

High temperatures, drought focus more attention on water-guzzling landscapes

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Tony Delphia, branch manager at Schultz Industries, with the ET controller (short for evapotranspiration-based irrigation controllers) his company installed at the Offices on the Fairway in Englewood.

Denver's record-breaking heat wave this summer brought up an issue that's been bubbling up among commercial real estate owners and homeowner associations for at least 10 years: What's the best way to save money by saving water, while maintaining an attractive landscape?

Landscape company officials, property managers and the Associated Landscape Contractors of Colorado (ALCC) say solutions range from complete turf removal, which then is replaced by Xeriscaped landscapes, to taking advantage of recent technology that enables "smart" irrigation, or a blend.

"At least 10 years ago, after Colorado's last big drought, public sentiment and attitudes have shifted and changed about how a landscape should look," said Kristen Fefes, ALCC executive director.

As possible solutions, landscape contractors presented examples of a large turf-removal project and a commercial real estate property that kept the grass, but installed ET controllers, short for evapotranspiration-based irrigation controllers.

Raytheon project

In 2007, Raytheon officials reached out to JBK Landscaping LLC to help solve a problem it was having with a campus building's landscaping swallowing too much water.

"It was a grassy area mainly east and south-facing with a hillside, sloping terrain," said [Marvin Reichenau](#), a senior electrical engineer for Raytheon who tracks its electricity, water and utility usage. "We were having to dump water on it all the time in the summer, the irrigation months, and it seemed like a waste. We were having some dry years, and people were being told to conserve water, and here Raytheon was just irrigating these areas for pretty green grass to look at — it didn't make sense to us."

So JBK removed almost two acres of grass, said [Mark Kramer](#), JBK president and owner, and installed Xeriscaping at the building site on the company's Aurora campus, 16800 E. Centretch Parkway.

Using a blend of rock ground cover and water-saving plants — such as juniper and evergreen trees — and pampas grasses, which are tall to "show a lot of motion" and use less water, JBK completely overhauled the landscape, Kramer said.

Project costs covering roughly 45,000 square feet were about \$150,000 (the industry standard for turf removal, and Xeriscape installation is about \$3 per square foot).

But the water savings were substantial, Reichenau said. In 2011, the new landscaping saved an estimated 1.8 million gallons of water, and the company has been averaging savings of about \$12,000 to \$20,000 in watering costs per year.

But Reichenau insists the company's motivation wasn't just to save money: "We wanted to be good citizens, too," he said.

Kramer, a licensed landscape architect, said Xeriscape projects must be done right, or risk harming property values.

"If you just throw in a bunch of rock, that just creates a heat island," he said, noting industry insiders call that practice "zero-scaping."

"There's no way, ecologically, that's the solution."

JBK earned ALCC's "Excellence Award" in 2009 for the project, and the Denver Water Board also recognized the project with a cash award for its conservation efforts, Kramer said.

"Corporate culture is trying to be green and save where they can," Kramer said.

Offices on the Fairway project

The six-building office complex Offices on the Fairway, near Lincoln and E-470, in recent years upgraded its irrigation system to include the ET controllers, which sense the amount of moisture in the soil and tracks weather data from an area weather station to deliver only the amount of water needed.

"In 2007 we got a huge fine from Meridian over our water usage," said [Wendy Cromwell](#), property manager with Inverness Properties, which oversees the complex. "Our allocation is 888,000 gallons, and we were using about 2.5 times that."

"Their first-year reduction in consumption was close to 40 percent," said [Tony Delphia](#), branch manager with Schultz Industries Inc., based in Golden.

Delphia said the ET controllers are "the science of replacing moisture lost to the atmosphere" and about half the company's clients have switched to them based on Schultz's recommendation.

"We went to all our property managers and HOAs and recommended they all go to ET controllers," he said.

The controllers cost about \$2,500 each; Delphia said a two- to three-acre property uses about 19 controllers. There's also monthly subscription costs for monitoring and regular reports from the system.

"My experience is that conversion to the ET control always improves the condition of the landscape," he said.

Cromwell said they installed an inferior system at first — against Delphia's recommendation — that malfunctioned when communicating with the weather station and watered too much, leading to more fines.

It had to be replaced last year, and the property's new system is web-based. Inverness Properties also installed rain sensors.

"It made more sense to go with the ET controllers as opposed to modifying the whole system," Cromwell said.

Of course, it's been tough to gauge water savings this year, as everyone's had to water more to mitigate the effects of the heat and lack of rain.

"They really do have to look at the long-term cost benefit of saving water and saving money," ALCC's Fefes said. "But that capital outlay can be a tough sell sometimes. It's not like new windows or paint. It's not pretty or sexy; it's an underground irrigation improvement."

She said improvements can be phased in, as opposed to doing the entire grounds at once, and warned that "low prices don't always mean quality." "This really is one of the most important things out there," Fefes said. "Especially in Colorado, where we will deal with water shortage and water quality forever."