

# Smart Irrigation: The New Law of the Land

BY SUZANNE JOHNSON

Not so long ago, homeowners felt forced to choose between a beautiful landscape to accompany their beautiful home or lowering their water bill. With advances in irrigation technology, they can have both.

And just as has happened with solar technologies, incentives in the form of rebates and government mandates are making the move to more energy efficient methods of irrigation all but irresistible.

California is commonly considered the bellwether state when it comes to energy saving legislation, but in Texas a bill has been introduced requiring smart controllers statewide for all new construction. If signed into law, HB 2299 would take effect a full two years before California's AB 1881, which starting in 2010 will mandate that every controller sold in the state must be a smart controller.

"In 2005, there were no mandates," mused Steve Snow, vice president of business development for ET Water Systems LLC. "Now I know of at least nine, either water agencies or communities, mandating smart controllers. And more are coming all the time." Long before the state law kicks in, Snow expects a large number of communities will have enacted their own smart controller requirements.

## Rebates & runoff

Top homebuilders are quickly getting on board and working with smart irrigation controller manufacturers such as ET Water. Builders have three good reasons for doing so, Snow says: It's a smart way to market their homes as environmentally friendly; it can ease the permitting and planning process, especially in communities where potential water shortages are an issue; and it's becoming a mandate in many places.

In Southern California, the Metropolitan Water District, a master water wholesaler that sells to all the retail water agencies in that area, provides rebates of \$80 for a production home and \$200 for a model home, says Chris Manchuck, vice president of business development for HydroPoint Data Systems Inc. There are also rebates for other water-conservation measures that builders may choose to include as a standard package with their homes. For example, builders who specify landscaping that minimizes turf in favor of native plants can receive an incentive of 80 cents per square foot.

The other thing is overwatering and the problems this can create for the builder, including damage to the hardscaping, mold, mildew, runoff to the watershed and the ensuing liability it can cause. Smart controllers give the builder a way to avoid all that.

## Just enough water

ET (evapotranspiration) is a term widely encountered when talking about smart controllers. It's influenced by temperature, wind, solar radiation and humidity, which together determine how much water is leaving the landscape and needs to be replaced by the irrigation controller.

ET Water is popular among consumers because it is a Web-based product, Snow says. That Web-centricity makes it possible for ET Water's smart controller to integrate with other technologies that enhance landscape health. For example, the company has modified its software and irrigation controllers to allow the application of fertilizers or other soil amendments through an EZ-FLO dispenser while the landscape is being watered.

ET Water also has a partnership with Walla Walla Sprinkler Co., maker of MP Rotators. The MP Rotator multistream rotor is much more efficient in the way it sprinkles a lawn, Snow says, resulting in 20 percent potential savings on water by ensuring higher distribution uniformity.

"Homeowners can integrate all these water-saving devices and control them through their computer," Snow says. With rebates already under way for MP Rotators in some water districts and talk of rebates for more efficient fertilization technologies, Snow says, "You can hit a home run with water savings."

Todd Magatagan, whose Houston-based company ATM Landscape Management installs irrigation systems primarily in East Texas, says the first obligation of the irrigator is to ask the builder about the uses of the landscape and the plant requirements—something that often doesn't occur.

Like California, Nevada and other states in the Western region, Texas is beginning to talk about ordinances, but Magatagan points out that the average homeowner expects an aesthetically pleasing environment around her home. That includes grass, trees and shrubs, which through ET actually have a cooling effect on structures. "If you don't plant grass and trees around the house [in an attempt] to save water, your utility bill is going to skyrocket," he says.

Magatagan agrees that ET-based controllers can save water, but they need to be installed to ensure distribution of uniformity. When sprinkler heads are spaced too far apart, the result is inadequate coverage, leading to dry spots.

"My advice to the builder is to require their irrigator not to exceed the manufacturer's minimum head spacing, zone appropriately to the microclimate and make sure they require the appropriate backflow device for their area," Magatagan says. In most places, the backflow device is required to protect the potable water supply.



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