Summer 2019 Edition

CELEBRATING OUR 20th YEAR

# EC Landscape News

## GETTING TO THE BOTTOM OF DEEP WATERING

Summer has arrived and along with the heat comes continued watering restrictions for many of our communities. In order to protect turfgrass and plants from damage due to increased temperatures we need to re-evaluate our watering practices.

Plants with shallow root systems are vulnerable in regions like ours because of the harsh sunlight and high temperatures during the summer months. Under these extreme heat conditions, the top few inches of the soil surface becomes hot and moisture is rapidly lost through evaporation, ultimately exposing the roots. Plants perish when their root system is near the surface and not deep enough to reach the moist, cooler soils below.

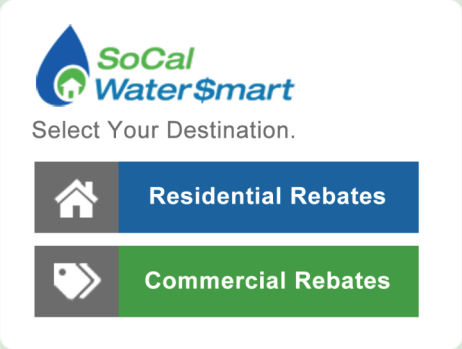
A defense against extreme temperatures and heat stress is to promote deep root growth. This is accomplished through deep watering, which trains the roots to grow deeper. This process employs the application of water in a series of run-times by alternating between controller stations, which allows the water to soak into the soil. The amount of water applied during each sequence and the time needed between intervals is determined by the type of soil and its ability to retain water.

Most of the soils in our area are sandy loam, which has a moderate-low soil water storage capacity (SWSC). Areas with slopes or poor draining soils have the potential to lead to excess runoff.

## Turf Rebates are BACK!!!!

SoCal Water$mart has partnered with the Metropolitan Water District of Southern California to offer turf replacement rebates to promote water use reduction and support sustainability. The program combines turf removal, irrigation modification, and sustainable methods to reduce or prevent wasteful runoff through the use of rainwater capture or filtration systems.

Metropolitan Water District is offering a rebate of $2.00 per square foot for turf replacement, up to 50,000 square feet per year per service address for commercial properties. It is also highly recommended that you check with your local water agency for additional rebate incentives. The rebates only apply to new replacement projects, prior to commencement of the work.




The Turf Replacement Program is offered to residential and commercial customers. Rebates for weather-based irrigation controllers, soil moisture sensors, rotating sprinkler nozzles, and rain barrels or cisterns are also available. The District also offers indoor-related water conservation incentives.

Long before these incentives were being offered, several of our communities were facing challenges in balancing the quality of landscaping with the quantity of water allocations. We partnered with our boards to implement turf removal projects and implemented sustainable landscapes that have matured and continue to thrive today.

Through our experience we have developed approach to meet the needs of the communities, while staying within their water

budgets. By analyzing site and water usage data, EC was able to identify the problems areas, present graphic representations of the before and after results, and provide a favorable return-on-investment estimate. Through this process, we were able to gain the support of community boards and their respective residents.

Prior to the availability of rebates, our experience has shown that these projects have been a tremendous success in reducing water costs. With the turf rebates available once again, taking advantage of these incentives makes these projects even

more viable to undertake. Communities are able to save anywhere from 50% to 75% of the cost for renovation, and reap the benefits with lower water usage or competitive rates under the Recycled Water rates.

We have had great success in securing rebates for our clients. For additional information on rebate programs, visit the SoCal Water$mart website at socalwatersmart.com, bewaterwise.com, or let us know if we can be of assistance in answering any questions that you may have.

# WHEN TO WATER
## Keeping Turfgrass Healthy

There are two schools of thought regarding when to water. One suggests watering in the mornings, while the other implies evenings work just as well. Strong arguments can be made for either position, which is why it is not a simple question to answer. In some cases, as we will explain below, there are situations that dictate the only plausible option.

A multitude of factors influence the optimal time to water. Those factors include:

- local water agency regulations,
- soil conditions,
- irrigation system, and
- site characteristics.

Most local water agencies mandate watering restrictions including establishing the hours when you can irrigate. Some have set limits on the duration of each irrigation station cycle or days in which you can irrigate. In addition to the time schedules set, communities need to be mindful of the water budgets allocated by the water district.

With various tiered systems used, an association's irrigation budget can be heavily impacted when rates increase to 10 times the base rate as you enter into the top tiers. As an example, Rancho California Water District's rates are structured as follows (rates are $/HCF, effective July 1, 2019):

Tier 1: $0.738 (base rate)
Tier 2: $1.611 (2x base rate)
Tier 3: $3.118 (4x base rate)
Tier 4: $7.347 (10x base rate)

Knowing the soil type identifies its ability to absorb water before reaching the saturation point and to avoid runoff. It also aids in programming the length of the station run-times and the time-length of the intervals. Loose soils, such as sandy loams, pass water rapidly through the upper layers, making less water available for turfgrass, accelerating the need for replacement water.

Conversely, tight soils, such as clay loams, are slow to drain, making more water available to the turfgrass root systems. Soil amendments, when applied regularly, can help to balance the water replacement and water retention factors.

Programming capabilities in the irrigation systems will drive the watering schedules. Short, repeated run times, allow water to soak in and penetrate deeper into the soil. Staggered start times, with 30 to 60-minute intervals between sequences however, extend the overall watering schedule by several hours. This has a direct effect on exactly when to start the watering cycle, especially when irrigating large turfgrass areas.

Last, we need to consider site usage. Many of the communities we serve contain large turfgrass and park areas. Watering in the morning would not allow enough time to complete the watering cycle before residents start using the common areas. Watering at night does not interfere with park usage and proves to be the best option under these conditions. Night watering is also a common practice used by golf courses and municipal parks for the same reason.

# BROWN PATCH
## A Fungus Among Us

Brown Patch is a debilitating fungal disease that appears as irregular circular patterns in the turf. It is brownish-yellow in color and ranges from 6 inches to several feet in diameter. Brown Patch only harms the grass blades and not the crown of the plant or root system.

*Rhizoctonia* is the fungus responsible for Brown Patch. It may be present in the soil for some time before it becomes active. The fungus can lay dormant during the winter and can survive for years until conditions are just right. The perfect conditions for the fungus to take effect include periods of high temperature and high humidity in mid- to late-summer. *Rhizoctonia* is especially harmful to tall fescue and ryegrass.

To confirm the diagnosis of Brown Patch, look closely at the outside edge of the turf area that is starting to turn yellow. The tip of the grass blades will be turning brown and curling up while the base of the blades remains green.

A healthy turfgrass system is the best defense against Brown Patch, so it is important to have a solid, turf-care regimen. Environmental Concepts makes sure to use sharp mower blades to prevent tearing of the grass. A clean blade cut reduces the surface area for the fungus to enter the plant. In addition, regular aeration improves air circulation, which will also reduce the humidity that causes Brown Patch.

Although a broad-spectrum fungicide that is labeled for use on Brown Patch can be applied at the first signs of the disease, most turfgrass will typically recover without chemical treatment. In addition, overseeding in early fall will help to combat the fungus.

ENVIRONMENTAL CONCEPTS LANDSCAPE MANAGEMENT, INC.

PO Box 1788
Temecula CA 92593
(951) 587-6551
www.eclmi.com