City of SACRAMENTO
Department of Utilities

SMART IRRIGATION CONTROLLERS – FREQUENTLY ASKED QUESTONS

There are many questions about smart irrigation controllers (also known as sprinkler timers): how they work, where to find them and their cost, plus others. If you have a question that is not answered, email us at riverfriendly@cityofsacramento.org

What is a "smart" irrigation controller?

As defined by the Environmental Protection Agency's (EPA) WaterSense[1], smart irrigation controllers act like a thermostat for your sprinkler system to automatically tailor watering schedules and run times on sprinklers or drip systems. Smart controllers either are sensor based and use real-time measurements using weather information and site conditions such as soil type, plant type, and slope, or are signal based and regularly receive the data from local weather stations via the web.

How do they work?[2]

There are two basic types of smart irrigation controllers: weather-based[3] and soil-moisture based. Currently, only weather-based irrigation controllers are certified by the EPA WaterSense program and are eligible for a rebate. Soil-moisture based irrigation controllers are expected to be added to the EPA list in 2018.

Can I program smart controller to run every day?

Yes, but the real question is: why would you? Smart controllers help tailor watering schedules to actual site conditions and meet plants' needs. In addition, deeper and less frequent irrigation is recommended for your lawns and plants to encourage deep root growth and to avoid overwatering. Overwatering is the most common cause of plant deaths. Smart controllers will have frequent and longer run times during heat waves or dry conditions. However, if programmed correctly, smart controllers will help you maintain a healthy landscape by providing the right amount of water without watering every day.

Do I need to purchase a new controller to make it "smart"?

The short answer is that it really depends upon what you have and whether the manufacturer of that controller has an add-on or plug-in device that will work with that controller. The older the controller, the less likely you can use an add-on or plug-in device. Some controllers can become smart by purchasing the appropriate add-on or plug-in device. Consult the list online and research whether the device is compatible with your irrigation controller.

- [1] **EPA Water Sense** – see their Controller definition and their mini report (from their webpage, www.epa.gov/watersense/irrigation-controllers)
- [2] Smart Irrigation Controllers: What Makes an Irrigation Controller Smart? University of Florida Institute of Food and Agricultural Sciences (IFAS), 2015. Michael D. Dukes
- [3] Alliance for Water Efficiency: http://www.allianceforwaterefficiency.org/Smart_Irrigation_Controllers_Introduction.aspx

Can I program my smart controller to run during the day?

No. If you have a EPA WaterSense certified weather based Smart Controller, DOU staff will need to verify that it is scheduled and operating correctly. Once vetted and approved by DOU staff, you may water with a smart controller any day of the week, but before 10:00 a.m. and after 7:00 p.m.

Can I manually operate smart controller? Can it be overridden?

Yes. Most smart controllers have a test feature that will allow you to manually operate or override the programming to make sure there are no breaks, obstructions or misaligned sprinkler heads.

Do I have to have a smart phone to operate my smart controller?

Not all smart controllers need a smart phone. Most of them can be accessed via a website, so check into it before you make your purchase.

Where can I purchase a smart controller?

After looking over the EPA WaterSense[4] qualified list of irrigation controllers, you can shop online, at your local hardware store, or at your local irrigation supply store. Some plant nurseries also sell smart controllers

How much do they cost?

On average, homeowners are spending just under $300 for their smart controller. The rebate is up to $400.

I understand that smart controllers are exempt from the City of Sacramento's watering schedule. How do I get my exemption?

First, install and program your smart controller and contact us, either at riverfriendly@cityofsacramento.org or by calling 916-808-1337. A pre-inspection is not required to receive this rebate. Secondly, make sure that you are not watering between 10:00 a.m. and 7:00 p.m. Smart controllers still need to follow the City's time of day restriction. Then, check your watering times and make sure that you do not have water pooling or running off your property. If you do, you need to shorten your watering times, and you may wish to consider our irrigation upgrade program.

If you already have a EPA WaterSense controller, then contact us at 916-808-5605 to schedule a visit to verify it is programmed correctly.

Is my irrigation controller smart if I install a rain sensor?

In short, the answer is no. It will shut off your irrigation when there is measurable rain, but it will not adjust the watering times for the seasons.

[4] https://www.epa.gov/watersense/product-search

Is my irrigation controller smart if I only install a soil-moisture sensor?

No. Soil moisture sensors only work to tell you the soil conditions right around that sensor or sensors. They can work well in conjunction with smart controllers, but many smart controllers factor in the soil type and are not compatible with soil moisture sensors. Check with the manufacturer.

How much water can I save?

EPA estimates that 50% of water used residential landscape is wasted due to inefficient irrigation systems and methods. Your actual water savings will depend upon your irrigation system efficiency. However, replacing a standard clock timer with a WaterSense labeled irrigation controller can save an average home nearly 13,500 gallons of water annually.