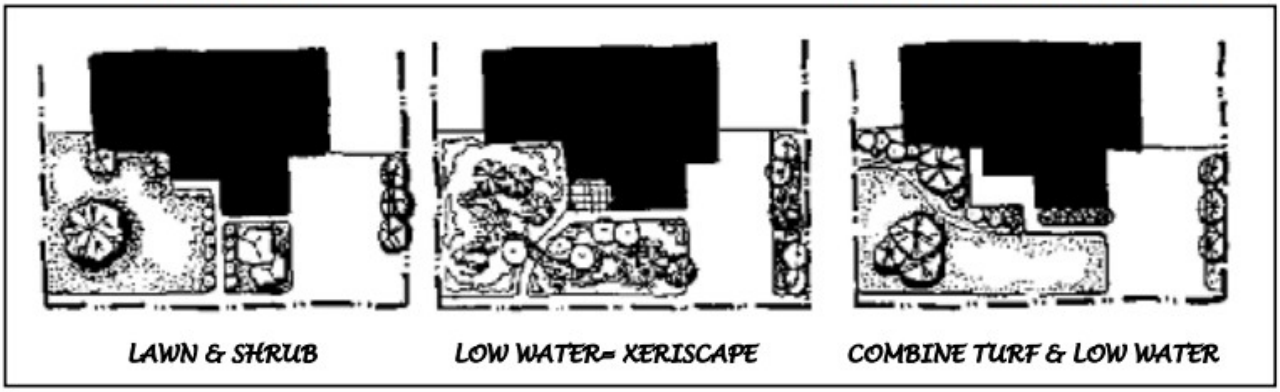
Xeriscape

Xeriscape Yard

Traditional Lawn and Shrubs



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Xeriscape uses seven principles to achieve water efficiency.

Planning and Design

Why plan? You can make a mistake on paper and toss it away. When you make a mistake in the landscape, its effect is not so easily tossed. Successful Xeriscapes begin with a good design that considers the function of the landscape and the mature size and water needs of each plant.

Appropriate Turf Areas

Locate grass only in areas where it provides functional benefits, like the children's play area. Keep grass away from sidewalks, walls, and fences for easier maintenance. Avoid planting turf in oddly shaped or narrow areas that can’t be watered efficiently.

Efficient Irrigation

Water all trees, shrubs, and ground-covers with an efficient, low volume drip system. Irrigate grass areas separately from other plantings. Change the irrigation schedule frequently with seasonal weather changes. For more information, check out Landscape Watering by the Numbers.

Low-Water-Use Plants

Many low-water-use plants are available. They can be used to create a wildlife habitat or to frame a functional outdoor living space. Some provide shade and screening. Others are perfect for color, scents, texture, and accents. For more information, check out Landscape Plants for the Arizona Desert.

Soil Improvements

Use organic matter to improve the soil when planting. This helps the soil hold water, permits better water absorption, and feeds nutrients to your plants.

Surface Mulches

Use mulches to cover and cool the soil, decrease evaporation, reduce weed growth and slow erosion. Use organic mulches such as shredded bark or wood shavings, or inorganic mulches like rock and gravel.

Appropriate Maintenance

Xeriscapes require less maintenance than traditional landscapes, but to preserve the appearance and ensure water efficiency, some regular maintenance is required. Weeding, fertilization, proper pruning, and pest control will keep your Xeriscape looking good. Regular irrigation system maintenance and adjustments help save water.

From City of Chandler AZ. https://www.chandleraz.gov/residents/water/water-conservation/education-and-resources/xeriscape

Xeriscape

1. Plants

The term Xeriscape describes a landscape that demands little water. It is composed of naturally drought resistant species from North America and dry climates around the world. In the dry western states, this style of landscape also supports exotics from South Africa, the Middle East and Australia. These plants are naturally adapted to the same long dry season as most western natives making them compatible in the garden. Because of water concerns, many western homeowners are turning to lawn-free landscapes.

The strategy is to utilize native plants that are already perfectly adapted to thrive on local rainfall. Once established, these ask for no extra water in summer or much care in winter because they have evolved to adapt locally. Other American natives plus a few exotic species from other cold humid regions of the world may do equally well here. Xeriscape Plant List

In terms of planting design, it is important to determine just how dry a landscape will be. This dictates how to combine plants with similar water demands. However, a nursery grown plant will not take on the drought resistance of its wild counterpart for at least two years or more. Many plants that are very drought resistant in habitat can have a hard time adapting to conditions in the nursery. Their root system cannot spread out as it should due to constraints of the container. Therefore these will require significant irrigation the first and possibly the second dry season to help roots travel deep enough to support the plant without irrigation. As it becomes more established, the irrigation is cut back or phased out entirely. This illustrates why early maintenance of a newly installed xeriscape is paramount to its success.

- *Pro Tip: Fall is the best time to install a xeriscape while plants are dormant. This allows all winter and spring to become established before summer heat and drought arrives.*

2. Irrigation

IIrrigation is essential. The underlying principal in the xeriscape is low pressure systems. These are designed to deliver water to the root zone and nowhere else. The original drip irrigation invented in Israel delivers a small amount of water to a single location where it can penetrate deep into the soil. This depth is vital to luring roots downwards, venturing deep to harvest the moisture there when the surface soil is dry. This trains plants to root beyond their original pot-shaped root ball. After awhile the deep roots will be able to sustain the plant even if the drip system is phased out.

But more often the drip system remains in place and is used to ensure the plant is sufficiently hydrated not just to survive, but to look good and bloom abundantly in your landscape. This is vital to those species which choose the driest time of year to become dormant, which is summer and fall in the West. Some become deciduous when summer dormant, while others partly so. With irrigation the deciduous species may retain enough foliage to remain attractive during these seasons.

3. Soils

All this deep rooting is found in most western natives, particularly those from California. Study these species in habitat and they are often found on hillsides, cliff faces, and in sandy gravelly ground along dry washes. They have evolved to root very deeply to reach moisture during the dry season. If planted in heavy clay, this rooting may be stunted and the soil may not be able to absorb enough water to support plants. Therefore the plant may fail to reach its optimal level of drought resistance, and it may not prove sufficiently long lived either. This is why soil conditions come into play with xeriscapes due to the preferences of the plants adapted to drought.

4. Mulch

A mulch is simply an organic or mineral material spread on top of the ground to make conditions more amenable for plants. Mulches help to prevent moisture evaporating from the surface of the soil. They also shade the soil so it doesn't heat up so much in the summer. It is also vital for preventing weed growth that can compete with landscape plants for limited water.

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Mulch availability is different in each region, the cost effective choices originating close by. This limits trucking costs and helps the xeriscape blend into the surrounding style of gardens. For example, the southwest has always relied on naturalistic fine gravels. In the Pacific Northwest forest industry byproducts such as wood chips and ground bark are cost effective. In the south pine needle much is standard.

5. Free Style

Do not assume that all xeriscapes look like a southwestern desert scene. Mediterranean species have long been used in European gardens, and these can lend a formal French style or a rural Tuscan feel while conserving water. Drought resistant plants from Africa and Australia can be chameleons, lending character and color to virtually any theme or style. Your designer knows that conservation is as easy as specifying a drought resistant alternative to a water loving tree or shrub. So long as this alternative is well adapted to the local climate, your xeriscape style is only as limited as your designer's knowledge of plants.

Coverage Provided by Plants at Maturity
(Not a Complete List)

Small Shrubs & Groundcovers (10 sq ft)	**Large Shrubs & Groundcovers (75 sq ft)**	**Large Trees (225 sq ft)**
*Asclepias subulata – Desert Milkweed	Bougainvillea spectabilis – Bougainvillea	Acacia farnesiana – Sweet Acacia
Cephalophyllum cultivar – Red Spike Ice Plant	*Caesalpinia mexicana – Mexican Bird of Paradise	*Cercidium floridum – Blue Palo Verde
Chrysactinia Mexicana - Damianita	Simmondsia chinensis - Jojoba	Cercidium hybrid – Hybrid Palo Verde
*Convolvulus cneorum - Bush Morning Glory	Sophora secundiflora – Texas Mountain Laurel	Cercidium praecox – Palo Brea
Ruellia brittoniana - Katie Ruellia	*Tecoma species – Yellow/Orange Bells	*Chilopsis linearis – Desert Willow
Medium Shrubs & Groundcovers (30 sq ft)	*Tecomaria capensis – Cape Honeysuckle	Olneya tesota – Ironwood
*Anisacanthus quadrifidus – Flame Honeysuckle	Wedelia trilobata – Yellow Dot	Pistacia chinensis – Chinese Pistache
Bougainvillea ‘Torch Glow’- Bougainvillea Torch		Pistacia lentiscus – Mastic Tree
*Caesalpinia gilliesii - Yel. Bird of Paradise	**Small Trees (75 sq ft)**	* Prosopis species – Mesquite (all)
*Caesalpinia pulcherrima - Red Bird of Paradise	Acacia craspedocarpa - Leather-Leaf Acacia	Quercus virginiana – Live Oak
*Calliandra species - Fairy Dusters	Acacia willardiana – Palo Blanco	Ulmus parvifolia – Evergreen Elm
*Eremophila species - Eremophila (all)	Bauhinia lunarioides – Anacacho Orchid Tree	Vitex agnus-castus - Chaste Tree
Gossypium harknessi - San Marcos Hibiscus	Brahea armata – Mexican Blue Palm	
*Hamelia patens - Firecracker Bush	Chamaerops humilis - Mediterranean Fan Palm	
*Lantana hybrid - Lantanas (all)	*Punica granatum – Pomegranate	
Leucophyllum species - Texas Sage (all)		
Nerium oleander – Oleander	**Medium Trees (150 sq ft)**	
Rosmarinus officinalis – Rosemary	Acacia berlandieri - Guajillo	
*Ruellia peninsularis - Baja Ruellia	Caesalpinia cacalaco - Cascalote	
Senna artemisioides - Senna/Cassia (all)	Cercidium microphyllum – Foothill Palo Verde	
	Eucalyptus erythrocorys - Red-Cap Gum	
	Lysiloma microphylla - Feather Bush	**Attracts butterflies, hummingbirds*
	Pithecellobium flexicaule - Texas Ebony	*or other pollinators*