

[Wise Water Use]

Saving water in the garden

Landscaping is the single biggest water user for California households: 50 to 70 percent of household water goes for watering lawns and gardens. One way residents can reduce their water use outdoors is to change the way they think about landscaping. Substantial water savings are possible with Xeriscape landscaping, an approach to garden design that makes use of plants that thrive in California's semi-arid landscape and climate.

The term Xeriscape (pronounced ZEER-uh-scape) is a combination of the Greek word *xeros*, which means dry or arid, and the English word *scape*, meaning vista. The concept of Xeriscape was originated in Denver, Colo., in 1978 by a water conservation task force of the Denver Water Department. The term Xeriscape is a registered trademark of the Denver Water Department.

Despite how the word sounds, Xeriscape landscaping does not mean "zero" landscaping or watering. More accurate terms for this approach to garden design are water-wise landscaping or low-water-use landscaping. California-friendly landscaping is another term that is being used more widely, which emphasizes how these principals can be applied in gardens throughout the state.

Nor does Xeriscape landscaping mean replacing an entire yard (although this would provide a homeowner with the biggest water savings). Gardeners who want to start small can replace individual plants with those that need less water. Turning a particularly hard-to-water section of the yard into a Xeriscape garden is another way to enjoy the water-saving benefits of this approach to landscaping.

Xeriscape landscaping pays off even during years with abundant rainfall. Water treatment and delivery represent the single largest use of electricity in California. Reducing water use through intelligent garden design conserves energy and reduces energy costs for water providers and therefore water customers.

The Water Conservation Garden, located on the Cuyamaca College campus in El Cajon, Calif., near San Diego, is a public garden that demonstrates Xeriscape principals applicable to residential and commercial landscapes. The garden is operated by a joint power authority whose members include the Grossmont-Cuyamaca Community College District, Helix Water District, Otay Water District, Padre Dam Water District, City of San Diego and San Diego County Water Authority.

The following introduction to Xeriscape landscaping principals is adapted from information for gardeners that appears on the garden's website. Many thanks to the Water Conservation Garden for granting permission to use this material.

About Xeriscape landscaping

Many people believe that a colorful, lush, and vibrant garden needs lots of water. In reality, the same ends can be achieved through the application of Xeriscape practices, resulting in a 35- to 70-percent water savings.

Xeriscape landscaping is defined as “water conservation through creative and appropriate landscaping.” The key words here are “creative” and “appropriate.” You can have almost any garden look you like and still save water. Your garden can be a beautiful oasis and significantly increase the value of your home while saving water.

Xeriscape landscaping is founded on seven principles. While these principles have been used in traditional landscaping for years as separate or partially combined principles, Xeriscape incorporates all of them into one holistic method resulting in a unique landscaping approach that combines all the necessary elements to achieve water conservation. When all seven principles are implemented correctly, the result is a significant reduction in water consumption without the loss of the beauty that landscapes provide.

1. Planning and design

Planning is the most important step to a successful Xeriscape. A thoughtful design can allow you to install your landscape in phases and avoid costly mistakes. Many people create their own designs with excellent results. Landscape professionals can be valuable resources, with services ranging from making simple planting suggestions to full-scale design and construction.

2. Practical turf areas

Grass is the thirstiest component of any landscape, so it should be used only where necessary. A lawn designed to serve multiple purposes – like recreation, light traffic, and maintenance access – will maximize the return on the water invested in its maintenance. While lawns may be fine for play areas, picnics, and pets, in many cases turf can be replaced with other, less-thirsty materials such as groundcovers, low-water use plants, mulches, or hardscape, such as paving or decks.

3. Appropriate plants

There is a large selection of water-efficient plants available throughout California. Many popular landscape plants are a lot more drought-tolerant than you’d imagine. Nearly every landscape function can be served with a low-water-use plant. Year-round greenery, bright flowers, borders or accents – all can be achieved efficiently and attractively. Some nurseries tag their low-water-use plants for easy selection.

4. Appropriate maintenance

Regular maintenance preserves the intended beauty of your landscape and saves water. Pruning, weeding, proper fertilization, pest control, and water-schedule adjustments contribute to water savings. Because of their design, Xeriscapes result in reduced maintenance cost and time.

5. Mulches

Mulches cover and cool the soil, reduce weed growth, slow erosion, and, most importantly, minimize evaporation. The textures and materials also provide landscape interest. Organic mulches include shredded bark or chips, wood grindings, or compost. Inorganic mulches are usually rock or gravel products.

6. Efficient irrigation

A combination of a sound irrigation design and installation with careful water management will conserve water. Irrigation technology has boomed in the last few years with improved product quality and increased water-saving efficiency. Turf areas are best watered with sprinklers. Trees, shrubs, flower beds, and groundcovers can be watered efficiently with low-volume sprinklers, drip or bubbler emitters. Even traditionally water-thirsty plants can benefit from Xeriscape principles if separately zoned and efficiently irrigated. Monitoring and maintaining your irrigation system is the key to saving both water and money.

7. Soil analysis

Soil improvement allows for better water penetration and improved water-holding capacity of the soil. Organic matter and other amendments also provide beneficial nutrients to plants. It is best to test soil to determine the correct amendments and amounts needed. Improve the soil prior to planting and installation of an irrigation system. Contact the University Cooperative Extension Farm Advisor or your local nursery professional for more information about soil testing and amending.

To learn more

More information about Xeriscape landscaping and Xeriscape plants is available at the Water Conservation Garden website at www.thegarden.org.

More information about using water wisely can be found at the California Drought Preparedness website at www.cadroughtprep.net. California Drought Preparedness is a partnership of the California Rural Water Association and the California Department of Water Resources.

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The 7 Xeriscape principles

1. Planning and design. Plan before you plant.
2. Practical turf areas. Use grass for recreation, light traffic areas and maintenance access only.
3. Appropriate plants. Choose plants that are drought tolerant or need less water.
4. Appropriate maintenance, including pruning, weeding, fertilization, pest control and watering.
5. Mulches to cover and cool soil, control weeds and erosion, and reduce evaporation.
6. Efficient irrigation for every part of the yard.
7. Soil analysis to improve water penetration and water-holding capacity.