

# a greener approach to green lawns

By Caitlin Cunningham

**P**roperty owners often pride themselves on a lush lawn and thriving plants. The average household, however, exceeds the amount of water needed to maintain it by 8,000 gal per month—the equivalent of turning a faucet wide open for more than half a day.



*Installing smart irrigation technology to conserve water, cut costs*

Over-irrigation sends water and electricity bills skyrocketing, costing many system owners hundreds of extra dollars annually. It is also detrimental to landscape health, as excessively watered plants become more susceptible to disease and pest infestation. Furthermore, the heavy water use generates increased runoff loads that negatively impact surface water quality.

The water industry has come to recognize and act on the issues surrounding irrigation system design and usage. Just a 10% improvement in efficiency, for instance, could conserve enough water to double the global amount available for drinking.

Toward this end, recent advances in irrigation methods and technologies have made it possible for water professionals to help residents, business owners and communities achieve verdant landscaping in a more environmentally friendly and affordable manner.

## Get Smart

“How we consume water will ultimately determine the repercussions felt by later generations,” said Andrew Lindquist, director of education for Minneapolis-based turf irrigation distributor HYDROLogic. “Some of the easiest water conservation solutions are overlooked, and people can easily change that in their own backyard.”

“Smart” irrigation systems, which have been used for years on large plots of land such as golf courses and parks, are becoming one such mainstream backyard solution. Rather than requiring manual adjustments or operating on a set schedule, these systems gather a combination of weather, site and soil moisture data to determine an appropriate basis for watering. Oversaturated soil, slow-to-absorb slopes and impervious driveways and sidewalks, after all, do not need the moisture that dry patches of a lawn and sunny flowerbeds might.

The cost of a smart system varies based on its number of zones and special features, but most begin at a few hundred dollars. Some models utilizing weather station data require additional monthly or annual transmission payments.

## Applications

Retired Air Force Brigadier General and Bellevue, Neb., homeowner Regis Urschler recently went “green” without sacrificing his green lawn. A contractor working on Urschler’s home noted a French drain collecting rainwater from downspouts and, recognizing the owner’s interest in water management, called Chad Rowley, account advisor for HYDROLogic. Rowley met with Urschler to discuss the new Hc<sup>3</sup> Smart System, a water-conserving irrigation solution, and Urschler’s property became the site of the first-ever system installation in spring 2008.

Urschler had learned firsthand the importance of water, having served Air Force duty in Okinawa, Japan, where water would be turned on for 12 hours then off for 36 more. “Right now everyone is upset by the soaring cost of oil and its impact on other prices,” he said. “But what many don’t realize is how much money they waste on water. It’s a precious resource that’s often overused and won’t be as readily available if we don’t conserve now.”

The smart irrigation technology, custom-engineered to most efficiently water each installation site, promises adequate water distribution via strategic placement and timing.

“Customization is a key part of installing this irrigation system,” said Nick Eby, a certified Hc<sup>3</sup> Smart System contractor with Pioneer Underground. “We align high-tech sensors that take into account property variables such as slopes, shaded areas and concrete.”

The system’s weather pattern data-gathering technology sets it apart from timed devices that water on a set schedule, and a strict installation protocol and independent audit further distinguish it from do-it-yourself alternatives in terms of effectiveness and cost, according to the manufacturer. Ultimately, the new offering uses up to 40% less water than a traditional irrigation system.

On a larger scale, the city of O’Fallon, Mo., also recently installed the system to improve its water efficiency and heighten public awareness. HYDROLogic certified conservation contractors built the system during the week of July 7.

“Water conservation is a priority on our green ‘to do’ list,” said O’Fallon Mayor Donna Morrow. “Our city is committed to bettering the environment, and installing this efficient irrigation system speaks volumes about that commitment right here in our own backyard. ... This project sends a strong message that needs to be heard on a local, state and national level.” *wqp*

**Caitlin Cunningham is associate editor for Water Quality Products. Cunningham can be reached at 847.391.1025 or by e-mail at ccunningham@sgcmail.com.**

LearnMore! For more information related to this article, visit the web at [www.wqpmag.com/lm.cfm/wq090806](http://www.wqpmag.com/lm.cfm/wq090806)

For more information on this subject, write in 1016 on the reader service card.