

SEVEN PRINCIPLES OF LOW WATER LANDSCAPING

1. Plan And Design (see Water Use Zones)

Take the time to plan before you plant. Create different water-use zones and choose appropriate plants; consider variety, size, texture, color, and bloom time. Water zones are: Moderate—weekly or more irrigation; Low—monthly irrigation; and Very Low—little or no irrigation once established.

2. Design Practical Turf Areas

Turf grasses are more expensive and intensive to maintain than most other landscape plants. Limit the size of lawn areas to an amount you will actually use. Consider using a low-water alternative like Blue Grama Grass (*Bouteloua gracilis*) instead of thirsty Kentucky Blue Grass (*Poa pratensis*).

3. Work With Your Soil

If necessary, amend your soil with organic matter such as compost or aged manure prior to planting. This will improve root development, and increase water penetration and retention. Be aware that some native plants may not benefit from additions of organic matter; loosening the soil may be all that is needed.

4. Use Appropriate Plants

Choose native plants and plants with low water needs whenever possible. Group plants with similar water requirements, placing them in the appropriate water zone.

5. Cover Your Soil

Covering the soil with mulch, large stones, or decorative wood pieces will provide a protective layer to retain moisture, prevent erosion, reduce weeds, and create a finished look to the garden. Mulch can be organic such as bark, wood chips, and pine needles, or inorganic which includes pea gravel and crushed rock.

6. Irrigate Efficiently

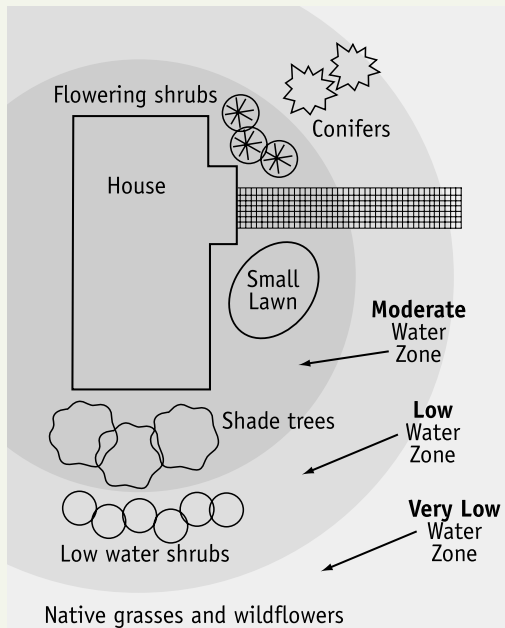
Water deeply and less often. Even low water plants can become water hogs when over-watered. Watering in the morning or late at night will reduce evaporative loss. Follow the water schedule established by the City of Flagstaff: even numbered addresses water Wednesday, Friday, and Sunday; odd numbered addresses water Tuesday, Thursday, and Saturday. **Water only before 9 AM and after 5 PM.**

7. Maintenance

A properly maintained landscape conserves water. Check irrigation systems regularly to make sure they are working correctly, and adjust timers as the seasons change and plants become established. Proper pruning, weeding, and mulch will save water and enhance the beauty of your landscape.

WATER USE ZONES

Planting in specific zones can create a water-efficient landscape that is both beautiful and functional.



WATER USE ZONES

WATER USE

Moderate: This is the zone containing plants with the highest water requirements. This zone is often located close to the house in high use and/or high visibility areas. These locations will require more watering and should be limited to focal points, entrances and functional areas.

Low: Plants growing in this zone require infrequent watering. This area may need supplemental water during the dry months.

Very Low: This zone is often located farthest from the house. The most drought-tolerant plants in this zone will require little, if any, supplemental water once established. This area may need additional watering in times of extreme drought.

BOOKS

- *Native Plants for High-Elevation Western Gardens*. 2003. Busco, J. and N. R. Morin, Fulcrum Publishing.
- *Beyond the Ponderosa: Successful Landscape Trees for Higher Elevations in the Southwest*. 1998. DeGomez, T. and J. Bailey. Flagstaff Community Tree Board.
- *Waterwise Gardening*. 1989. Sunset Books, Lane Publishing.
- *The Xeriscape Flower Gardener*. 1991. Knopf, J. Johnson Books.
- *Waterwise Landscaping with Trees, Shrubs & Vines*. 1994. Knopf, J. Chamisa Books.
- *Xeriscape Gardening*. 1992. Ellefson, Stephens & Welsh. MacMillan Publishing.
- *Xeriscape Plant Guide*. 1996. Denver Water. Fulcrum Publishing.

Special Acknowledgement

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Flagstaff Xeriscape Council Sponsors

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- Coconino Community College
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- Coconino Cooperative Extension
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- Flagstaff Native Plant and Seed
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- The Arboretum at Flagstaff
(928) 774-1442 www.thearb.org
- Warner's Nursery & Landscape Company
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WEB RESOURCES

- The Arboretum at Flagstaff - www.thearb.org
- Xeriscape Colorado! - www.xeriscape.org
- Colorado State University Extension Service - www.ext.colostate.edu
- Xeriscape Council of New Mexico - www.xeriscapenm.com/index.html

sun loving and low-water

Flagstaff Fabulous Plants



developed by
Flagstaff Xeriscape Council

Water, Gardens, and Wisdom

Flagstaff homeowners quickly learn how dry summers, cold temperatures, high altitude, and a short growing season create special gardening challenges.

Selecting the right plants will help create beautiful and lasting landscapes that require less maintenance and water.

To help homeowners select plants appropriate to our arid region, the following list of tried and true low water use plants was created with input from local nurserymen, botanists, horticulturists, and landscape professionals.

Although many more plants are available, this list serves as an introduction to home gardeners interested in early success.

These plants were chosen based on the following criteria:

- Commercially available
- Ecologically appropriate
- Low water use
- Low maintenance
- Survivability
- Cold hardy
- Color and texture



Flagstaff Fabulous Plants

Sun loving, low-water plant list. It's not enough to wish for rain - plan ahead!

| | COMMON NAME | BOTANICAL NAME | HEIGHT | WIDTH | SUN | ZONE | INTEREST / NOTES |
|----------------------|-----------------------------|-----------------------------------|-----------|-----------|--------|---|---|
| TREES | Amur Maple | <i>Acer ginnala</i> | 15-20 ft | 15-20 ft | ☉● | L - M | Hardy, small tree or large multi-stemmed shrub with great fall color; best in partial sun |
| | Rocky Mountain Juniper | <i>Juniperus scopulorum</i> | 20-30 ft | 20-30 ft | ☉● | VL | Native evergreen that is easily transplanted; good windbreak |
| | Crabapple | <i>Malus spp.</i> | 10-30 ft | 20 ft | ☉ | L - M | Deciduous tree grown for attractive spring color; flower buds may freeze in spring |
| | Colorado Blue Spruce | <i>Picea pungens</i> | to 100 ft | to 40 ft | ☉● | L | Evergreen, pyramid-shaped tree; not for dry, windy sites; dwarf sp. subject to windburn |
| | Pinyon Pine | <i>Pinus edulis</i> | 20-30 ft | 15 ft | ☉ | VL | Bushy, evergreen tree that is extremely drought tolerant; edible seeds; resinous |
| | Ponderosa Pine | <i>Pinus ponderosa</i> | 60-100ft | 25-30ft | ☉ | VL - L | Large evergreen tree common to Flagstaff; very hardy and drought tolerant |
| | Gambel Oak | <i>Quercus gambelii</i> | 20-40 ft | 15-20 ft | ☉● | VL - L | Slow growing deciduous tree with beautiful fall foliage; thicket forming |
| | Black Locust | <i>Robinia pseudoacacia</i> | 40-50 ft | 25-30 ft | ☉● | L | Deciduous shade tree that is drought tolerant once established; wind tolerant |
| | Utah Serviceberry | <i>Amelanchier utahensis</i> | 12-15 ft | 10-15 ft | ☉● | VL - L | Deciduous, twiggy shrub with distinct white bark and red berries in the spring |
| | White Sage Brush | <i>Artemisia ludoviciana</i> | 2-4 ft | 2-4 ft | ☉ | VL | Small shrub grown for its silvery-white, aromatic foliage rather than its flowers |
| SHRUBS/VINES | Mountain Mahogany | <i>Cercocarpus spp.</i> | 6-12 ft | 6-12 ft | ☉ | VL | Slow growing native shrub that is semi-evergreen to deciduous depending on species |
| | Fernbush | <i>Chamaebatiaria millefolium</i> | 4-6 ft | 4-6 ft | ☉ | VL - L | Semi-evergreen to deciduous shrub with fragrant white flowers that attract butterflies |
| | Rabbitbrush | <i>Ericameria nauseosa</i> | 2-5 ft | 3-5 ft | ☉ | VL | Fast growing evergreen shrub with plumes of yellow flowers in fall; drought tolerant |
| | Apache Plume | <i>Fallugia paradoxa</i> | 4-6 ft | 3-6 ft | ☉ | VL - L | Deciduous to semi-evergreen shrub; fuzzy, pink seed heads appear all summer |
| | Virginia Creeper | <i>Parthenocissus inserta</i> | 3-15 ft | spreading | ☉● | L | Deciduous vine that makes a good groundcover; scrambles rather than climbs |
| | Chokecherry | <i>Prunus virginiana</i> | 20-30 ft | 6-30 ft | ☉ | L - M | Large deciduous shrub or small tree with red to black berries |
| | Three-leaf Sumac | <i>Rhus trilobata</i> | 3-8 ft | 4-6 ft | ☉● | L | Deciduous shrub with beautiful fall foliage; very drought tolerant |
| | Currant (Golden/Wax) | <i>Ribes spp.</i> | 3-6 ft | 3-6 ft | ☉● | L | Deciduous shrub with spring flowers; height dependant on species |
| | New Mexico Locust | <i>Robinia neomexicana</i> | 10-15 ft | 10-15 ft | ● | VL | Spiny, deciduous shrub that forms dense thickets; showy pink, pea-like flowers |
| | Arizona Rose | <i>Rosa woodsii</i> | 3-6 ft | spreading | ☉ | VL - L | Fast growing deciduous shrub; fragrant, pink flowers in spring and summer; red fruit |
| GRASSES/ACCENTS | Agave | <i>Agave parryi</i> | 12-20 in | 18 in | ☉ | L | Succulent accent plant with spectacular blooms |
| | Blue Grama | <i>Bouteloua gracilis</i> | 6-12 in | spreading | ☉ | VL - L | Warm season native grass; low traffic turf alternative |
| | Arizona Fescue | <i>Festuca arizonica</i> | 2-3 ft | 2 ft | ☉● | VL - L | Cool season bunch grass with dense, thin blades |
| | 'Blue' Fescue | <i>Festuca ovina 'Glauc'</i> | 8-12 in | 12 in | ☉● | L | Ornamental, dense bunch grass with steel blue, needle-like foliage; many cultivars |
| | 'Karl Foerester' Grass | <i>Calamagrostis x acutiflora</i> | 4-5 ft | 2 ft | ☉● | L - M | Fast-growing, clump-forming, upright grass topped with tawny, fluffy flower heads |
| | Little Bluestem | <i>Schizachyrium scoparium</i> | 2-4 ft | 2-3 ft | ☉● | L | Warm season, perennial bunch grass with reddish fall color that persists through winter |
| | Banana Yucca | <i>Yucca baccata</i> | 2-2.5 ft | 3 ft | ☉ | VL | Accent plant with sword-shaped leaves; requires well-drained soil |
| | Western Yarrow | <i>Achillea millefolium</i> | 6-24 in | spreading | ☉● | L | Spreading perennial with fern-like foliage and white blooms; many colored cultivars |
| | Licorice Mint | <i>Agastache rupestris</i> | 18-30 in | 18 in | ☉● | VL - L | Licorice scented perennial with light orange flowers in summer; attracts hummingbirds |
| | Pussytoes | <i>Antennaria spp.</i> | 3 in | spreading | ☉● | L | Excellent small area groundcover with silvery foliage; some species require shade |
| FLOWERS/GROUNDCOVERS | Butterfly Milkweed | <i>Asclepias tuberosa</i> | 15-18 in | 15-18 in | ☉ | L | Upright perennial with showy yellow to orange flowers in summer; attracts hummingbirds |
| | Wine Cups | <i>Callirhoe involucrata</i> | 8 in | 24-36 in | ☉ | L | Spreading perennial with wine-colored flowers that bloom all summer long |
| | Buckwheats | <i>Eriogonum spp.</i> | 3-18 in | 12-24 in | ☉ | VL - L | Mat-forming group of perennials; flower stalks rise above foliage; height and color vary |
| | Red Dome Blanketflower | <i>Gaillardia pinnatifida</i> | 18 in | 24 in | ☉ | VL | Easy-care perennial with red disk flowers surrounded by yellow ray flowers |
| | Prairie Smoke | <i>Geum triflorum</i> | 4-12 in | spreading | ☉● | L | Groundcover that blooms in spring; feathery seed heads persist throughout summer |
| | Showy Goldeneye | <i>Heliomeris multiflora</i> | 3 ft | 3 ft | ☉ | VL - L | Bushy, long-lived perennial; abundant yellow sunflowers appear summer through fall |
| | Blue Flax | <i>Linum lewisii</i> | 2 ft | 2 ft | ☉● | VL - L | Low-maintenance perennial; blue flowers open each morning |
| | Showy Four-O'Clock | <i>Mirabilis multiflora</i> | 24 in | 30 in | ☉ | VL | Mounding perennial with large, magenta flowers; thrives in harsh climates |
| | Primrose | <i>Oenothera spp.</i> | 30-48 in | 12-24 in | ☉ | VL - L | Annual, biennial or perennial depending on species; large flowers attract butterflies |
| | Penstemon | <i>Penstemon spp.</i> | 4-48 in | varies | ☉● | VL - L | Group of over a dozen species, all with tube-shaped flowers; tolerant of poor soils |
| | Silver Cinquefoil | <i>Potentilla hippiana</i> | 6-12 in | 24 in | ☉ | VL - L | Low-growing perennial with silver foliage and yellow, rose-like flowers |
| | Scarlet Cinquefoil | <i>Potentilla thurberi</i> | 18-30 in | 24 in | ☉● | L - M | Long-blooming perennial with deep red flowers held in loose clusters that attract bees |
| | Broom Groundsel | <i>Senecio spartioides</i> | 1-3 ft | 2 ft | ☉ | L | Numerous, showy yellow flowers |
| Globe Mallow | <i>Sphaeralcea coccinea</i> | 12 in | 12 in | ☉ | VL - L | Long-blooming perennial for hot, sunny sites; attracts butterflies, bees and hummingbirds | |

☉ Full Sun

☉● Part Sun / Part Shade

M = Moderate Water

L = Low Water

VL = Very Low Water