

What is Xeriscape?

The natural landscapes of New Mexico are as varied as they are beautiful. But from the cool northern mountains to the hot deserts of the south, one thing most of our native plants have in common is the ability to survive on very little water. Although rainfall can vary throughout the state, New Mexico averages less than 13 inches of rainfall per year.

Because of our state's arid climate—and because water is a precious and limited resource—xeriscaping makes sense. Xeriscape can be defined as water-efficient landscaping appropriate to the natural environment.

The term xeriscape is derived from the Greek word *xeros*, which means dry. The goal of xeriscape is to create a visually attractive

landscape that uses plants selected for their water efficiency. Properly maintained, a xeriscape can easily use less than one-half the water of a traditional landscape.

In New Mexico, water-conserving landscaping is the natural choice.

Xeriscaping vs. Zero-scaping

Many people confuse xeriscaping with “zero-scaping.” While both of these landscapes use less water than the traditional, turf-dominated approach, they are totally different in appearance and appeal.

Xeriscaping is lush and beautiful. Zero-scaping tends to be hot and less interesting.

Xeriscaping uses a wide variety of water-efficient plants to create an oasis-like feeling. Zero-scaping uses lots of rocks and usually a juniper or yucca.

Xeriscaping makes an area colorful and inviting. For New Mexico, it's a water-smart and attractive way to landscape!

The Advantages of Xeriscape

Xeriscaping saves water. Using native and other drought-tolerant plants can significantly reduce water use.

Xeriscaping saves time. It de-emphasizes the use of bluegrass lawns and other thirsty plants. This common-sense approach can reduce the time you spend watering, fertilizing and mowing.

Xeriscaping saves money. Reducing water use can lower your water bill. Xeriscaping can also reduce maintenance costs—and increase the beauty and value of your property.



XERISCAPES ARE COLORFUL

Xeriscape Tips

Here are some handy tips that can help create a successful xeric landscape.

- Newly planted xeriscapes require additional water in the first year or two. After plants are established, water less.
- Consider converting to water-wise grasses. Native and low-water species such as blue grama and buffalo grass need far less water than bluegrass.
- Xeriscaping doesn't have to be an “all or nothing” proposition. After completing your landscape plan, you can convert to low-water-use plants one zone or area at a time.
- Hiring a landscape professional is probably the best way to completely convert an existing landscape to xeriscape. However, with a proper plan, xeriscaping your yard in stages can be an excellent “do-it-yourself” project.

Watering Tips

Here's how to save water no matter what kind of landscape you have.

- Water deeply but less frequently, keeping in mind the needs of specific soils, plants and watering systems.
- Water plants—not sidewalks and driveways.
- Water lawns during the cooler morning hours to avoid excessive evaporation.
- Adjust watering to compensate for seasons and rainfall. (In other words, don't let your automatic sprinklers come on the day after a summer “monsoon.”)
- Know your plants. Learn how much water they need, and don't overwater!
- For water-wise trees and plants, convert to drip irrigation—which is usually more efficient than traditional sprinklers.



State Engineer Office
Water Conservation Program
505-827-3879

Acknowledgements

Special thanks to Curtis Smith, Cooperative Extension Service; David Cristiani, landscape designer and consultant; Judith Phillips, Bernardo Beach Native Plant Farm; Mollie Toll, Carol Schneider Dumont, and Hope Reed, Santa Fe Xeriscape Council; Pat Codd, Arrow Construction Services; and Dean Ricer, Living Desert State Park.

Suggested reading

Natural by Design by Judith Phillips

Plants for Natural Gardens by Judith Phillips

Native Plants for Southwestern Landscapes by Judy Mielke

The Xeriscape Flower Gardener by James Knopf

Landscaping with Native Plants of Texas and the Southwest by George O. Miller.

PRODUCED BY SCHULTZ COMMUNICATIONS. DESIGNED BY GIANOPOULOS DESIGN. PHOTOGRAPHY BY CHARLES MANN.
FUNDED BY THE NEW MEXICO INTERSTATE STREAM COMMISSION.

A Guide to Water-wise Landscaping in New Mexico

THE Enchanted Xeriscape



State Engineer Office Water Conservation Program

The Principles of Xeriscaping

By applying xeriscape principles to your landscape, you'll not only save water—you'll also enjoy the beauty and diversity of native and other water-wise (drought-tolerant) plants. Many delightful varieties of trees, shrubs, flowers and grasses do very well in the climates of New Mexico. The following principles serve as a basic introduction to successful xeriscaping.



Planning and Design

A beautiful xeriscape starts with a good design. The physical characteristics of the site should be considered—and so should your needs and your aesthetic preferences.

For example, here are a few of the considerations:

- **Sun**— What portions of the property receive hot, afternoon sun? What portions receive morning sun and afternoon shade? The amount and time of sun will affect the types of plants you choose.
- **Function**— Do you need an outdoor living area? If so, consider expanding the patio area with additional shade structures and low-water-use trees to provide privacy.
- **Views**— Are there views you want to protect or screen? Know the mature size of the plants you select to ensure the views and screening you desire.
- **Time**— How much time do you plan to spend maintaining your landscape? If you'd rather enjoy your yard than work in it, choose low-maintenance plants.

A well-planned design enables you to convert to water-wise landscaping quickly or to install your xeriscape in phases. Whether you create your own design or call upon a landscape design professional, a properly designed xeriscape can help meet your lifestyle needs.



Soil Improvements

To enable your soil to better absorb water, you may need to add soil amendments before you plant. The water-retention abilities of most New Mexican soil is improved with the addition of organic matter. If you're landscaping with native plants, however, soil amendments may not be necessary. Some well-adapted xeric plants prefer not to have too rich a soil. For these plants, doing as little as loosening the soil is all the soil preparation you'll need.



Appropriate Turf Areas

Let's face it, Kentucky bluegrass isn't native to New Mexico. While the statewide average is 13 inches of rain per year, Kentucky bluegrass requires 40 inches or more to stay green and healthy. The difference in moisture must come from irrigation—lots of irrigation.

That's why it's important for New Mexicans to rethink lawns. Instead of using a lawn to cover large areas, choose your lawn size and type to fit your family's needs. Drought-tolerant grasses such as buffalo grass and blue grama grass may be substituted for water-thirsty bluegrass in many situations. Consider reducing the size of your lawn and planting water-wise groundcovers and shrubs instead.



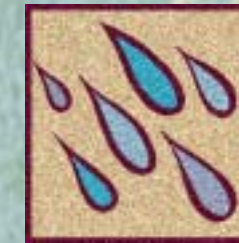
OUR ENCHANTED NEW MEXICO ENVIRONMENT IS A NATURAL XERISCAPE



Low-Water-Use Plants

Whenever possible, choose native and low-water-use plants. A delightful variety of water-wise plants can grow in all of New Mexico's climatic regions. Some are perfect for adding year-round greenery and texture; others are great for adding seasonal color.

Xeriscaping uses the concept of “zoning.” By grouping plants with similar water needs together in specific “zones,” your landscape can use water more efficiently. Low-water-use plants should be grouped together, away from the high-water plants and turf. Take advantage of warm or cool “microclimates” (the actual climatic conditions around your property which can be influenced by the placement of walls and shade trees) to create areas of interest and diversity.



Efficient Irrigation

A well-planned and well-maintained irrigation system can significantly reduce a traditional landscape's water use. For the most efficient use of water, irrigate turf areas separately from other plantings. Other irrigation zones should be designed so low-water-use plants receive only the water they require.

Proper irrigation choices can also save water. Turf lawns are best watered by sprinklers. Trees, shrubs, flowers and groundcovers can be watered efficiently with low-volume drip emitters, sprayers and bubblers.



Mulching

Mulches cover the soil and minimize evaporation, cool the soil, reduce weed growth and slow erosion. Mulches can also provide landscape interest and offer protective cover until plants mature. Organic mulches—including bark chips, wood grindings and composted cotton burs—are commonly used in planting beds. Inorganic mulches, such as gravel and decomposed granite, can be used to add texture and color under trees and around shrubs. (By the way, don't use plastic underneath rock or bark. It prevents the soil from breathing and encourages shallow plant roots.)



Proper Maintenance

Although most successful xeriscapes are *low* maintenance, they aren't *no* maintenance. Keeping your xeriscape beautiful and water thrifty through a program of well-timed mowing, fertilizing, pruning, pest control and weeding will ensure that your landscape will develop beautifully.

To ensure continued water savings, keep irrigation systems properly adjusted. Properly maintained, a well-planned xeric landscape requires even less work as it matures—leaving you more time to enjoy your garden.

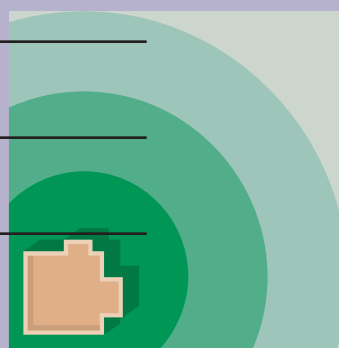
THE NEW MEXICO XERISCAPE

Creating Your Xeriscape

Zone 1 Arid

Zone 2 Transition

Zone 3 Mini-Oasis



One of the keys to creating a successful xeriscape is planning for different areas of landscape use. By putting plants into specific zones based upon the functions you want your yard to serve *and* the water needs of the plants you select, you can create a water-efficient landscape that is both beautiful and functional.

Typically, there are three xeriscape zones: arid, transition and mini-oasis.

Arid – Zone 1

Far away from the house and removed from the most active areas of the landscape, Zone 1 landscaping features the most drought-tolerant vegetation. Choose native plants and other varieties that only rarely require supplemental watering. Rainwater can be directed toward these xeric plants with land contouring to provide virtually all the water they need once the plants are well established.

Selecting the Right Plants

Based upon your local climate (see the New Mexico Climate Areas map below) and the water-use zones you'd like to create in your landscape plan, you'll need to select the appropriate plants. Use these three regional lists as a starting point.

Please keep in mind that this is merely a small sampling of plants that will grow in the various areas and zones. There are literally hundreds of species that grow and thrive in New Mexico. For more information about additional plants to meet your landscape requirements, contact a local nursery or landscape professional.

Transition – Zone 2

This intermediate zone takes advantage of low- and moderate-water-use plants. The transition zone is used to blend lush areas with the more arid parts of the landscape. These plants need infrequent supplemental watering (usually once a week or less).

Mini-Oasis – Zone 3

Your "outdoor living room" (where you spend the most time outdoors) should be in or near a mini-oasis. This is the area nearest to the house where the highest water-use plants are closely placed, creating the lushest zone. The mini-oasis zone includes the lawn area (if any) – which is typically the highest water-use area. This zone also includes the shady north and east sides of a house – which are usually the coolest parts of the site.

And, anywhere water collects – off a roof or at the base of a slope – can be turned into a mini-oasis.



PRAIRIE CONEFLOWER *Ratibida columnifera*



NORTHERN NEW MEXICO XERISCAPE This "outdoor room" is surrounded by islands of color. Flowering yarrow (at far left), coreopsis (foreground, center) and verbascum (foreground, right) provide bright yellows. Red penstemon (foreground, center) and purple iceplant along the pathway provide additional color.



PINELEAF PENSTEMON *Penstemon pinifolius*

Zone 1 Drought-tolerant plants – water only rarely

Perennials and groundcovers: Blue Euphorbia, Gayfeather, Pineleaf Penstemon, Prairie Coneflower, Prairie Sage, Sunrose. **Shrubs and accents:** Apache Plume, Big Sagebrush, Chamisa, Littleleaf Mountain Mahogany, Sea Buckthorn, Wax Currant. **Trees:** New Mexico Locust, One-Seed Juniper, Piñon Pine, Utah Juniper.

NM Climate Area 1
North/Mtn.

Zone 2 Water-wise plants – water infrequently

Perennials and groundcovers: Blanket Flower, Common Yarrow, Lamb's Ears, Perennial Bachelor's Button, Purple Coneflower, Snow-in-Summer, Woolly Thyme. **Shrubs and accents:** Cliffrose, Common Lilac, Curlleaf Mountain Mahogany, Fernbush, Silver Fleece. **Trees:** Austrian Pine, Bristlecone Pine, Cockspur Hawthorne, Gambel Oak, Golden Rain Tree, Rocky Mountain Juniper.

Zone 3 Mini-oasis plants – regular supplemental water

Perennials and groundcovers: Blue Flax, Creeping Potentilla, Daylily, Gloriosa Daisy, Rocky Mountain Columbine, Silverleaf Potentilla. **Shrubs and accents:** Blue Avena, Boulder Raspberry, Butterfly Bush, Virginia Creeper, Western Sandcherry. **Trees:** Aspen, Bigtooth Maple, Blue Spruce, Japanese White Pine, Kentucky Coffeetree, Littleleaf Linden.



New Mexico Climate Areas

Several factors influence regional and local climatic conditions. These include latitude, elevation, terrain, exposure and precipitation. Although there is no foolproof way to completely account for these variations, this map can serve as a guide to determining the appropriate plants and trees for your location.

NM Climate Area 2
Central

Zone 1 Drought-tolerant plants – water only rarely

Perennials and groundcovers: Blackfoot Daisy, Bush Morning Glory, Chocolate Flower, Gray Santolina, Paperflower, Palmer Penstemon. **Shrubs and accents:** Apache Plume, Beargrass, Bird of Paradise, Chamisa, Creosote Bush, Mormon Tea, Three-Leaf Sumac. **Trees:** Arizona Cypress, Desert Willow, Honey Mesquite, One-Seed Juniper.

Zone 2 Water-wise plants – water infrequently

Perennials and groundcovers: Blanket Flower, Cotoneaster, Mexican Evening Primrose, Purple Iceplant, Sedum, Spotted Gayfeather. **Shrubs and accents:** Chamisa, Cliffrose, Fernbush, Fountain Grass, Rosemary, Spanish Broom. **Trees:** Blue Atlas Cedar, Chaste Tree, Chinese Pistache, Desert Willow, Mexican Elder, New Mexico Olive.

Zone 3 Mini-oasis plants – regular supplemental water

Perennials and groundcovers: Blue Flax, Daylily, Honeysuckle, Snow-in-Summer. **Shrubs and accents:** Autumn Sage, Blue Avena, Burkwood Viburnum, Evergreen Silverberry, Pampas Grass, Pomegranate. **Trees:** Arizona Sycamore, Japanese Pagoda Tree, New Mexico Olive, Oklahoma Redbud, Southern Live Oak.

NM Climate Area 3
South

Zone 1 Drought-tolerant plants – water only rarely

Perennials and groundcovers: Blackfoot Daisy, Desert Marigold, Desert Zinnia, Parry's Penstemon. **Shrubs and accents:** Beargrass, Creosote Bush, Ocotillo, Prickly Pear Cactus, Texas Ranger, Turpentine Bush. **Trees:** Arizona Cypress, Coolibah, Desert Willow, Honey Mesquite, Jerusalem Thorn.

Zone 2 Water-wise plants – water infrequently

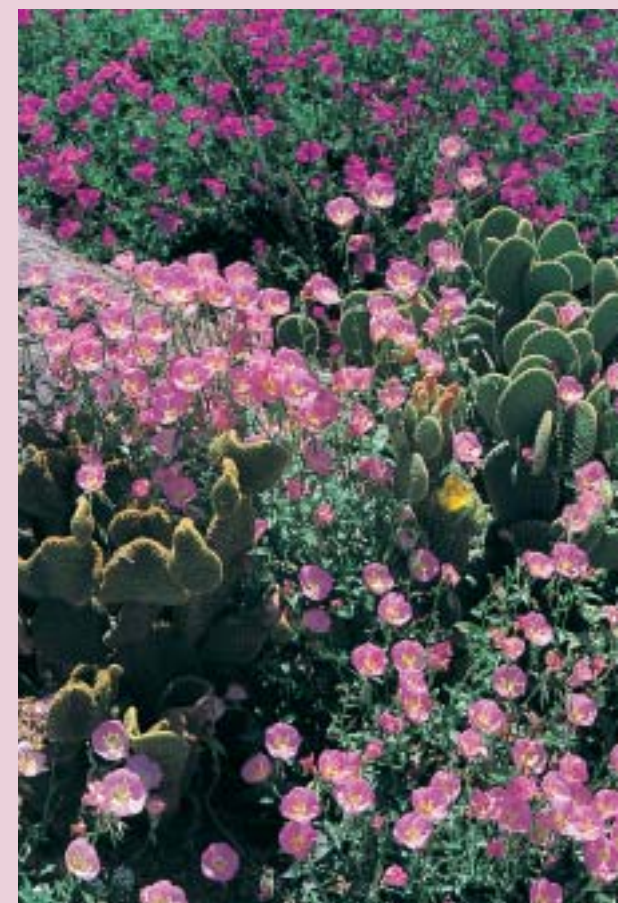
Perennials and groundcovers: Blanket Flower, Mexican Evening Primrose, Prostrate Desert Broom, Prostrate Rosemary, Verbena. **Shrubs and accents:** Arizona Yellowbells, Autumn Sage, Chihuahuan Sage, Deergrass, Sugarbush Sumac, Texas Mountain Laurel. **Trees:** Chaste Tree, Chinese Pistache, Cork Oak, Golden Ball Lead Tree, Mexican Buckeye, Mexican Elder.

Zone 3 Mini-oasis plants – regular supplemental water

Perennials and groundcovers: Creeping Lily Turf, Golden-Spurred Columbine, Lily of the Nile, Mexican Evening Primrose, Prostrate Rosemary. **Shrubs and accents:** Autumn Sage, Deergrass, Desert Honeysuckle, Evergreen Silverberry, Pomegranate, Redtip Photinia. **Trees:** Arizona Sycamore, California Fan Palm, Carolina Cherry Laurel, Lacebark Elm, Southern Magnolia.



BLANKET FLOWER *Gaillardia*



SOUTHERN NEW MEXICO XERISCAPE Pink Mexican primrose (foreground) thrives amidst the heat- and drought-tolerant prickly pear cactus. The beautiful purple flowering verberna completes the garden.



SPOTTED GAYFEATHER *Liatris punctata*



CENTRAL NEW MEXICO XERISCAPE A dry streambed is framed by woolly veronica (foreground, left) and creeping thyme (foreground, right). Pineleaf penstemon provides bright red-orange flowers, while paper flower adds a dash of yellow. In the background at right, fountain grass adds visual interest.



APACHE PLUME *Fallugia paradoxa*



BLACKFOOT DAISY *Melampodium leucanthum*



State Engineer Office Water Conservation Program

FOR MORE INFORMATION ABOUT WATER CONSERVATION, CALL

1-800-WATER-NM
(1-800-928-3766)

ALL PHOTOGRAPHY BY CHARLES MANN