

Water shortages and restrictions on outdoor water use are becoming more common in Georgia as population growth places an ever-increasing strain on available water supplies. The problem surfaces each summer when citizens water their lawns and landscapes. Periodic droughts make the situation even worse.

Today we are finding more and different ways to use water than ever before. During the past 30 years, population growth in the United States has increased by 52 percent while water use has increased by 300 percent. Average per capita water use in the United States is 100 gallons/day. Compared to developing countries around the world where per capita water use may be as little as 22 gallons/day, Americans consume luxurious amounts of water.

During the summer months in Georgia, residential water customers often use more water outdoors keeping their lawn and landscape green than they use for bathing, cooking and cleaning. If citizens would learn about the water needs of plants and implement water-efficient landscape practices, outdoor water use could be decreased by 50 percent or more without sacrificing quality or beauty of the outdoor environment.

Xeriscape™ (pronounced Zera-scape) is a term coined in Colorado in 1981 that describes a seven-step approach to outdoor water conservation in the landscape. These include *Proper Planning and Design*, *Soil Analysis*, *Appropriate Plant Selection*, *Practical Turf Areas*, *Efficient Irrigation*, *Use of Mulches* and *Appropriate Maintenance*. Let's see how they can be applied to an existing landscape.

First, look at your landscape to see what parts of it require the most water. Usually it's

the lawn, but it may also be flower beds or other water-demanding plants. Then think of ways you can reduce the water demands of the landscape. You may decide to reduce the size of the watered areas by replacing them with organic ground cover, like pine straw, or beds of drought-tolerant plants. English Ivy or Liriope, for instance, planted in shaded areas or groundcover junipers, like Blue Rug or Prince of Wales, in full-sun sites are extremely drought-tolerant. Once established, these plants can survive long periods without supplemental irrigation.

An even more cost-effective approach to water conservation would be to install beds of pine straw or recycled wood chips. Aside from keeping weeds down and replenishing the mulch periodically, these areas require **no** irrigation.

For each 1000 sq. ft. of landscaped area no longer irrigated, you save as much as \$200 per year on your annual water and sewage bill. Maintenance requirements of the landscape will also be reduced, and you'll have more free time to do other, more pleasurable activities.



Another easy way to reduce outdoor water use is by targeting irrigation to plants that show signs of moisture stress. Plants will indicate when they need water by wilting or turning an off-green color. Rather than using a portable sprinkler to water all plants equally, use the water hose to apply water only to plants that need it. Hand watering will also allow you to direct water to the base of plants instead of wetting the foliage, thereby reducing the likelihood of foliar diseases.

Mulches on the soil surface reduce evaporative water loss from the soil. Three to five inches of mulch around trees, shrubs and flowers helps prevent drought stress during periods of limited rainfall and reduces the need for supplemental irrigation. Pine straw, pine bark or recycled wood chips obtained from municipal recycling programs are ideal for this purpose. Still another way to save water in ornamental areas is to carefully remove existing mulch, placing newspaper two to three sheets thick over the soil surface, moistening it, then placing the mulch back on top. Newspaper provides an added barrier to moisture loss, and it will also decompose over time to enrich the soil.

Selecting appropriate plants is one of the most important steps to a water-wise landscape. Turfgrasses, for instance, vary a great deal in their drought tolerance. Bermuda grass is one of the most drought-tolerant warm season grasses. It will go dormant during drought and will bounce back with vigor when rains begin. Fescue, on the other hand, a common lawngrass in the northern half of the state, requires regular irrigation throughout the summer in order to survive during dry periods. Re-seeding this grass each October may be a

lower cost alternative than irrigating it throughout the summer, particularly since water rates are increasing in most areas of the state.

Ornamental plants vary greatly in drought tolerance. Ornamental grasses, most hollies, nandina and junipers are extremely drought tolerant once they are established. Azaleas, gardenias, English laurel and viburnums usually require supplemental irrigation during dry periods. Your local nurseryman or extension agent can advise you in selecting water-thrifty plants for your landscape.

To learn more about Xeriscape and ways you can save water, time and money in the outdoor landscape, The Georgia Water Wise Council has a 40-page booklet entitled *Xeriscape: A Guide to Developing a Water Wise Landscape*. It contains an extensive listing of plants for Georgia landscapes and their water requirements. To obtain a copy, send a check for \$3.95 to the Georgia Water Wise Council, 1033 Franklin Rd., Suite 9-187, Marietta, GA 30067-8004.

***Make Every Drop Count!
Our Future Depends on It.***

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Gale A. Buchanan, Dean and Director



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for
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