COVER STORY

GREEN INDUSTRY MUST GET INVOLVED

QUICK - READ:

- It will be incredibly expensive to harness new supplies of fresh water particularly to fulfill demands created by turfgrass irrigation during droughts—because of newer federal regulations. And our demand for water will double in 20 years.
- Xeriscapers single out the industry as 'the bad guy,' using way too much irrigation water for way too much turfgrass.
- Dr. James Beard says that xeriscapers have spread inaccurate and misleading information about landscapes and lawns, and about the amounts of water they need and use.
- Water-wise councils are separate from water utilities although utilities are represented on them. The green industry carries equal weight.
- Says Dr. Beard: What's wrong with tan or brown turf during droughts if one chooses not to irrigate or the water is not available?

• Somewhere in the United States it hasn't rained. The calloused hands of a water utility worker tighten the valves on the green industry's access to public water.

Whether you're a grower, landscape contractor, golf course superintendent or lawn care company owner, your access to public water (more likely that of your customers) could be restricted. The utility could turn off the spigot.

That's why it's vital that you understand how your services fit into the local water supply picture, and that you participate in community water-use decisions. And it must be done before a drought and its resulting water restrictions.



Advocates of xeriscaping have been accused of singling out the green industry as 'the bad guy,' the water waster.

Begin by learning two terms: "Xeriscape" (a trademarked term) and "water-wise." They crop up in discussions surrounding the politics of water.

Xeriscape has been around since 1981, starting in the arid Southwest. It's now recognized nationally, even in Florida where it's law for all water utilities. Texas, too, passed Xeriscape legislation with, sources say, little input from the green industry. The U.S. EPA in 1993, in fact, published a brochure describing and advocating it.

Xeriscape focuses almost exclusively on water-conserving landscapes. This makes some in the green industry uneasy. They say it singles out the green industry as "the bad guy," the water waster. Specifically, they say it puts too much blame on turfgrass.

"The idea of (water) conservation landscaping wasn't new by any means," says Ken Ball, conservation specialist with Denver Water. "What was new was calling it by some catchy, creative name and putting together a systematic approach to getting people involved in the process.

"There seems to be more resistance to the word from some professionals than from the lay person. Actually, it doesn't matter what you call it. Xeriscape represents sound horticultural principles." Some people in the turfgrass industry instead called it "zeroscape," implying that it advocated zero irrigation of landscapes. Supporters insist it doesn't. Nor did it ever. Even so, to some turfgrass managers it still means cacti, scrub and rocks—landscapes with little or no turfgrass.

The wrong info—Some turfgrass experts still see it as a threat.

Dr. James Beard, an influential turfgrass expert, maintains that Xeriscape supporters have spread inaccurate and misleading information about landscapes and lawns, and about the amounts of water they need and use. This, he has claimed at several turfgrass conferences, leads to unwise and unfair regulations limiting the amount of grassed property owners can have. Or it leads to rulings restricting turfgrass irrigation.

"Statements have been made, such as all turfgrasses are higher water users than trees and shrubs," Beard said at the 1993 International Turfgrass Conference in Palm Beach, Fla. "There is no scientific data available to support this statement. The few comparative water use studies that are available indicate that trees and shrubs are higher water users than turfgrasses."

Xeriscape proponents confuse the public further, claimed Beard, by providing lists of

IN WATER-USE DECISIONS

plants that may be drought resistant but aren't necessarily low water users. Mechanisms for controlling a plant's wateruse rate and drought resistance are entirely different, he stressed.

"I'm not against trees. I'm just saying, if you're going to be legislating the use of plant materials, let's base it on sound scientific fact," said Beard.

Xeriscape supporters, indeed, have redefined their views on turfgrass, now allowing that it has a place in water-conserving landscapes. Even so, they believe that way too much turfgrass is receiving way too much irrigation water, specifically potable water.

Dollars and sense—Both sides argue about the total amount of water used in turfgrass irrigation. But just about everyone concedes that it's usually drawn from a utility when demand for water generally is greatest—when it's hot and dry.

This creates unacceptable expense, explains Fox McCarthy, who was hired by Cobb County-Marietta (Ga.) Water Authority in 1989 to help the green industry develop water-conserving practices.

During the 1988 drought in Atlanta, for instance, McCarthy's utility was fined \$75,000 for exceeding its permit limits during peak water use. Much of this peak use resulted from turfgrass watering, which worries water utility officials. They maintain that harnessing new supplies of fresh water, particularly to fulfill demands created by turfgrass irrigation during droughts, will be incredibly expensive as a result of newer federal regulations. give us up to 15 percent of our demand in the future," says McCarthy. "Demographic studies tell us our demand for water is going to double in 20 years."

Part of the answer is evident, says McCarthy: conservation.

A larger effort—Enter the concept of "water-wise" that seems to be more acceptable to segments of the green industry than Xeriscape. That's because water-wise encompasses almost every aspect of water conservation, the inside of homes and businesses as well as lawns/landscapes. Xeriscape is often just one part of this larger conservation effort.

The Georgia Water Wise Council was started in 1989, a year after the drought hammered Atlanta's green industry, causing millions of dollars in losses because of irrigation restrictions.

"The green industry really took a hit here in Atlanta," recalls McCarthy, who saw that the water utilities and the green industry didn't trust each other. Over a period of months that changed though, he explains particularly after the formation of Georgia Water Wise Council and subsequent face-toface meetings between utilities and industry

Councils like this are separate from water utilities, although utilities and the green industry carry equal weight on them. In fact, representatives from utilities and the green industry alternate as presidents of the council.

"The utilities and the green industry professionals are getting to know each other, and that's why it's working," claims McCarthy. The Georgia Water Wise Council spawned a similar council in Florida this past year. Another in Texas is being considered.

Changing perceptions—Although utilities and the green industry (usually turfgrass) strongly disagree on the appropriateness of turfgrass irrigation, both realize the greater problem lies with water misuse.

"This is really a people issue," says Dr. Doug Welsh, a cooperative extension agent in Texas and a longtime Xeriscape proponent. "What we have to do is change people's attitudes about water. We did it 20 years ago with 'Don't Be a Litterbug,' and now people don't throw trash on the highways."

Welsh believes that the industry should educate customers to accept periods when their turfgrass is brown and dormant. "You can have a nice lawn in most of the East and never have to irrigate," he says, "if you can perhaps put up with a couple weeks of brown."

Beard, in fact, has made similar statements. "What's wrong with tan or brown turf during droughts if one chooses not to irrigate or the water is not available, rather than the alternative of getting rid of the turf and planting trees?" he said at the Ohio Turfgrass Conference in 1992.

Proponents and skeptics of Xeriscape, indeed, agree that turfgrass itself isn't necessarily a water waster, but people sometimes are.

"When an area gets plenty of rain, it's not the turf's fault that people are watering. It's people's fault," claims Welsh.

"Basically, in most situations it's man who's wasting the water through improper irrigation practices and landscape design," said Beard at Ohio Turf.

"The publicity and legislation devoted to water conservation through reductions in turfed areas is extraordinarily out of proportion to the much more significant water waste in metropolitan water districts," he added.

And, in spite of fundamental differences of purpose, both heartily agree that the green industry—specifically turfgrass—*must* become involved in local water-use decision making.

-Ron Hall

"If we can cut off those peaks, that would

Bruce Adams

is the water con-

servation coordi-

THE SEVEN XERISCAPE GUIDELINES

fit as well in south Florida as they do in the

nator for south Florida. This might seem ridiculous. Few areas in the U.S. receive more than south Florida's average of 55 inches of rain annually. Few are as lush and green. After all, much of the Everglades is in the South Florida Water Management District (SFWMD).

Adams, though, insists that the seven principles of Xeriscape

arid Southwest.

"Sure, we have 50-plus inches of rain, but we also have about 45 inches of evapotranspiration each year too," says Adams. Most of the rain falls in the summer, not in the winter when tourists

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return and water demand balloons. Also, some of the precipitation arrives in 3- to 50-inch cloudbursts. The rain soaks well below Florida's sandy soils, or cascades off roofs and pavement to be collected in ditches and whisked to the ocean via canals.

The SFWMD, in fact, attempts an incredible balancing act. Using sophisticated weather-monitoring equipment, SFWMD specialists electronically manipulate a spiderweb matrix of canals and gates to move excess rain from communities. Yet it must also maintain groundwater levels to keep the Atlantic Ocean's salt water from invading aquifers.

This is vital because 98 percent of south Florida's fresh water supply comes from groundwater.

In truth, south Florida cannot capture and retain its abundant rain so that when the area receives less 10 or 12 inches below its normal annual amount—as it did in 1989 and 1990—shortages develop. This leads to irrigation restrictions for landscapes and turfgrass.

But, maintains Adams, not all lawns or landscapes suffer similarly because of the restrictions.

"Any person who practices Xeriscape landscaping and has an efficient irrigation system, and has segregated their plants by water needs, and maintained them properly—these people laugh at the restrictions," he says. "They're barely bothered."

Taking the lead from the SFWMD, other water districts in Florida have begun promoting Xeriscape through the Florida Water Wise Program.

Adams, past president of the now-defunct Xeriscape Council and an instructor at Florida Atlantic University on water-conserving landscapes and the opportunities they provide the green

1) Plan your landscape. Understand the nature of the land and its water demands.

2) Improve the soil. Build up sandy soil with compost and maintain it by periodically returning organic matter.

3) Irrigate efficiently. Irrigate turf areas separately from other plantings. Group plantings according to similar water needs.

4) Use turf wisely. Locate turf only in areas where it provides functional benefits.

5) Use drought-tolerant plants. Considering exposure to the sun, choose the right plant for the right place in your yard.

6) Use mulches. Mulches limit weed growth and retain moisture.

7) Maintain your landscape properly. Proper mowing, pruning and weeding, limited fertilization, pest control and irrigation system use save water.

-R.H.

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