Tips for Water Efficiency

Water is a finite resource that is renewed only at the whim of nature. With growing populations and increasing development, it is essential that we look at water as a precious resource not to be wasted. It is estimated that up to 50% of water consumed by the average urban household is used for landscape plants and turf grass.

To manage water in your yard, you can gradually introduce drought-tolerant plants into an existing garden or design and plant a new water-efficient landscape. “Water-Efficient Landscape” is a generally accepted term for a landscape which uses plants that have low water requirements and are able to withstand periods of drought. Water-efficient landscapes are a conscious attempt to develop plantings compatible with the environment. California has a Mediterranean type climate with warm, dry summers and cool, wet winters. Take this into account when you select plants.

Water-efficient gardens do not have to look like seas of gravel and plastic, or cacti and rocks. They can be full of beautiful green plants, but they must have low water requirements. Use the following tips to keep the number of thirsty plants and grasses in your landscape to a minimum.

It is estimated that up to 50% of water consumed by the average urban household is used for landscape plants and turf grass.

Plan your landscape to match the exposure at the site, the drainage, water availability, wind direction, and soil type. As a general rule, southern and western exposures result in the greatest water loss. Excessive use of rock in southern or western exposures can cause temperature increases in and around the house. Use sun-loving, drought-tolerant plants to save water in these locations.

Define separate irrigation zones for plants with similar water requirements. Use water-loving shade plants like hostas and ferns sparingly in an area close to the house or patio. Put drought-tolerant plants like Grevillea and Mahonia together in a separate area. Hydrozoning, using irrigation zones for plants with similar water needs, can minimize water usage. Place shrubs that need watering once a week on a different water line than summer annuals that need daily water. Plants that require little or no summer water are effective in outer areas.

Reduce lawn areas. Use turf grass for function more than appearance. Grass is a good choice where children play but avoid long narrow strips of turf and isolated islands of grass that are difficult and wasteful to water. In outlying areas, use drought-resistant grasses or meadow mixes instead of lawn.

Save water with effective irrigation. Using the proper irrigation practices can lead to a 30-80% reduction in water usage. For flowers and shallow-rooted shrubs, drip irrigation is efficient and reduces pest and disease problems caused by wet foliage.
Use a low-volume sprinkler system for lawn areas. Lawns require enough weekly water to penetrate the soil to a depth of 4-6 inches. Daily watering with a hand-held sprinkler is ineffective and wasteful. Adjust irrigation timing at least 4 times a year as the seasons change. Do not irrigate during the winter months.

**Use water-efficient plants** and those that originated in climatic conditions similar to yours. Water-efficient landscape plants are not limited to natives. A huge array of plants with low water requirements is available at local nurseries. Plants with higher water requirements can be grouped together in limited areas. Use islands of intensely managed and irrigated plantings for accent. A small arrangement of bright color can make a strong, tasteful statement with less water than rambling shrubs or turf.

**Use mulches** to reduce evaporation, minimize erosion, keep soil cool, and improve the soil. Mulches will also reduce the number of weeds that compete for valuable moisture.

A well-planned water-efficient gardens combine beauty and function. It offers low maintenance, lower water bills, and a beautifully varied landscape.

**References:**


The following is just a glimpse of a few Water-Efficient Plants:

**Trees**

Crape Myrtle
*Lagerstroemia indica*
Incense Cedar
*Calocedrus decurrens*
California Buckeye
*Aesculus californica*

**Shrubs**

Manzanita
*Arctostaphylos* (many)
Western Redbud
*Cercis occidentalis*
Wild Lilac
*Ceanothus* (many)

**Perennials**

Yarrow
*Achillea* (many)
Matilija Poppy
*Romneya coulteri*
Russian Sage
*Perovskia*

**Include hardscape design elements** such as decks, patios, walkways, arches, and seating areas. Accent them with container plants or water features. While conserving water, they can make outdoor “rooms” that add interest and utility to your landscape.

Written and compiled by **RONNIE INGRAHAM**, UCCE Master Gardener, and **KEVIN MARINI**, UC Program Representative

WATER-WISE LANDSCAPING is a collaborative project of the University of California Cooperative Extension, UCCE Master Gardeners of Placer and Nevada Counties, Placer County Water Agency, and the US Bureau of Reclamation. For more information call 530-889-7388 or visit [http://ceplacernevada.ucdavis.edu](http://ceplacernevada.ucdavis.edu)

**Resources**

Placer County Water Agency [http://www.pcwa.com](http://www.pcwa.com)


Water Saver Home [http://www.h2ouse.org](http://www.h2ouse.org)

The University of California prohibits discrimination against or harassment of any person employed by or seeking employment with the University on the basis of race, color, national origin, religion, sex, physical or mental disability, medical condition (cancer-related or genetic characteristics), ancestry, marital status, age, sexual orientation, citizenship, or status as a covered veteran (covered veterans are special disabled veterans, recently separated veterans, Vietnam-era veterans or any other veterans who served on active duty during a war or in a campaign or expedition for which a campaign badge has been authorized) in any of its programs or activities or with respect to any of its employment policies, practices, or procedures.

University Policy is intended to be consistent with the provisions of applicable State and Federal laws. Inquiries regarding the University’s nondiscrimination policies may be directed to the Affirmative Action/Staff Personnel Services Director, University of California, Agriculture and Natural Resources, 1111 Franklin, 6th Floor, Oakland, CA 94607-5200; (510) 987-0096

University of California, United States Department of Agriculture, Placer and Nevada Counties Cooperating.