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University of California
Agriculture and Natural Resources
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UCCE

The Green Scene

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California's Drought Emergency and the Landscape

We are aware of the extreme shortage of precipitation this past winter and the ongoing California drought. Governor Brown has issued an executive order mandating water restrictions, including restrictions in landscapes. We will see how these are implemented at the local level in Kern County. Among the provisions of the executive order are lawn replacement with drought-tolerant vegetation and the use of drip irrigation. Since turf is often over-irrigated, this directive will likely save water. However, as noted below, plant replacement does not guarantee water savings.

Saving Water (And $) in Home Landscapes, Gardens, and Orchards

It is not necessary to do a landscape makeover to save water, nor will modifications necessarily result in water savings. **The key to saving water in outdoor plantings is irrigation scheduling. Modifications to a landscape are of no benefit for water conservation unless the irrigation amount is reduced.**

Although water conservation is a large topic, here are a few tips and ideas for saving water in landscapes and other outdoor plantings:

- **Check the system**

Periodically run the irrigation system to check for missing heads, broken risers, and sprinkler coverage. Repair as necessary.

- **How much to water?**

Water needs of plants in home gardens, landscapes, and orchards change by a factor of 10 from winter to summer. Therefore, irrigation schedules should be changed at least four times per year: spring, summer, fall, and winter (when perhaps the system can be shut off).

Irrigation amounts are usually expressed as depth of applied water. In winter, about 0.02 inches per day are needed in the Bakersfield area, while in summer the value rises to about 0.25 inches per day. These values do not mean water needs to be applied every day. Weather conditions will affect water needs of plants. Please see the University of California publication *Saving Water in Landscape Irrigation* available on-line at http://cekern.ucanr.edu/files/210552.pdf.

You can measure how much water your sprinklers deliver by placing cans or coffee mugs in the landscape and running sprinklers for a set amount of time. You can also estimate total landscape water use from your water bill by considering water use during winter months as the baseline indoor value, and water in addition as used outdoors. That assumes sprinklers are shut off during winter.

Irrigate and monitor. In other words, check soil moisture between irrigations with a shovel, soil probe, or screwdriver, and adjust the irrigation schedule accordingly.

- **How often to water?**

Irrigation scheduling is a combination of frequency (how often) and duration (run-time). As a rule-of-thumb, plan to fill a plant rootzone and then irrigate again when about half the water has been used. Therefore, set run-times for each irrigation zone and then add or subtract days depending on season of the year.

- **When to water?**

Early morning is best since wind speeds and temperature are low, and less evaporation and wind-loss occur.

- **What about mulches?**

Mulches, such as wood chips or shredded leaves, help save water by reducing evaporation from soil.

- **What about turfgrass?**

Turfgrass is water-thrifty if irrigated carefully. However, turf is often over-irrigated, so reducing the area of turf may lead to water savings. Experimental data show warm-season grasses, such as bermudagrass and the UC release 'El Toro' zoysia, offer water savings over cool season turfs, such as tall fescue or bluegrass. Buffalograss is even more drought tolerant, but not often planted in California.

- **What about "drought-tolerant plants?"**

Research-based water-use data do not exist for many plants. Therefore, we often infer drought tolerance from seeing where a plant grows in nature. Many California natives and plants adapted to desert conditions do not perform well under irrigated conditions. These plants may be susceptible to root rot, for example, if irrigated. Drought-tolerant plants, per se, do not save water. Saving water is accomplished by changing irrigation schedules.

Saving Water in Turf and the Landscape: A Seminar Series

We plan to offer back-to-back seminars on saving water in the landscape. On June 9, 2015, we plan to offer a two-hour seminar focusing on saving water in turfgrass, and on June 10, a seminar focusing on landscape water conservation. Both will begin at 6 pm at the UC Cooperative Extension Office, 1031 S. Mt. Vernon Avenue. Cost will be $25 per night. Please register at this link: http://ucanr.edu/survey/survey.cfm?surveynumber=15302.

Fall 2015 Horticulture Classes Offered by UC Cooperative Extension

For more than 25 years we've offered horticulture classes to the community, and we are pleased to do so again this autumn. We will discuss irrigation system design and management and water conservation. A Horticulture for Landscapes, Gardens, and Orchards level I class will be offered beginning late August and will extend 16 weeks, with one three-hour class session per week. The start time will be 5:30 pm, but the start day and meeting days have not yet been chosen.

This Horticulture I class can benefit homeowners through knowledge of how to take care of turf and landscape plants as well as how to grow food, including vegetables and fruits, saving time and money. Additional topics will include plant selection, soil science, landscape design principles, tree pruning, and pest management with an emphasis on organic and IPM methods, as well as

sessions on vegetable crops, deciduous fruits, and citrus. Representatives from homeowners associations and real estate professionals may also wish to attend to glean tips on evaluating landscapes, using appropriate terminology to request work from landscape contractors and to evaluate work that is done. A syllabus will be available ahead of time.

We plan to offer at least one additional class, probably Horticulture II. We understand several people have requested Horticulture V, and we may schedule that class in the future given enough interest.

We ask those interested in the Horticulture I class to contact the Cooperative Extension office at cekern@ucdavis.edu, or 868-6200, to pre-register to reserve a space and help us track class size. Cost of each 16-week class session will be $75. Actual registration will be handled at the first class meetings.

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