

Plants Approved for the **“Rainwater Harvest Garden” Rebate Program**

All plants need regular watering when they are first planted in order to establish a root system that will support growth. The length of time it takes for plants to become well established varies greatly among plant species and with site conditions. The best adapted, fastest rooting plants may be well established in one or two growing seasons. Some plants may take three to five years of watering in summer before they can be weaned entirely. As the plants root out, gradually decrease the frequency of irrigation from weekly to semi-monthly, then monthly in summer, half as often in spring and autumn, and once or twice in winter. As you decrease the frequency of irrigations, increase the depth that the water penetrates to 30 inches to promote rooting well below the surface.

Three to four inches of mulch, stones or fibrous types such as pecan shells or shredded bark, helps suppress the growth of weeds which compete with the desirable plants for moisture and reduce evaporation of moisture from the soil.

Plants supported only by available precipitation once they are established will generally grow more slowly and mature at smaller overall dimensions than the same plants will when irrigated.

TREES

Precipitation only adapted trees will typically not reach shade tree canopy proportions unless they are grown in runoff catchments where they receive occasional flooding.

AFGHAN PINE/ALLEPO PINE/*Pinus halepensis* var. *brutia* and *eldarica*

*CATCLAW ACACIA/*Acacia greggii*

CANYON LIVE OAK/*Quercus chrysolepis*

*DESERT (NEW MEXICO) OLIVE/*Forestiera neomexicana*

*DESERT WILLOW/*Chilopsis linearis*

*EMORY OAK /*Quercus emoryi*

FRAGRANT AS/*Fraxinus cuspidata*

MESCAL BEAN or TEXAS MOUNTAIN LAUREL/*Sophora secundiflora*

NETLEAF HACKBERRY/*Celtis reticulata*

*ONE-SEED JUNIPER /*Juniperus monosperma*

*PIÑON /*Pinus edulis*

*SCREWBEAN MESQUITE/*Prosopis pubescens*

*TEXAS HONEY MESQUITE/*Prosopis glandulosa*

*VITEX *Vitex agnus-castus*

*VELVET MESQUITE/*Prosopis velutina*

SHRUBS

*APACHE PLUME /*Fallugia paradoxa*

BEEBRUSH/*Aloysia wrightii*

*BROOM DALEA/*Psoralea scoparius*

*BUSH or SAND PENSTEMON/*Penstemon ambiguus*

- *CHAMISA/*Chrysothamnus nauseosus*
- *CREOSOTEBUSH/*Larrea tridentata*
- *DAMIANITA /*Chrysactinia mexicana*
- *DESERT BROOM /*Baccharis sarothroides*
- DUNE BROOM/*Parryella filifolia*
- FAIRY DUSTER/*Caliandra eriophylla*
- *FEATHER DALEA /*Dalea formosa*
- *FOURWING SALTBUSH/*Atriplex canescens*
- GARDNER SALTBUSH/*Atriplex gardneri*
- GREEN EPHEDRA/*E. viridis*
- JOINT FIR/*Ephedra torreyana*
- LITTLELEAF SUMAC/*Rhus microphylla*
- *MARIOLA/*Parthenium incanum*
- *SAND or THREADLEAF SAGE/*Artemisia filifolia*
- SHADSCALE/*Atriplex confertifolia*
- THREELEAF SUMAC/*Rhus trilobata*
- *TURPENTINE BUSH /*Ericameria laricifolia*
- *WINTERFAT /*Ceratoides lanata*
- *WOLFBERRY /*Lycium pallidum*
- *YELLOW BIRD OF PARADISE/*Caesalpinia gilliesii*

SHRUB-LIKE CACTUS AND SUCCULENTS

- AGAVE/*Agave Americana mediopicta*
- AGAVE/*Agave havardiana*
- AGAVE/*Agave parryi* or *neomexicana*
- AGAVE/*Agave utahensis*
- BEAKED YUCCA/*Yucca rostrata*
- BEARGRASS/*Nolina texana*
- BIG BEARGRASS/*Nolina microcarpa*
- *BLUE SOTOL/*Dasyliirion wheeleri*
- BLUE YUCCA/*Yucca rigida*
- CANDELILLA/*Ephorbia antisyphilitica*
- CANDLE CHOLLA/*Opuntia kleiniae*
- *CANE CHOLLA/*Opuntia imbricata*
- *CHIHUAHUAN PINEAPPLE CACTUS /*Echinomastus intertextus*
- *ENGELMANN'S PRICKLY PEAR/*Opuntia engelmannii*
- GOLD CHOLLA/*Opuntia davisii*
- *GREEN SOTOL/*Dasyliirion texanum*
- ISOTE/*Yucca filifera* or *deciapiens*
- JOSHUA TREE/*Yucca brevifolia*
- *MESCAL AGAVE /*Agave parryi* var. *truncata*
- *NARROWLEAF YUCCA /*Yucca glauca*
- *NEW MEXICO PINCUSHION CACTUS /*Escobaria vivipara*
- *OCOTILLO /*Fouquieria splendens*
- *PENCIL or CHRISTMAS CHOLLA/*Opuntia leptocaulis*
- *PURPLE PRICKLY PEAR/*Opuntia macrocentra*

*RED-FLOWERED HEDGEHOG CACTUS /Echinocereus coccineus
SANTA RITA PRICKLY PEAR/Opuntia Santa Rita
SCHOTT'S YUCCA/Yucca schottii
SILVER CHOLLA/Opuntia echinocarpa
*SOAPTREE YUCCA/Yucca elata
*SPANISH DAGGER/Yucca baccata
*THOMPSON'S YUCCA/Yucca thompsoniana

WILDFLOWERS AND GARDEN PERENNIALS

*BLACKFOOT DAISY /Melampodium leucanthum
BUSH MORNINGGLORY/Ipomoea leptophylla
*CHOCOLATE FLOWER/Berlandiera lyrata
DESERT FOUR O'CLOCK/Mirabilis glabra
DESERT GLOBEMALLOW/Sphaeralcea ambigua
*DESERT MARIGOLD /Baileya multiradiata
*DESERT or ROUGH MULE'S EARS/Wyethia scabra
DESERT ZINNIA/Zinnia grandiflora
*FERNLEAF VERBENA /Glandularia bipinnatifida
*GIANT or DESERT FOUR O'CLOCK/Mirabilis multiflora
GOLDEN ASTER/Chrysopsis villosa
GOOSEBERRY-LEAF GLOBEMALLOW/Sphaeralcea grossularifolia
JAMES BUCKWHEAT/Eriogonum jamesii
NARROWLEAF PENSTEMON/P. angustifolius
*PALE EVENING PRIMROSE /Oenothera pallida
*PAPERFLOWER /Psilostrophe tagetina
*PERKY SUE /Tetranuris argentea
* PINK WILD SNAPDRAGON or PALMER PENSTEMON/P. palmeri
*SCARLET GLOBEMALLOW/Sphaeralcea coccinea
*SILVER or THREADLEAF GROUNDSEL/Senecio longilobus
WHITE DESERT ZINNIA/Zinnia acerosa
*WHITE TUFTED EVENING PRIMROSE/Oenothera caespitosa

GRASSES

*ALKALI SACATON/Sporobolus airoides
*BLUE GRAMA/Bouteloua gracilis
*BUSH MUHLY/Muhlenbergia porteri
CANE BLUESTEM/Bothriochloa barbinooides
*GIANT SACATON/Sporobolus wrightii
*INDIAN RICEGRASS/Achnatherum syn. Oryzopsis hymenoides
LITTLE BLUESTEM/Schizachyrium scoparium
SAND BLUESTEM/Andropogon hallii
SAND LOVEGRASS/Eragrostis trichodes
SIDE OATS GRAMA/Bouteloua curipendula
*THREADGRASS/Nassella syn. Stipa tenuissima

* The plants noted with an asterisk are species described in Beyond Xeric: A New Frontier, the University of New Mexico Landscape Architecture Master's degree thesis of Deborah Stover. These have demonstrated survivability in Albuquerque under precipitation only conditions. The other plants on the list are also known to be extremely drought resistant and native to the Albuquerque area. The following statement taken from the thesis describes the criteria used for all the plants on this list: "The plants described here are a collection put together from various sources and descriptions gleaned from the research for this thesis. Watering requirements are not indicated because they are all adapted to New Mexico's dry climate and will do well solely on precipitation after two to three years of irrigation to establish the root systems. Exact water requirements of plants are unknown. As a result of this thesis work, the state of New Mexico is currently seeking funding to allow for a study that would define urban landscape vegetation water needs. For the purposes of this study, water requirements are based on examples of settings and the plants within them that are surviving on rainfall or plants that have been reported to have very low water requirements. Although the "very low" water requirement terminology is subjective, the plants that meet this criterion have been culled from sources familiar with vegetation in New Mexico and that state that the water requirement, even for an arid area, is very low. This list is by no means all-inclusive, but provides some ideas and suggestions for species that are proven to work in low water environments once established.