

## DIVISION OF AGRICULTURAL SCIENCES AND NATURAL RESOURCES

## The benefits of a smart irrigation system

Oftentimes when we think about technology, computers, smartphones, smartwatches or video games are what come to mind. Some people don't realize how technology can be involved when irrigating a home landscape, especially if they irrigate with a sprinkler hooked to a water hose.

Technology, which is the application of scientific knowledge to the practical aims of human life, can play a big role in home landscape irrigation. The irrigation industry is experiencing tremendous growth in the area of technology development. Consumers are finding more irrigation products that use advanced sensors, Wi-Fi and app-based capability to keep the landscape looking its best. As we celebrate Smart Irrigation Month during July, it's a good time to look at the benefits of a smart irrigation system.

While there's nothing wrong with the tried-and-true sprinkler attached to a water hose, a smart irrigation system makes the job much easier and will conserve water. A smart irrigation system irrigates the landscape efficiently using technology. Sensors "talk" to the system using real-time weather data so it knows precisely how much water to apply.

By investing in smart irrigation technologies, homeowners can be sure to save water, money and time in caring for their landscapes.

Consider these three irrigation technologies:

**Weather-based controller**: These controllers adjust the irrigation schedule based on local weather conditions. This category has a wide range of products featuring various weather inputs and landscape-specific adjustment factors. When programmed correctly, these controllers self-adjust and require little intervention.

**Sensor-based controller**: These controllers rely on soil moisture sensors placed below ground in the root zones of the landscape to determine if and for how long to water. Systems with a sensor-based controller can be set to run based on soil moisture and the specific water needs of the plants in the landscape.

**Rain/freeze sensors**: Irrigating a landscape while it's raining or you're experiencing freezing conditions wastes a lot of water. Adding rain/freeze sensors to an irrigation system will stop irrigation when temperatures approach freezing. This will help prevent damage to the plants. These devices can help reduce overall water usage and extend the life of the irrigation system.