THE SEVEN PRINCIPLES *of* XERISCAPE

Whether old or new, your landscape can be made much more water efficient by applying the principles of xeriscape.

Xeriscape means low-water-using. It does not mean dry or barren looking.

Applying the seven principles of xeriscape enables you to use natives and desert adapted plants for lovely, colorful, and shady outdoor spaces around your home.

Xeriscape's seven principles are:

Water-wise Planning and Design

Begin by making a plan for your site. Determine how you intend to use areas around your home. Identify shady and sunny areas, sloped and flat areas, and how air moves on your site. Next, divide your property into oasis-type, moderate, and low-water-use areas. The oasis area should be next to your house, where use is the most intense, to provide shade and coolness, as well as aesthetic appeal. The lowest-water-use area will probably be at the outer edge of your property, and may include native plants already growing on the site. Once the plants in this zone are established, they need little or no water. The middle zone is a transition zone between the other two areas and uses a moderate amount of water. Plants that have a similar need for water, sun, and maintenance should be grouped together to increase irrigation efficiency and reduce maintenance time.

Low-Water-Using Plants

There are plenty of plants that use little water. You can select plants from a native or xeriscape plant list. For more information, ask at your favorite nursery for their recommendations, or look at all the plant books you can find.

Tree selection is very important because trees can provide you with years of luscious shade. They can be chosen and located to provide shade to your home in the summer months and allow the winter sun in. Use groundcovers and wildflowers to add color and texture in your landscape, and use shrubs for an accent or as a screen for privacy.

Take the time to look at good xeriscape examples in your area. The Tucson Botanical Garden, Tohono Chul Park and the Arizona-Sonora Desert Museum have beautiful xeriscaped areas. Pima County Cooperative Extension and the Arizona Department of Water Resources have additional information about xeriscaping, as does your public library.

Limit Grass Areas

Grass uses more water than anything else in the garden and also requires more maintenance, so use it only where it provides functional benefits. If you want grass just to look at, perhaps a good groundcover could better provide you that mat of green. Use grass in high-use areas, but do not use it on slopes or in hard-to-irrigate and maintain areas. A good alternative for low-use areas is seeded wildflowers or native grasses.

Water Harvesting Techniques

Incorporate water harvesting techniques into your landscape design. This means simply channeling runoff from rain to planted areas or to a container for later use. A few simple methods that direct runoff to where it is needed include sloping sidewalks and terraces, collecting roof water, contouring lawns or other sloped areas, and the use of rock "river" channels. By constructing earth mounds or berms at the edge of your property you can also hold water on your site. Locate plants where they can take advantage of this extra water.

Efficient Irrigation System & Design

Match your irrigation method to the type of plant being irrigated — drip irrigation for individual plants and spray irrigation for grass. Drip is the most efficient way to irrigate because it puts water where it is needed and reduces evaporation. Use a timer or controller to schedule irrigation and change schedules often — whenever the weather changes, especially when it rains. Put plants with similar water needs and similar rooting depth

on separate valves. Then you are not wasting irrigation water on shallow-rooted plants such as groundcovers to accommodate deep-rooted plants such as trees. Most of our soils cannot absorb water as fast as a spray irrigation system puts it out, so use low-volume spray heads to avoid runoff.

And most important, water wisely. Too much water is as bad as not enough, and in many cases is worse. Use deep, widely-spaced irrigations. This will encourage deeper rooting and more drought tolerance in plants. Water in the early morning to reduce water loss from evaporation.

Mulch

Apply mulches at the base of plants to retain moisture, keep weeds down, and control erosion. Mulches can also reduce soil compaction and salt buildup, conditions that are common to our soils. Typical mulches include compost, bark chips, and inert materials such as decomposed granite or river run rock.

Proper Maintenance Practices

Your xeriscape will not only reduce your water use, but also minimize your maintenance efforts. But, some pruning, weeding, and fertilizing will still be needed. Without good maintenance you will not achieve the water savings and appearance you want. Go easy on the fertilizer and use a slow-release type. Remember many xeriscape plants do not need any or very little fertilizer. Aerate and dethatch your lawn once a year to improve infiltration and reduce runoff. Pull up weeds because they use valuable water and fertilizer. Establish a regular maintenance program for your irrigation system to check for leaks and damaged equipment. Be sure and fix any problems immediately or turn your system off until you can.

Water is Arizona's most precious natural resource. Through its wise use in water efficient landscaping, you preserve and protect this resource and at the same time you can have beautiful and enjoyable yards and gardens. Xeriscape yards and gardens!

Remember, xeriscape means low-water-using, it doesn't mean dry and barren looking. Applying the seven principles of xeriscape enables you to use natives and desert-adapted plants for lovely, colorful, and shady outdoor spaces around your home.

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