust Hill CC in Rochester, N.Y., believes water will soon be the most restricted resource for turfgrass management.

WILL WALDRON

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dents are worried that if they cut back on water use — and allow their courses to turn brown — they'll be fired for their ineptitude.

While Slattery is sure most superintendents want to use water wisely, he says some won't hesitate to use more than they need to keep their courses as lush and green as their competitors' tracks. They know what will happen if they don't.

"It often comes down to job security," Slattery says. "If you have a family to support, you elect to worry about the water shortage later. If we lose grass, we lose our jobs."

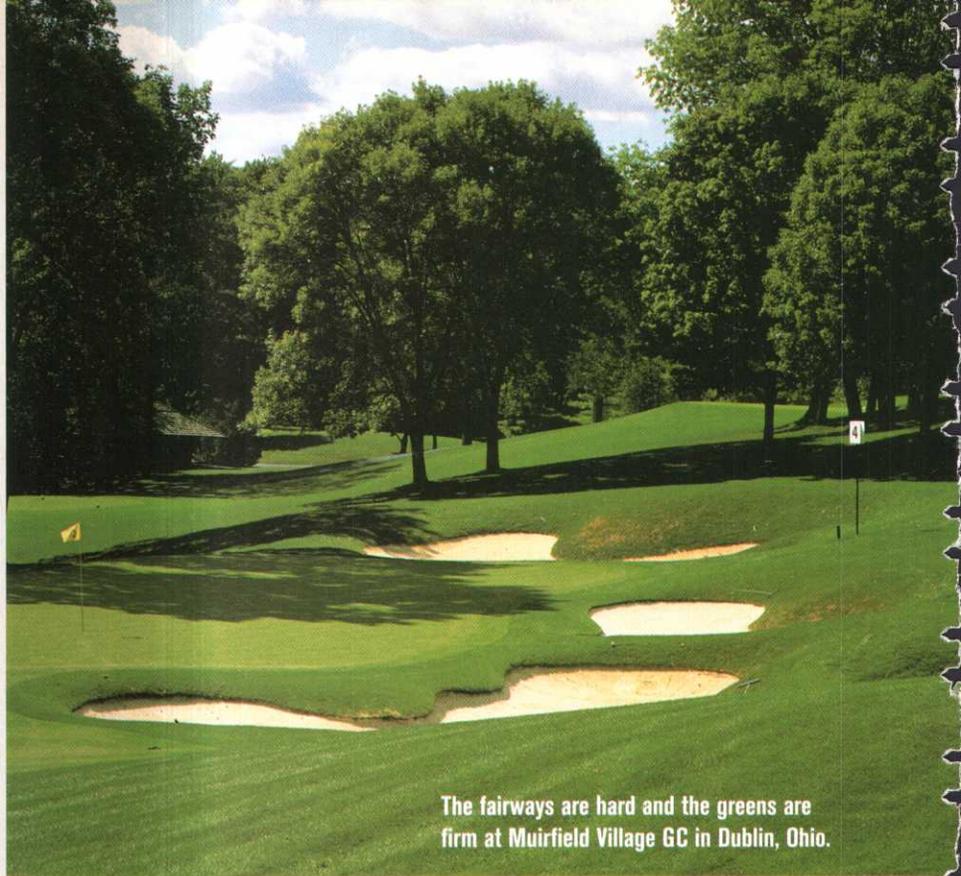
The industry — especially its researchers, educators and inventors — has reacted to the impending water crisis with a plethora of ideas to conserve water, including state-of-the-art irrigation systems, improved guidelines for water reuse and drought-resistant turfgrasses. These components are mainstays in the industry's aim to manage its water use better, but not the answer. Rather, an intangible — golfer education — is the key. Superintendents and others insist golfers must be taught that brown grass in late July is acceptable, especially so golf courses can conserve water. The problem, of course, is getting a golfer to believe that after he's paid \$150 to play a round.

"Have you ever stood over declining turf?" Slattery asks.

Most superintendents know it's not a pretty sight, and they approach the problem with one of two solutions, Slattery says. They either irrigate the turf so it comes back quickly or they let it suffer and recover on its own. Slattery would prefer the latter, but he knows members wouldn't stand for brown turf on his course for any length of time.

That frustrates Slattery because he wants to do the right thing environmentally. "Golfers need to look inward at what their expectations of superintendents have become," Slattery insists.

Duncan says everyone in the golf in-



The fairways are hard and the greens are firm at Muirfield Village GC in Dublin, Ohio.

dustry — from superintendents to scratch golfers — needs to understand that a serious freshwater shortage is inevitable if people don't try to prevent it. Duncan believes frequent, clear communication between superintendents and golfers about superintendents' role in conserving water is the industry's best bet to combat the issue.

Paul Parker, executive vice president of the Center for Resource Management, a Salt Lake City-based environmental stewardship group, says many golfers have forgotten the philosophy that the game is supposed to be played in nature, not a setting that advocates wall-to-wall green. It should be superintendents' goals to educate golfers that not all courses need to be manicured like Augusta National, Parker says.

Former superintendent Ed Etchells, president of North Palm Beach, Fla.-based Golfturf, a division of Golden Bear International, advises superintendents to be frank while educating golfers. Superintendents will only be getting themselves into trouble if they cut back their courses' irrigation cycles to conserve water and don't tell members about it.

"You have to be up-front about it," Etchells says. "You have to tell them you're going to stop watering roughs and

are only going to water greens, tees and fairways."

Duncan says superintendents should take the issue to their golfers and greens committees through literature, such as a one-page pamphlet that explains the golf course is cutting back on irrigation to conserve water for the environment's sake.

"If you're willing to put it in writing and explain it at a level for people to understand, they're much more willing to accept your proposal," Duncan says. "You have to take a proactive stance and communicate your message at a level that members understand."

An outsider might think one of the world's great modern courses would soak up all the water it wants to keep it looking lush and green, but not at Muirfield Village GC in Dublin, Ohio. On a hot and dry August day, superintendent Mike McBride scans the turf, which is medium green with a hint of golden brown — just the way he and his boss Jack Nicklaus like it. McBride says Nicklaus, who designed and built Muirfield, believes golf courses should be kept dry for better playability.

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MIKE KLEMM

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"Jack wants the course as hard as it can be," McBride says. "He wants the fairways to run, and he wants firmness in the greens."

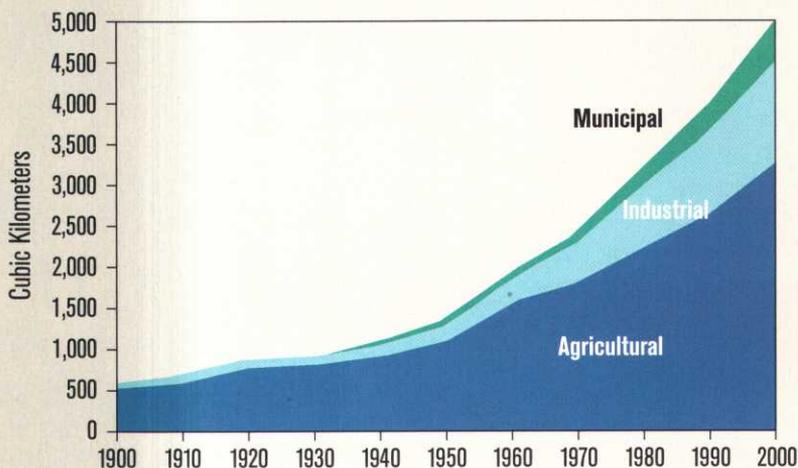
How does McBride convince Muirfield's members that a hard and brown course isn't so bad for golf? Simple: You must take the time to explain it to them, McBride says. "I try to communicate to members what we're trying to do, and what Jack would like this club to be," McBride adds.

McBride achieves that through conversation, and the word eventually spreads among members. It helps that McBride can drop Nicklaus' name when educating members on the benefits of a dry golf course.

"If you're on the dry side, your course is going to play shorter — and members want to get as much roll as they can," McBride says of Nicklaus' playability philosophy.

McBride admits there's a fine line between maintaining a good-looking

Global Annual Water Withdrawal by Sector, 1900-2000



SOURCE: ABRAMOVITZ 1996

course and a track that looks like it's begging for rain.

"You don't want to get to the point where it looks like you're not taking care of the property," McBride says. "You have to time your watering with anticipated rain."

Charlie Fultz, superintendent of the

Country Club of Culpeper in Culpeper, Va., says he would rather have his course a little dry than a little wet. "If that means the turf has to be a little off-color, then so be it," he says.

Like Slattery, however, Fultz feels pressure to keep the course a near-perfect green. He says many superintendents suc-

Simon Says: Golf Courses Need to Do Their Part to Conserve Water

Paul Simon (the former U.S. senator, not Art Garfunkel's singing partner) says he's a tennis player, not a golfer. But Simon, an environmentalist, knows enough about golf to say the industry needs to use less water to green up its golf courses.

Simon, senator from Illinois from 1984 to 1997, knows something about water — specifically an impending freshwater shortage he says will greatly affect the world. In 1998, Simon wrote a book about the subject: *Tapped Out: The Coming World Water Crisis and What We Can Do About It*.

In *Tapped Out*, Simon says the world is heading toward a "grave" water crisis. He also says regional wars could be fought over water. "Ultimately, that would affect golf because it would affect everything," Simon says.



Paul Simon

Simon says he heard criticism from environmental groups and others that the golf industry uses too much water, especially in the water-depleted West. Simon has no proof to back the claims but says, "There's a feeling that we must discourage construction of golf courses in areas where there are water shortages, like the Southwest."

Simon points out that the United States has 4 percent of the world's population and 8 percent of its freshwater supply.

"But it's not evenly distributed here," he adds. "That's why cities like Las Vegas and Phoenix face problems. They're sunny areas where people like to retire and play golf, so you have built-in conflicts there."

Simon says more education on the water crisis is needed, and not just for people in the golf industry. The public —

from the country's leaders to its citizens — needs to take the water shortage seriously. "The sooner we adjust to the problem, the better off we'll be," he adds.

The golf industry must do its part, Simon adds. "The golf industry has to be willing to change its methods of preserving its greenery."

That may involve desalinization, of which Simon is a proponent. Ninety-seven percent of the world's water is seawater and needs to be utilized for consumption, not to mention golf course irrigation, Simon says. Desalinated water is expensive, but its cost is decreasing, Simon contends.

Simon says municipalities have begun to charge more for fresh water to get people to conserve.

"The old market system works," Simon says. "When the price of gas goes up, people drive less."

— Larry Aylward, Editor

cumb to members' demands and "push the limit of how green their courses can be," which is not a healthy approach.

"When a Scotsman sees how green golf is in the United States, he says, 'That's not how golf is supposed to be,'" Fultz relates. "I agree. I don't like that your course is considered to be in awful shape if you have a patch of brown on it."

Fultz says it's time superintendents unite with pros, architects and others in the industry to educate golfers that brown isn't bad and that using less water on courses is more environmentally sound.

"All of us must be involved [in the education process]," Fultz stresses. "Superintendents can't do it by themselves."

No they can't, echoes Troon's Clark, who insists education must start with the PGA Tour. He says golfers' views about green won't be changed until the PGA Tour allows them to see brown turf on television every weekend — and feel good about it.

"The PGA tour *has* to educate," Clark adds. "End of story."

In the near short-term, however, it could be politics and economics that dictate freshwater use, educating golfers in the process. If the country is experiencing widespread drought in a few years, expect the government to flex its muscle. However, don't expect the government to demand cuts of fresh water to grow crops, Clark says. Politicians will summon the "non-essential recreation industry," which includes golf courses, to decrease its freshwater use.

If a fresh and potable water shortage leads to increased prices, which it already has in some areas, many golf courses will be forced to use less water for financial reasons. "If we get in a prolonged recession, you're going to see more superintendents minimize water use because of cost, not because they want to save water," Clark says.

The bottom line, Slattery says, is that more people in the industry need to take the water crisis seriously — now. "Hopefully, we have enough foresight as an industry to tackle this problem," he adds. ■

The Word on Water

Superintendents and others provide their takes on potable and freshwater issues:

"The industry uses too much water. When we see a problem, we throw water at it, instead of trying to delve deeper into it. I think the population boom is going to make us realize even more that there's a water crisis."

— **Charlie Fultz**, superintendent of the Country Club of Culpeper, Culpeper, Va.

"Superintendents are not aware of how tight water restrictions could become."

— **Brian Vinchesi**, president of Irrigation Consulting, Peperell, Mass.

"The industry needs to do everything it can to be more efficient in terms of water use. Some courses are very efficient, but my guess is there are a lot of courses that aren't very efficient."

— **Paul Parker**, executive vice president of the Center for Resource Management, Salt Lake City.

"The whole issue of water — the way you hold it, the way you use it, the way you conserve it — it's all a big-time issue for me."

— **Tim O'Neill**, certified superintendent of CC of Darien (Conn.)

"I'm convinced that [the West] is one place where the golf industry has taken a leadership role [to conserve water]. Superintendents are far more efficient with their water use than average homeowners here."

— **Damian Pascuzzo**, California-based architect and president of the American Society of Golf Course Architects



RAIN BIRD

"We water our dry spots more than we water our wet spots. We just don't turn it on and let it run."

— **Clint Smallridge**, certified superintendent of Banyan GC, West Palm Beach, Fla.

"In some areas, there's more water being used than needs to be used. Other superintendents are conscious of what they're doing and working within good agronomics and environmental awareness."

— **Demie Moore**, director of communications for Aquatrols, Cherry Hills, N.J.

"If I'm a superintendent, I'm going to put down all the water I can because I'm living for today. Am I going to turn off my irrigation system and say I'm conserving water? If I do that, how long do you think I'll keep my job?"

— **George Frye**, water consultant and former superintendent, Kiawah Island, S.C.

"In site-specific situations, the tendency of superintendents is to overwater. [Generally], I think we can grow grass with a lot less water than we're using."

— **Ed Etchells**, president of Golfturf, North Palm Beach, Fla.

"Water scarcity will affect everything from prospects for peace in the Middle East to global food security."

— **Sandra Postel**, director of the Global Water Policy Project in Amherst, Mass., in her 1997 book, *Last Oasis: Facing Water Scarcity*.