Save Money and Water with Xeriscape Landscaping

The state of Arizona in 2002 experienced its driest year in nearly 50 years, according to the National Climatic Data Center. Municipalities continue to face increased demands on existing water supplies. Consequently, there is a greater focus on water conservation, not just in times of drought, but also in anticipation of future population growth. Water can no longer be considered a limitless resource.

The goal of xeriscape landscaping is to create visually attractive landscapes of plants selected for their water efficiency. Properly maintained, it can easily use less than one-half the water of a traditional landscape. Once established, it also should require less maintenance than turf landscape.

LANDSCAPE CONVERSION

Converting to xeriscape saves money. There are initial expenses, but the cost savings are worth the investment. Here are some cost comparisons from real properties that converted to xeriscape. (Costs based on 2002 estimates that may vary depending on site requirements.)

- Cost to convert: 50 cents to $2.04 per square foot
- Estimated payback period: 2 ½ years to 6 years
- Water savings: Costs cut by one-half to two-thirds
- Estimated annual savings: $1,900 to $14,100 (includes water savings and maintenance costs)

Not only can you save money on water, but your maintenance bills can change, too:

- Lush, traditional landscape with lots of turf and water-loving plants: $1,300 to $2,600 per acre per month.
- A heavily planted and "over-maintained" desert landscape: $900 to $1,700 per acre per month.
- A moderately-maintained desert landscape with selective pruning: $500 to $900 per acre per month.
- A very natural landscape, where minimal pruning is necessary: $175 to $300 per acre per month.

ESTIMATING SAVINGS

Conversion of landscapes from turf to xeriscape can result in dollar savings because of reduced water use, maintenance costs and, in some cases, wastewater fees. The following are steps to estimate potential savings. (Application rates for turf and low-water-use plant material as established by the Arizona Department of Water Resources):

1. **Determine Savings from Reduced Water Use**
   - Determine size of turf area selected for conversion: (If square feet, convert to acres; 43,560 square feet equals 1 acre)
   - Estimate water use for existing turf area (Estimated water use: turf area times application rate equals _____ acres times 4.9 acre-feet/acre)
   - Estimate water use for conversion to low water use design

(Estimated water use: landscaped area times application rate equals _____ acres times 1.5 acre-feet per acre)

- Estimated water savings: turf water use per acre minus conversion water use per acre (1 acre foot of water equals 325,851 gallons)

- Estimated dollar savings: water savings times cost (water rates) per 1,000 gallons (Contact your water provider's customer service for this information)

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2. Determine Possible Savings from Reduced Maintenance Cost

Estimated maintenance savings: Annual cost of mowing plus cost of over seeding, minus estimated cost of maintaining xeriscape

3. Determine Savings from Reduced Wastewater Fees

Estimated wastewater savings: water savings times cost (wastewater fees) per 1,000 gallons

REMOVING BERMUDA GRASS

Bermuda grass is a perennial popular as a lawn grass in the Valley. Although well adapted to the heat, drought and alkaline soils of the desert Southwest, it takes over 40 inches of water a year to keep it looking green. This is despite its dormancy throughout the winter. Removing an established Bermuda grass lawn takes persistence, but is well worth the effort in water savings.

Late summer is the best time to kill a Bermuda grass lawn because products applied to the leaves move into the roots and rhizomes. Killing turf grass involves the following steps.

1. One week before application of the herbicide, water the lawn daily for 30 minutes to 40 minutes. This makes the grass grow actively.
2. Do not mow. The more leaf surface, the more herbicide absorbed.
3. Apply an herbicide when the grass is actively growing and the turf is a bright green color. Use herbicides that contain glyphosate as the active ingredient. The grass will trans-locate these postemergent from the leaves to the roots. This usually kills between 85 percent to 95 of Bermuda and other turf grass species.
4. Irrigate the turf area a second time approximately one week after the initial herbicide treatment to stimulate re-growth of the surviving grass.
5. Retreat the remaining green turf.

After you've successfully killed the grass, remove the dead turf and thatch. You can then prepare the site, install an irrigation system, and plant ornamentals. If grass reappears in irrigated areas around desirable ornamentals, spot treat the grass with a glyphosate-containing product, being careful to avoid contact with ornamentals.

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