Rain sensors can solve overwatering problems and save water and money

With automatic timers on most underground sprinkler systems, it is easy to forget to turn off those systems during rainstorms or extended periods of rainy weather.

However, all too often sprinkler systems in The Woodlands are running full force while it is raining. Water is wasted and lawns are over-watered.

Officials with The Woodlands Joint Powers Agency, the entity that provides management services for all 11 water districts in The Woodlands, say over-watering is the most frequent mistake The Woodlands' homeowners make in lawn care.

Too much water promotes a shallow root system, which causes grass and plants to become vulnerable to hot/dry weather.

They say the demand for water in The Woodlands is increasing. Water use during the summer is three to eight times that of winter use. The Woodlands water system is designed to meet peak demand, and much of the water is wasted. If a family of four uses more than 40,000 gallons of water during a 60-day summer billing period (with average rainfall), they are irrigating too much.

Residents and business owners in The Woodlands are urged to install rain sensors, or rain shut-off devices, on automatic sprinkler systems.

Sensors detect moisture/rainfall and automatically shut off when the trigger amount is met, said Mike Mooney, operations manager for The Woodlands Joint Powers Agency (WJPA). They are important because they save water, and in turn, save residents money.

Mooney said the cost savings could be substantial during a wet year. "Our goal is to have all resident and commercial businesses install a rain shut-off device," said Mooney. "Basically, we think the rain sensors are just the prudent thing to do. The aquifer (that supplies The Woodlands with water) is being over-pumped, and whether the device saves 10 gallons or 10,000 gallons we think it is worth it."

The problem with over-watering

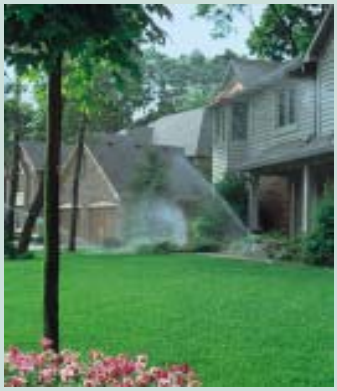
Lawns irrigated three or four times a week, or everyday, cause grasses and plants to develop shallow root systems that cannot survive without frequent watering. During drought conditions, or in hot weather, these "addicted" plants and grasses wilt quickly. And, if grass is cut to a height of one or two inches, the problem is compounded because the top few inches of soil dries out quickly in hot weather, and plants and grasses are further starved for water.

The solution

The easiest way to correct the problem caused by over-watering is to gradually reduce the frequency of watering. With less frequent watering, root systems push deeper into the soil looking for water.

The goal is to irrigate deeply once per week applying approximately 1" of water. Using the cycle/soak method on the irrigation controller, water will penetrate 4 to 6 inches into the soil rather than running into the street.

The WJPA has a list of approved rain sensor devices and approved installation contractors.



What is a rain sensor?

A rain sensor is a small device wired to the common line on an automatic sprinkler system designed to override the automatic watering cycle when a certain level of rainfall is detected. The shut-off level is usually set at 1/4-inch of rain.

The sensors do not affect the sprinkler system's overall timing device. Once the collection dish dries out, the automatic timer kicks in.

The three primary benefits of installing a rain sensor are:

- Cost savings -- the sprinkler system shuts off when adequate rainfall is received, thus saving money on water bills.
- System savings-- there is less wear and tear on the sprinkler system because it only runs when necessary.
- Lawn protection -- reduces potential damage to the lawn caused by over-watering.

For more information, contact The Woodlands Joint Powers Agency at 281-367-1271 or go to www.wjpa.org