

XERISCAPING 101

What is Xeriscaping?

Literally the word Xeriscaping comes from a combination of two Greek words: “xeri” meaning dry and “scape,” meaning a type of view or scene. Xeriscape therefore translates to mean “dry scene,” but in practice Xeriscaping is a form of landscaping successful in dry climates using slow-growing, drought-tolerant plants to conserve water and reduce yard trimmings.

This method of landscaping is based on seven landscape principles that promote water conservation. Following these principles can help you create a beautiful, water efficient landscape that is easy to create and easy to maintain.



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Xeriscaping is promoted in dry climates like Wyoming because this form of landscaping reduces the amount of watering required for landscaping by using native drought-resistant plants. The average Rocky Mountain citizen uses 50% of their annual water bill for irrigation of their traditional water deficient landscapes. Unlike these traditional landscapes, Xeriscapes choose plants that are subsistent on the amount of moisture they receive in the fall and winter months, and require only a small amount of attention in the spring and summer. Because plants indigenous to Wyoming are already naturally accustomed to our climate & therefore water efficient for landscaping, in addition to conserving water they lessen the impact on the environment by attracting native birds and insects. And following the Xeriscaping format doesn't mean being restricted to only native Wyoming plants. Any drought tolerant plant native to similar climates can be used. Having a xeriscape means having a beautiful landscape even during a drought, when traditional landscapes are suffering. Along with water conservation, Xeriscapes also generally require less fertilizer as well as fewer pest control measures because they use native plant life, which also lessens the environmental impact. Xeriscapes therefore require less maintenance by reducing time spent watering, fertilizing, & trimming, helping save you both time & money.

Why Xeriscape?

- **Saves water**
Using native, drought resistant plants help significantly reduce water usage.
- **Saves time**
By replacing bluegrass blanketed yards & other water deficient plants with xeriscape alternatives reduces time spent watering, fertilizing & mowing.
- **Saves money**
Reducing water use can lower your water bill & xeriscape beautification can help to increase your property value.

Xeriscaping™ Principles

Developed by Denver Water

Planning and Design

The first principle of Xeriscaping is developing a plan for your landscape. Creating a landscape to accent your development is similar to building that development, you need a plan to not only provide you with the layout of how the landscape will look, but to help ensure that water-conserving techniques are implemented in the landscape.

In your plan you should include the types of plant life that you are going to use, including a description of their location. In developing your plan you will need to map the area you are going to landscape and make sure your plan fits any city requirements.

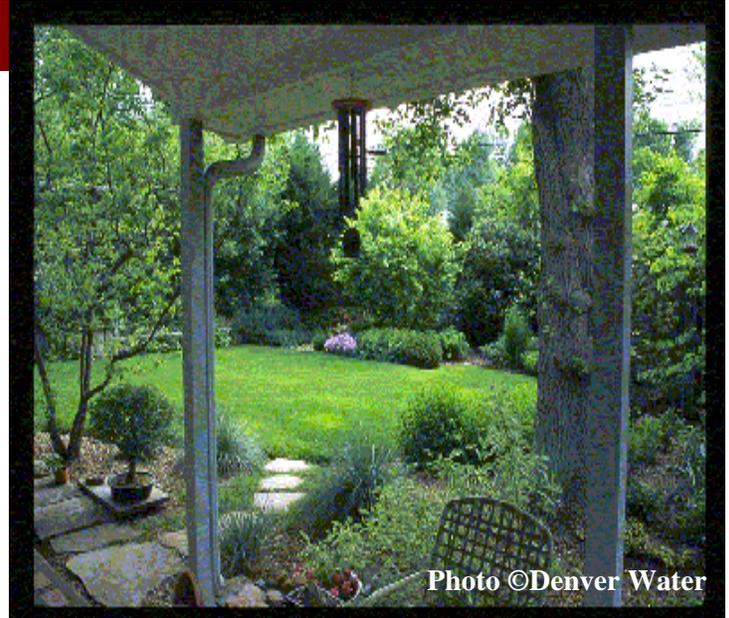


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Soil Improvements

Another important part of Xeriscaping is considering the type of soil in which your landscape is going to be planted.

Wyoming and other desert soils tend to fall into one of two categories: sand & clay. It is most likely that your soil will be one of two. If you have a clay like soil it is important to note that clay soil is dense. Its density makes it slow to absorb and release water. If you apply water to clay soil too quickly, it either pools on the surface or runs off. This can either prevent plant life from getting water, or actually drown your plants.

Unlike clay soil, sandy soils have difficulty holding water. Unless irrigated or watered frequently plants

in sandy soils receive small mounts of water, causing them to dry out.

To solve this problem and enable your soil to better absorb water which allows for deeper roots, you may need to add a soil amendment before you plant. You will need to make sure that the amendment reaches at least 6 inches deep. Remember that xeriscape plants are usually native, and therefore soil amendments may not be needed because these plants are suited to soil that is not too rich. For many of these plants, the only soil preparation necessary is to loosen the soil.



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Efficient Irrigation

Even though Xeriscape landscaping doesn't require as much water as traditional landscaping, it still must be watered. Although xeriscape can be watered by hand, Irrigation such as sprinkler systems are the best way to water.

If you're installing a sprinkler system, it's best to plan this along with your landscape's design plan. Because xeriscape landscaping requires similar like plants to be planted together, make sure that your turf areas are separate from other plantings. This way the irrigation method that waters the plants in each area are most efficient.

For grass such as buffalo grass, low-pressure, low-angle sprinklers irrigate best. Drip, spray or bubbler emitters are most efficient for watering trees, shrubs, flowers and groundcovers. Also, the most efficient sprinklers are ones that put out big drops and keep the water close to the ground. Remember to water deeply and infrequently to develop deep roots.

Zoning of Plants

When Xeriscaping, keep in mind that the different areas of your landscaping will get different amounts of light, wind and moisture. To conserve water, it is best to group together plants with similar light and water requirements. This is known as zoning.

A useful guideline to follow is to put high water-use plants in low lying drainage areas or at the very least, in the shade of other plants. It also helps to put high water-use plants where the most water is received, or where it is easy to water.

Dry, sunny areas or areas far from a hose are great places for the many low water-use plant options that grow well the Douglas climate. Plant zoning encourages the planting of a variety of plants with different heights, color and textures, which creates interest and beauty.

By "zoning," or grouping your plants appropriately, you can reduce your chance of over watering drought tolerant plants and under watering moisture loving plants. This maximizes water conservation while ensuring that your plants flourish in the right environment.



Photo ©Denver Water



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Using Mulches

Mulching is another essential tool for successfully Xeriscaping in Wyoming. Mulch is important because it helps keep plants roots cool, prevents soil from crusting, minimizes evaporation, slows erosion, and reduces weed growth. Mulches also give beds a finished look and increase the visual appeal of your yard or garden.

Organic mulches, such as bark chips, pole peelings or wood grindings should be applied at least 4 inches deep because they decompose over time or blow away in the Wyoming wind. They're especially important for new landscaping. As plants mature and spread, their leaves and branches will cover the mulched areas, doing the job of the mulch. Inorganic mulches such as rocks and gravel may be used, applying at least 2 inches deep. They rarely need replacement and are good in windy spots, however, avoid placing them in sunny spots as they tend to retain and radiate heat. Mulch may be applied directly to the soil surface or placed over a landscape fabric.



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Turf Alternatives

Traditionally, the landscape of choice in Wyoming has been seed or sod, which creates a carpet of bluegrass turf. Bluegrass is lush and hardy, but in our semi-arid climate it requires substantial amounts of supplemental watering.

One way to reduce the watering requirements of your landscape is to reduce the amount of grass turf in your landscape by limiting the areas of turf to practical sizes. Also, it is smart to consider using the xeriscape practice of turf alternatives. By choosing a turf such as buffalo grass that uses less water, you can still have a beautiful lawn with less watering.

Appropriate Maintenance

In order to preserve the beauty of your Xeriscape you must maintain it regularly. Like all yards and gardens, for the first year or so your new landscape will likely require some maintenance. This could be care such as weeding and mowing but overtime your plants should crowd out the weeds, reducing your maintenance time.

In addition, your Xeriscape will need proper irrigation, pruning, and depending on your plant selection, small amounts of fertilizing and pest control. At first, maintenance time for xeriscape is similar to a traditional landscape, but it decreases over time. And when your landscape is well taken care of, you can sit back and enjoy the view.



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Heavy Duty Xeriscaping Suggested Plants

- ◆ Big Bluestem
- ◆ Blue Avena Grass
- ◆ Blue Grama Grass
- ◆ Curl-leaf Mountain Mahogany
- ◆ Cushion Spurge
- ◆ Cut-leaf Staghorn Sumac
- ◆ Faassen's Catmint
- ◆ Feather Reed Grass
- ◆ Fernbush
- ◆ Golden Raintree
- ◆ 'Heavy Metal' Switch Grass
- ◆ Indian Grass
- ◆ Jupiter's Beard
- ◆ Lavender Mist Sun Daisy
- ◆ Leadplant
- ◆ Oakleaf Sedum
- ◆ Orange Day Lilies
- ◆ Paprika Yarrow
- ◆ Pine Leaf Penstemon
- ◆ Pink Sunrose
- ◆ Plumbago
- ◆ Red Leaf Rose
- ◆ Russian Sage
- ◆ Scarlet Bugler Penstemon
- ◆ Seafoam Sage
- ◆ Shrub Cotoneaster
- ◆ Slowmound Mugo Pine
- ◆ Snow-In-Summer
- ◆ Spanish Gold Broom
- ◆ Sundrops
- ◆ Sunny Border Blue Veronica
- ◆ Sunset Hyssop
- ◆ Yellow Pine Leaf Penstemon

Fire Resistant Plants:

- * Jupiter's Beard
- * Lavender Aster
- * Blue Lavender
- * Kinnikinnick

Douglas, Wyoming's climate is a semi-arid, and normally only receives 13-15 inches of precipitation a year. And if you think that's dry, during a drought the annual precipitation can fall to as low as 8-10 inches. This puts strain on many plants, especially when the limited resources of water during the summer call for watering restrictions that limit the amount of supplemental irrigation that can be applied.

So how do plants survive in this kind of environment? The truth is, some plants do just fine. There are several plants that can take Wyoming's periodic droughts in stride. Some are even fire resistant, which is an important consideration when planning your Xeriscape on your farm or ranch, or in the mountains. Following Xeriscaping practice, in addition to selecting drought-resistant plants, Remember these effective ways to help your landscape survive a drought:

Amend the soil. This is especially important if you have sandy soil. Sand can't hold water, so the sandier your soil, the quicker any rain or irrigation water will percolate down past plant roots to the water table.

Use Mulch. Mulching trees, shrubs and flower beds will help the soil retain water and prevent the soil surface from crusting. Mulching also keeps the soil temperature (and the plant roots) cooler, reducing the amount of moisture the plants use. Mulch should be at least 3 inches deep.

Irrigate efficiently. Drip irrigation is the least wasteful way to water shrubs, trees and perennials. If you have a sprinkler system you can retrofit it for drip irrigation. If not, you can use soaker hoses and move them from bed to bed. Either way, applying water "low and slow" is the way to go.



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Suggested Plants

Suggested Turf:

- ◆ Buffalo Grass
- ◆ Indian Rice Grass
- ◆ June Grass
- ◆ Big Bluestem Grass
- ◆ Sand Love Grass
- ◆ Blue Fescue Grass

Suggested Trees:

- ◆ Big tooth maple
- ◆ Tree of Heaven
- ◆ Western Catalpa
- ◆ Rocky Mountain Juniper
- ◆ Goldenrain Tree
- ◆ Ponderosa Pine
- ◆ Pinyon Pine
- ◆ Gambel Oak
- ◆ Burr Oak
- ◆ Siberian Elm Tree

Suggested Shrubs:

- ◆ Sage
- ◆ Saltbrush
- ◆ Barberry
- ◆ Rabbitbrush
- ◆ Cliff Rose
- ◆ Juniper
- ◆ Sand Cherry
- ◆ Buffalo Berry
- ◆ Yucca Plant

Suggested Flowers:

- ◆ Columbine
- ◆ Canterbury Bells
- ◆ Bleeding Heart
- ◆ Horned Violet
- ◆ Sweet Violet
- ◆ Golden Banner
- ◆ False Lupine
- ◆ Cactus plant
- ◆ Cornflower
- ◆ Delphinium
- ◆ Purple Coneflower
- ◆ Baby's Breath
- ◆ Lavender
- ◆ Bearded Iris
- ◆ Shasta Daisy
- ◆ Lupine
- ◆ Peony
- ◆ Iceland/Oriental Poppy
- ◆ Black-Eyed Susan



Aurora Water Xeriscape Garden, Aurora, CO

The City of Douglas' landscaping ordinance requires landscaping on all new and re-development. Xeriscape is highly promoted because of its water efficiency. The dry desert climate of Wyoming combined with the recent drought conditions and projected population growth means that water is no longer a resource that can be taken for granted. Xeriscaping is easy to do and easy to maintain. Homeowners and those looking to re-develop their landscaping such as their yards are also encouraged to use xeriscape.

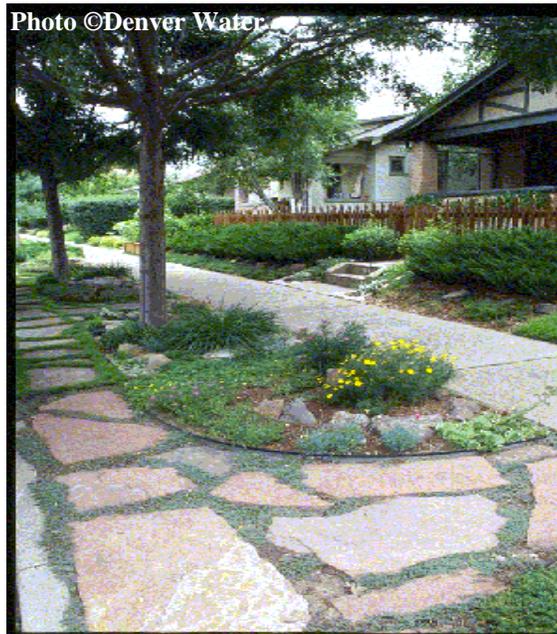
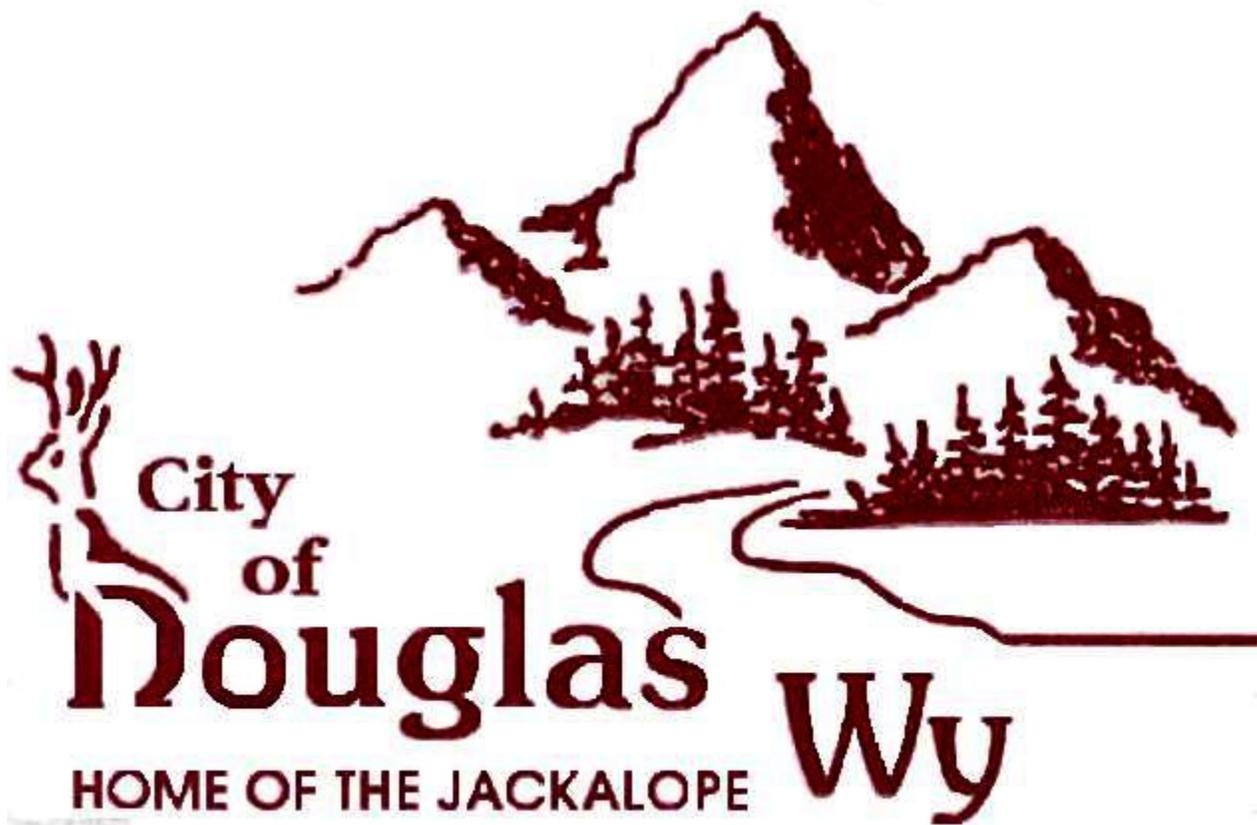


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More Information:

The principles of Xeriscaping were developed by Denver Water. Information in this packet was adapted from information found at www.xeriscape.org. For more information, including example landscape designs & plans visit their website.



City of Douglas
Planning & Community Development
101 N. 4th Street
Douglas, WY 82633
307.358.2132