

*Southern Nevada Water Authority &  
Southern Nevada Regional Planning Coalition*

# *Regional Plant List*

*December 2021*



## **Acknowledgements**

This Regional Plant List is the product of countless hours of work from members of the Southern Nevada Regional Planning Coalition's (SNRPC) Regional Urban Forestry Work Group and local arboriculture and horticulture experts. Special thanks to the following individuals:

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## **Prohibited Plants**

The following plants are no longer sold or allowed to be planted in Southern Nevada because they are on the State of Nevada's noxious weed list or are banned by the Clark County Health District for their allergenic properties. This list is subject to change.

Canopy coverage under the Water Smart Landscapes program for existing plantings:

- Green/Crimson Fountain Grass (*Pennisetum setaceum*) - 7 sq. ft.
- Fruitless Mulberry Tree (*Morus alba*) - 722 sq. ft.
- Fruiting Olive Tree (*Olea europaea*) - 530 sq. ft.

**Table of Contents**

Introduction .....	ii
How to Use the List .....	iii
Process for Review and Amendment.....	iii
Trees .....	1
Palms and Cycads .....	4
Shrubs .....	5
Groundcovers.....	7
Vines.....	8
Agaves, Cacti, Succulents, and Yuccas .....	8
Ornamental Grasses.....	10
Perennials .....	10
Plants with Special Needs .....	11
References.....	12



## **Introduction**

The Southern Nevada Regional Planning Coalition (SNRPC) and the Southern Nevada Water Authority (SNWA) are pleased to present this list of plants for the Southern Nevada region.

The original 2011 list was created by SNRPC's Regional Urban Forestry Working Group in conjunction with local experts including arborists, horticulturists, and urban foresters. Much of the effort was built on the foundations of excellent local resources such as the Nevada Division of Forestry's 2007 *Cleaner Air, Tree by Tree* and the 2005 Centennial edition of *Trees for Tomorrow*, a project of the High Desert Resource Conservation & Development Council. Both projects were made possible by grants from the Nevada Division of Forestry and the United States Forest Service.

The 2021 update was produced by a reconvened working group of local experts. The most notable revisions are to the Tree section, with an emphasis on deterring use of tree species poorly adapted to current and future conditions.

The intent of this list is to provide a single, region-wide reference for homeowners, landscape designers, architects and developers to select appropriate plants when designing their projects in the Las Vegas area. In addition, it is a tool for those who review those projects—such as city planners—to determine if those plants meet applicable codes and ordinances. Lastly, it contains information on plant canopy coverage, which is used by the SNWA in the Water Smart Landscapes incentive program.

Current and changing conditions in our region make proper plant selection more important than ever. The Las Vegas area is one of the fastest growing urban heat islands, and climate projections suggest it will become hotter and drier in the future. Choosing climate resilient plants that can survive and thrive in these conditions can help to moderate these effects to sustain and enhance quality of life in our community.

For the 2021 update, the Trees, Palms and Cycads sections now include a rating system from 1-5 stars, with 1 stars being inappropriate and 5 stars highly-appropriate for our region. A plant's rating is based on a number of important factors related to climate resilience such as environmental tolerances, water efficiency, drought tolerance, pathogen resistance and maintenance demands. Additional consideration was given to the potential for the plant to increase or decrease the diversity of our urban forest.

For example, *Prunus cerasifera* 'Atropurea' "Purple Leaf Plum" has a 1-star rating due to its heat sensitivity, poor drought tolerance, and susceptibility to pests. *Acacia aneura* "Mulga Acacia," on the other hand, has a 5-star rating because it is a well adapted desert plant with few pests, and it is not widely planted, so it has potential to diversify the urban forest.

This list is not intended to be a list of the only plants allowed in the region, nor is it intended to be an exhaustive, comprehensive list of all desert-appropriate plants. In addition, it is not intended to restrict what plants residents choose to plant in their yards. Rather, we hope that this list will help residents and developers make informed decisions about which plants to choose.

### How to Use the List

The list is divided between trees and other plants, including shrubs, groundcovers, vines, succulents and perennials. It is sorted alphabetically by botanical name and includes the common names of the plants. **You may use "Ctrl+F" to search the document for any term.** Several columns of attributes can be used to determine which plants are appropriate to use in specific situations.

Tree ratings depend upon a variety of factors, which are generally noted in the "comments" column.

1. **Organic mulch** – doesn't perform well without an organic surface treatment, such as wood chips or leaf litter, rather than crushed rock.
2. **Many cultivars** – your nursery may have numerous named cultivars of the same plant species.
3. **Overplanted** - A plant heavily used in the region and at risk for a catastrophic loss of urban tree canopy under adverse conditions.
4. **Poor environmental tolerance** – Likely to be damaged by cold, heat or other environmental issues.
5. **Invasive Species** – a plant that reproduces aggressively into urban or natural ecosystems, some of which may be prohibited by law.
6. **Mojave native** – A plant that grows naturally in some parts of the Mojave Desert.
7. **Poor Drought Tolerance** – unable to persist through prolonged conditions of low soil moisture.
8. **Susceptible to Pests** – Commonly attacked by diseases or insects.
9. **Short lifespan** – not expected to achieve the expected lifespan under local conditions.
10. **Protected microclimate required** – Capable of thriving, but only if protected from the harshest summer conditions, such as east and north-facing exposures.

### Process for Review and Amendment

The SNWA/SNRPC Plant List is intended to be a living document and will therefore be open to periodic review and amendment. Requests to add plants or modify information must be submitted to the SNWA Conservation Division by emailing [conservation@snwa.com](mailto:conservation@snwa.com). Requests should include the following information at a minimum:

1. the applicant's name and contact information
2. the botanical and common name(s) of the plant(s) to be considered.
3. for the revision to be considered, and supporting documentation.
4. For new plants, documentation shall include the plants' proposed attributes and information regarding the plant's history and performance in similar climates.
5. Supporting documentation must be verified by a certified arborist or horticulturist.

KEY			Rating	Tree Size	Height (average)	Width (average)	Coverage	Tree Type	Growth Rate	Water Needs	Excessive Litter	Spines or Thorns	Biogenic Volatile Organic Compounds (BVOC's)	Parking Lot Tree	Street Tree	Buffer Tree	Minimum Soil Surface Area (sq. feet)	Minimum Soil Volume (cu. feet)	Tolerates Compacted Soil	Compatible with Turf Grass	Compatible with Overhead Utilities	Comments
Botanical Name	Cultivar	Common Name	S, M, L, X	(feet)	(feet)	(sq. feet)	D, E, S	S, M, F	V, L, M, H	L, F, S	Yes or No	L, M, H	Yes or No	Yes or No	Yes or No	(sq. feet)	(cu. feet)	Yes or No	Yes or No	Yes or No	Comments	
<b>TREES</b>																						
<i>Acacia aneura</i>		Mulga Acacia	5★	M	20	15	133	E S V	---	N	M	Y	Y	Y	Y	120	200	N	N	Y		
<i>Acacia baileyana</i>	'Purpurea'	Cootamundra Wattle	2★	M	20	15	133														4,9,10	
<i>Acacia coriacea</i>		Desert Oak, Wiry Wattle	4★	M	20	20	236	E M L	L	N	L	Y	Y	Y	Y	120	500	Y	N	Y		
<i>Acacia estrophiolata</i>		Ironwood	4★	M	25	25	368	E M V	---	N	---	Y	Y	Y	Y	120	500	Y	N	N		
<i>Acacia jennerae</i>		Coonavitra Wattle	4★	M	20	15	133	E S L	---	N	---	Y	Y	Y	Y	120	200	N	N	N		
<i>Acacia pendula</i>		Weeping Acacia	5★	M	25	20	236	E M V	S	N	M	Y	Y	Y	Y	120	350	Y	N	N		
<i>Acacia salicina</i>		Willow Acacia	4★	L	30	20	236	E F L	L	N	---	Y	Y	Y	Y	200	350	Y	N	N		
<i>Acacia cupularis</i> (=saligna)		Blue Leaf Wattle	3★	M	25	20	236	E F L	L	N	---	Y	Y	Y	Y	120	350	Y	N	N	5	
<i>Acacia stenophylla</i>		Shoestring Acacia	3★	L	40	20	236	E M F	L, S	N	L	Y	Y	Y	Y	200	350	Y	N	N	3, 5	
<i>Acer tataricum</i> ssp. <i>ginnala</i>		Amur Maple	3★	S	15	15	133	D S	H	L	N	---	N	N	N	80	200	N	Y	Y	1, 7	
<i>Acer negundo</i>		Box Elder	2★	L	30	30	530														1,2,6,7,9	
<i>Acer palmatum</i> var. <i>atropurpureum</i>		Dwarf Japanese Maple	1★	S	12	12	85														1,2,4,7,10	
<i>Afrocarpus falcatus</i>		African Fern Pine	2★	M	25	15	133														1,4,10	
<i>Allantherus altissima</i>		Tree of Heaven	1★	L	35	35	722														4,5,7,8,9	
<i>Albizia lebbekoides</i> (=julibrissin)		Mimosa, Silk Tree	1★	L	25	30	530														5,8,9,10	
<i>Arbutus unedo</i>		Strawberry Tree	3★	S	15	15	133	E S	M	S	N	L	N	N	N	80	200	N	N	Y	4,7,10	
<i>Arbutus x andrachnoides</i>	'Marina'	Marina Strawberry Tree	3★	M	25	25	368	E S	M	S	N	L	N	N	N	120	500	N	Y	Y	1,4,7,10	
<i>Bauhinia lunarioides</i>		Anacacho Orchid Tree	5★	S	12	12	85	D M	L	---	N	---	N	N	N	80	200	N	N	Y	1	
<i>Bauhinia macranthera</i>		Chihuahuan Orchid Tree	4★	S	12	15	133	D M	L	---	N	---	N	N	N	80	200	N	N	Y	1	
<i>Bauhinia purpurea</i>		Purple Orchid Tree, Butterfly Tree	2★	M	25	25	368														1,4,9,10	
<i>Bouhinia x blakeana</i>		Hong Kong Orchid Tree	2★	M	25	20	236														1,4,9,10	
<i>Brachychiton acerifolius</i>		Illawarra Flame Tree	2★	L	30	20	236														1,4,7,9	
<i>Brachychiton populneus</i>		Bottle Tree	2★	L	30	20	236														1,4,7,9	
<i>Callistemon viminalis</i>		Weeping Bottlebrush	3★	S	18	15	133	E M	M	---	N	H	N	N	N	80	200	N	Y	Y	1	
<i>Calocedrus decurrens</i>		Incense Cedar	2★	L	30	10	59														4,7	
<i>Casuarina cunninghamiana</i>		River She Oak	4★	L	30	20	236	E F	M	L	N	---	N	N	Y	200	400	N	N	N		
<i>Casuarina equisetifolia</i>		Australian Pine	4★	L	30	20	236	E F	M	L	N	---	N	N	Y	200	400	N	N	N		
<i>Cedrus atlantica</i>	'Glauca'	Blue Atlas Cedar	3★	L	40	20	236	E M	M	---	N	L	N	N	Y	200	300	N	Y	N	1	
<i>Cedrus deodora</i>		Deodar Cedar	2★	X	60	30	530														1,4,7,9	
<i>Celtis australis</i>		Mediterranean Hackberry	4★	L	45	35	722	D M	M	L	N	---	N	Y	Y	200	1300	N	Y	N	1	
<i>Celtis occidentalis</i>		Common Hackberry	4★	L	45	30	530	D F	M	L	N	---	N	Y	Y	200	1000	N	N	N	1	
<i>Celtis laevigata</i> var. <i>reticulata</i>		Netleaf/Western Hackberry	5★	M	20	20	236	D S	L, M	S	N	L	N	Y	N	120	300	N	N	Y	6	
<i>Celtis sinensis</i>		Chinese Hackberry	2★	L	30	30	530														1,4,9,10	
<i>Ceratonia siliqua</i>		Carob	4★	L	35	20	236	E M	L, M	S	N	M	N	Y	Y	200	400	N	Y	N	4	
<i>Cercis canadensis</i>		Eastern Redbud	2★	M	20	15	133														1,2,4,10	
<i>Cercis canadensis</i> var. <i>mexicana</i>		Mexican Redbud	4★	M	20	15	133	D S	M	---	N	L	N	N	N	120	500	N	Y	Y	1	
<i>Cercis canadensis</i> var. <i>texensis</i>	'Oklahoma'	Texas/Oklahoma Redbud	4★	M	20	20	236	D S	M	---	N	L	N	N	N	120	300	N	Y	Y	1	
<i>Cercis chinensis</i>	'Avondale'	Avondale Chinese Redbud	2★	S	12	10	59														1,4,10	
<i>Cercis occidentalis</i>		Western Redbud	3★	S	15	15	133	D S, M, L, M	---	N	L	N	N	N	Y	80	200	N	Y	Y	6	
<i>Chilopsis linearis</i>		Desert Willow	4★	M	25	20	236	D M	M	L, F, S	N	M	N	Y	N	120	300	Y	N	N	2,3,6	
<i>Chionanthus retusus</i>		Chinese Fringe Tree	3★	S	15	15	133	D S	M	---	N	---	N	N	N	80	200	N	Y	Y	1	
<i>x Chitalpa tashkentensis</i>		Chitalpa	1★	M	20	20	236														1,4,7,8,9	
<i>Cinnamomum camphora</i>		Camphor Tree	1★	L	40	30	530														1,4,7	
<i>Citrus</i> spp.		Citrus Tree	3★	S	15	15	133	E M	M, H	S	N	---	N	N	N	80	200	N	N	Y	4,7,10	
<i>Condalia hookeri</i>		Brazilian Bluewood	4★	S	15	15	133	D M	V	---	Y	---	N	N	N	80	200	N	N	Y		
<i>Cordia boissieri</i>		Texas Olive	5★	M	20	15	133	S, M	M	---	N	---	N	N	Y	120	200	N	Y	Y		
<i>Corymbia papuana</i> (=Eucalyptus)		Ghost Gum	3★	X	50	30	530	E M	L	S	N	H	N	Y	Y	240	1300	N	N	N	4	
<i>Cotinus coggygria</i>		Smoke Tree	3★	S	15	15	133	D S	L, M	---	N	M	N	N	N	80	100	N	N	Y	1,4,10	
<i>Cupaniopsis anacardioides</i>		Carrotwood	1★	L	30	25	368														4,5,9	
<i>Cupressus arizonica</i> var. <i>glabra</i>		Arizona Cypress	3★	X	50	15	133	E M	L, M	---	N	L	N	N	Y	200	600	N	Y	N	1,2,9	
<i>Cupressus sempervirens</i>		Italian Cypress	2★	L	40	5	15														1,4	
<i>Cupressus x leylandii</i>		Leyland Cypress	1★	L	40	15	236														1,2,4,8,9	
<i>Dalbergia sissoo</i>		Indian Rosewood	4★	L	45	35	722	E M	L	---	N	---	Y	Y	Y	200	1300	Y	N	N	4	
<i>Ebenopsis ebano</i> (=Pithecellobium)		Texas Ebony	4★	M	25	20	236	S, M	V	---	Y	---	N	Y	Y	120	300	Y	N	N	8	
<i>Elaeagnus angustifolia</i>		Russian Olive	1★	L	20	20	236														5,7,8	
<i>Elaeocarpus sylvestris</i> (=decipiens)		Japanese Blueberry	2★	L	25	25	368														1,4,7,10	
<i>Eriobotrya deflexa</i>		Bronze Loquat	1★	S	15	15	133														1,4,7,8,9,10	
<i>Eriobotrya japonica</i>		Loquat	1★	S	15	15	133														1,4,7,8,9,10	
<i>Eucalyptus camaldulensis</i>		Red River Gum	4★	X	55	40	942	E M	M	---	N	H	N	N	Y	240	1600	N	Y	N	5	
<i>Eucalyptus gunnii</i>		Cider Gum	3★	L	45	25	368	E M	M	L	N	H	Y	Y	Y	200	700	Y	N	N	5	
<i>Eucalyptus microtheca</i>		Coolibah	4★	L	40	25	368	E M	L, M	L	N	H	Y	Y	Y	200	700	Y	N	N	5	
<i>Eucalyptus nicholii</i>		Willow Leaf Peppermint Gum	3★	L	35	25	368	E F	M	---	N	H	N	N	Y	200	700	N	N	N	1,5	
<i>Eucalyptus polyanthemus</i>		Silver Dollar Gum	3★	L	40	30	530	E F	L, M	L	N	H	N	Y	Y	200	1000	N	N	N	1	
<i>Eucalyptus rudis</i>		Desert/Flooded Gum	4★	L	45	30	530	E M	M	---	N	H	N	Y	Y	240	1000	N	N	N		
<i>Eucalyptus sideroxylon</i>		Red Ironbark	4★	L	40	25	368	E M	M	---	N	H	N	N	Y	200	1000	N	Y	N		
<i>Eucalyptus spathulata</i>		Narrow-leaf Gimlet	4★	M	25	20	236	E M	L	---	N	---	N	Y	Y	120	350	N	N	Y		
<i>Eysenhardtia orthocarpa</i>		Kidneywood	4★	M	20	20	236	S M	L	---	N	---	N	Y	Y	120	350	N	N	Y	1	





KEY			Rating	S, M, L, X	Tree Size	Height (average)	Width (average)	Coverage	Tree Type	Growth Rate	Water Needs	Excessive Litter	Spines or Thorns	Biogenic Volatile Organic Compounds (BVOC's)	Yes or No	Parking Lot Tree	Yes or No	Street Tree	Yes or No	Buffer Tree	Minimum Soil Surface Area (sq. feet)	Minimum Soil Volume (cu. feet)	Tolerates Compacted Soil	Yes or No	Compatible with Turf Grass	Yes or No	Compatible with Overhead Utilities	Comments	
Botanical Name	Cultivar	Common Name																											
<b>TREES (continued)</b>																													
<i>Prosopis alba</i>		Argentine Mesquite	3★	L	30	30	530	S	F	L,M	S	Y	---	N	Y	Y	200	1000	Y	N	N	N	N	N	N	N	N	N	2,3,5
<i>Prosopis x alba</i>	'Phoenix', 'AZT'	Thornless Hybrid Mesquite	4★	L	30	30	530	S	F	L	S	N	---	Y	Y	Y	200	1000	Y	N	N	N	N	N	N	N	N	N	2,3
<i>Prosopis chilensis</i>		Chilean Mesquite	3★	L	30	30	530	S	F	L,M	S	Y	---	N	Y	Y	200	1000	Y	N	N	N	N	N	N	N	N	N	3,5
<i>Prosopis x chilensis</i>	'AZT', 'Arizona'	Thornless Chilean Mesquite	4★	L	30	30	530	S	F	L,M	S	N	---	Y	Y	Y	200	1000	Y	N	N	N	N	N	N	N	N	N	2,3
<i>Prosopis x 'Seedless AZT'</i>	'AZT'	Seedless Hybrid Mesquite	4★	L	30	30	530	S	F	L	---	Y	---	N	Y	Y	200	1000	Y	N	N	N	N	N	N	N	N	N	
<i>Prosopis glandulosa</i>		Texas Honey Mesquite	4★	L	30	35	722	D	F	L	S	Y	M	N	Y	N	200	1300	Y	N	N	N	N	N	N	N	N	8	
<i>Prosopis glandulosa</i>	'Maverick', 'AZT'	Thornless Honey Mesquite	4★	L	30	30	530	D	F	L	S	N	M	Y	Y	N	200	1000	Y	N	N	N	N	N	N	N	N	8	
<i>Prosopis glandulosa var. torreyana</i>		Western Honey Mesquite	5★	M	20	20	236	D	M	V	L	Y	M	N	Y	N	120	350	Y	N	Y	N	N	N	N	N	N	6,8	
<i>Prosopis pubescens</i>		Screwbean Mesquite	5★	M	20	25	368	D	M	V	S	Y	M	N	Y	N	120	500	N	N	Y	N	N	N	N	N	N	6	
<i>Prosopis velutina</i>		Velvet Mesquite	5★	L	30	30	530	S	F	V	S	Y	L	N	Y	Y	200	1000	Y	N	N	N	N	N	N	N	N	6	
<i>Prunus caroliniana</i>		Carolina Cherry Laurel	1★	M	25	20	236	Not Recommended																				1,4,7,8,9,10	
<i>Prunus cerasifera</i>	'Atropurea'	Purple Leaf Plum	1★	S	15	15	133	Not Recommended																				1,4,7,8,9,10	
<i>Prunus mexicana</i>		Mexican Plum	3★	M	25	25	368	D	M	M	S	N	---	N	N	N	120	600	N	Y	N	N	N	N	N	N	N	1	
<i>Punica granatum</i>		Pomegranate	3★	M	20	15	133	D	M	M	S	Y	---	N	N	N	120	200	N	N	Y	N	N	N	N	N	N	2	
<i>Pyrus calleryana</i>		Ornamental Pear	2★	L	30	20	236	Not Recommended																				1,2,4,7,9,10	
<i>Quercus agrifolia</i>		Coast Live Oak	2★	L	30	30	530	Not Recommended																				1,4	
<i>Quercus buckleyi</i>		Buckley/Texas Red Oak	3★	L	30	30	530	D	S	M	L	N	H	N	Y	Y	200	1000	N	Y	N	N	N	N	N	N	N	1,7	
<i>Quercus canbyi</i>		Canby/Sierra Red Oak	4★	L	35	30	530	D	M	M	---	N	---	N	Y	N	200	1000	N	Y	N	N	N	N	N	N	N	1	
<i>Quercus douglasii</i>		Blue Oak	4★	L	30	25	368	D	S	M	---	N	M	N	Y	N	200	600	N	Y	N	N	N	N	N	N	N	1	
<i>Quercus fusiformis</i>		Escarpment Oak	4★	L	30	30	530	E	M	F	L,M	S	N	H	N	Y	Y	200	1000	N	Y	N	N	N	N	N	N	1	
<i>Quercus gambelii</i>		Gambel Oak	4★	M	25	20	236	D	M	M	S	N	M	N	N	N	120	400	N	Y	N	N	N	N	N	N	N	1,6	
<i>Quercus illex</i>		Holly Oak	3★	L	30	20	236	E	M	M	S	N	H	N	Y	Y	200	400	N	Y	N	N	N	N	N	N	N	1	
<i>Quercus lobata</i>		Valley Oak	3★	L	45	40	942	D	M	M	L,S	N	M	N	N	N	200	1600	N	Y	N	N	N	N	N	N	N	1,7	
<i>Quercus macrocarpa</i>		Bur Oak	4★	X	55	40	942	D	S	M	L,S	N	---	N	Y	N	240	1600	N	Y	N	N	N	N	N	N	N	1	
<i>Quercus muehlenbergii</i>		Chinquapin/Chinkapin Oak	4★	L	30	30	530	D	S	M	L,S	N	---	N	Y	Y	200	1000	N	Y	N	N	N	N	N	N	N	1	
<i>Quercus polymorpha</i>		Monterrey Oak	4★	L	45	30	530	E	M	L,M	---	N	---	N	Y	Y	200	1000	N	Y	N	N	N	N	N	N	N	1	
<i>Quercus shumardii</i>		Shumard Oak	3★	L	45	30	530	D	M	M	L,S	N	---	N	Y	Y	200	1000	N	Y	N	N	N	N	N	N	N	1,7	
<i>Quercus suber</i>		Cork Oak	4★	L	40	30	530	S	S	M	M	S	N	H	N	Y	Y	200	1000	N	Y	N	N	N	N	N	N	1	
<i>Quercus texana</i>		Nuttall Oak	3★	L	45	40	942	D	M	M	L,S	N	---	N	N	N	200	1600	N	Y	N	N	N	N	N	N	N	1,4,7	
<i>Quercus turbinella</i>		Desert Scrub Oak	5★	S	12	12	85	E	M	L	---	N	---	N	Y	Y	80	200	N	N	Y	N	N	N	N	N	N	1,6	
<i>Quercus x undulata</i>		Wavy Leaf Oak	5★	S	15	12	85	S	M	L	---	N	---	N	Y	Y	80	200	N	Y	Y	N	N	N	N	N	N	1,2,6	
<i>Quercus virginiana</i>		Southern Live Oak	4★	L	40	25	368	S	S	M	S	N	H	N	Y	Y	200	1000	N	Y	N	N	N	N	N	N	N	1,2,3,8	
<i>Quercus virginiana</i>	'Cathedral'	Cathedral Live Oak	4★	L	30	25	368	S	S	M	S	N	H	N	Y	Y	200	700	N	Y	N	N	N	N	N	N	N	1,8	
<i>Quercus virginiana</i>	'Heritage'	Heritage Live Oak	4★	L	30	25	368	E	S	M	S	N	H	N	Y	Y	200	700	N	Y	N	N	N	N	N	N	N	1,8	
<i>Quercus virginiana</i>	'High Rise'	High Rise Live Oak	4★	L	35	20	236	S	S	M	S	N	H	N	Y	Y	200	400	N	Y	N	N	N	N	N	N	N	1,8	
<i>Quercus wislizeni</i>		Interior Live Oak	2★	L	30	25	368	Not Recommended																				1,4	
<i>Rhamnus alaternus</i>		Italian Buckthorn	3★	S	15	12	85	E	S	M	---	N	---	N	N	N	80	200	N	Y	Y	N	N	N	N	N	N	1,4,10	
<i>Rhus lanceolata</i>		Prairie Flameleaf Sumac	4★	S	15	20	236	D	M	L,M	---	N	L	N	N	N	80	300	N	N	Y	N	N	N	N	N	N	1	
<i>Robinia pseudoacacia</i>		Black Locust	2★	L	40	30	530	Not Recommended																				1,2,8	
<i>Robinia x ambigua</i>		Idaho Locust	2★	L	40	30	530	Not Recommended																				1,2,8,9	
<i>Salix babylonica (=matsudana)</i>		Chinese Willow	2★	L	40	35	722	Not Recommended																				1,2,4,7,8,9	
<i>Salix babylonica (=matsudana)</i>	'Tortuosa', 'Snake'	Corkscrew Willow	2★	M	20	15	133	Not Recommended																				1,4,7,8,9	
<i>Salix gooddingii</i>		Goodding Willow	3★	L	30	25	368	D	F	H	L,F,S	N	---	N	N	N	200	600	N	Y	N	N	N	N	N	N	N	1,6	
<i>Salix x salomonii (=x sepulcralis)</i>		Weeping Willow	1★	L	40	35	722	Not Recommended																				1,4,7,8,9	
<i>Sambucus cerulea (=nigra ssp. cerulea)</i>		Blue Elderberry	5★	M	15	25	368	S	M	M	L,F	N	L	N	N	Y	120	500	N	Y	N	N	N	N	N	N	N		
<i>Sapindus saponaria var. drummondii</i>		Western Soapberry	3★	M	25	25	368	D	M	M	---	N	---	N	Y	N	120	500	N	Y	N	N	N	N	N	N	N	1	
<i>Schinus molle</i>		California Pepper Tree	2★	L	30	30	530	Not Recommended																				9	
<i>Schinus terebinthifolius</i>		Brazilian Pepper Tree	2★	M	25	25	368	Not Recommended																				1,4,3,9	
<i>Searsia lancea (=Rhus)</i>		African Sumac	3★	M	20	20	236	E	M	F	L,M	L,S	N	L	N	N	Y	120	300	N	Y	N	N	N	N	N	N	3,4,5	
<i>Senegalia greggii (=Acacia)</i>		Catclaw Acacia, Gregg's Catclaw	5★	S	15	20	236	D	S	M	V	---	Y	L	N	N	N	80	300	Y	N	Y	N	N	N	N	N	6	
<i>Sophora secundiflora</i>		Texas Mountain Laurel	5★	S	15	12	85	E	S	L,M	S	N	---	N	Y	Y	80	200	N	N	Y	N	N	N	N	N	N		
<i>Sophora secundiflora</i>	'Silver Sierra', 'Silver Peso'	Silver Mountain Laurel	5★	S	15	12	85	E	S	L,M	S	N	---	N	Y	Y	80	200	N	N	Y	N	N	N	N	N	N		
<i>Styphnolobium japonicum</i>		Japanese Pagoda Tree	3★	L	30	30	530	D	M	M	L	N	M	N	Y	N	200	1000	N	N	N	N	N	N	N	N	N	4,7	
<i>Thuja occidentalis</i>		Arborvitae	2★	S	15	12	85	Not Recommended																				1,4,7	
<i>Thuja plicata</i>		Western Red Cedar	2★	M	20	12	85	Not Recommended																				4,7	
<i>Tipuana tipu</i>		Tipu Tree	1★	L	35	35	722	Not Recommended																				4,7,9	
<i>Triadica sebifera</i>		Chinese Tallow Tree	1★	M	25	15	133	Not Recommended																				5,7,9	
<i>Ulmus americana</i>		American Elm	3★	X	50	40	942	D	M	M	L	N	L	N	N	Y	240	1800	N	Y	N	N	N	N	N	N	1,2,7		
<i>Ulmus crassifolia</i>		Cedar Elm	4★	L	40	35	722	D	M	M	---	N	---	N	Y	N	200	1300	N	Y	N	N	N	N	N	N	N	1	
<i>Ulmus glabra</i>	'Camperdownii'	Camperdown Elm	3★	S	15	15	133	D	S	M	---	N	---	N	N	N	80	200	N	Y	Y	N	N	N	N	N	N	1,7,10	
<i>Ulmus parvifolia</i>		Lacebark Elm	2★	L	40	40	942	Not Recommended																				1,2,3,4,7	
<i>Ulmus pumila</i>		Siberian Elm	1★	X	50	40	942	Not Recommended																				1,5,8,7	
<i>Ungnadia speciosa</i>		Mexican Buckeye	4★	S	12	12	85	D	S	L,M	S	N	---	N	N	N	80	200	N	N	Y	N	N	N	N	N	N		
<i>Vachellia constricta (=Acacia)</i>		Whitethorn Acacia	5★	S	15	15	133	D	M	V	---	Y	M	N	N	N	80	200	N	N	Y	N	N	N	N	N	N		
<i>Vachellia f</i>																													



KEY																																
<b>Rating:</b> Based on a combination of factors related to climate resiliency such as environmental tolerances (heat, cold), water efficiency, drought tolerance, pathogen resistance, along with some additional factors like diversity, maintenance needs, and invasiveness. Plants rated from 1★ (least appropriate) to 5★ (most appropriate) <b>Tree Size (based on both height and width):</b> <u>S</u> mall (< 20 ft), <u>M</u> edium (20-29 ft), <u>L</u> arge (30- 45ft), <u>E</u> xtra Large (>45ft) <b>Tree Type:</b> <u>D</u> eciduous, <u>E</u> vergreen, <u>S</u> emi-evergreen <b>Growth Rate:</b> <u>S</u> low, <u>M</u> oderate, <u>F</u> ast <b>Water Needs:</b> <u>V</u> ery Low, <u>L</u> ow, <u>M</u> oderate, <u>H</u> igh <b>Excessive Litter:</b> <u>L</u> eaves, <u>F</u> lowers, <u>S</u> eeds/Fruit <b>Biogenic Volatile Organic Compounds:</b> <u>L</u> ow, <u>M</u> edium, <u>H</u> igh, or data not available ----			<b>Comments:</b> 1. Organic mulch recommended 2. Many cultivars 3. Overplanted 4. Poor environmental tolerances 5. Invasive species 6. Mojave native 7. Poor drought tolerance 8. Susceptible to Pests 9. Short lifespan 10. Protected microclimate necessary																													
			Rating	Tree Size	Height (average)	Width (average)	Coverage	Tree Type	Growth Rate	Water Needs	Excessive Litter	Spines or Thorns	Biogenic Volatile Organic Compounds (BVOC's)	Parking Lot Tree	Street Tree	Buffer Tree	Minimum Soil Surface Area (sq. feet)	Minimum Soil Volume (cu. feet)	Tolerates Compacted Soil	Compatible with Turf Grass	Compatible with Overhead Utilities	Comments										
Botanical Name	Cultivar	Common Name	S, M, L, X	(feet)	(feet)	(sq. feet)	D, E, S	S, M, F	V, L, M, H	L, F, S	Yes or No	L, M, H	Yes or No	Yes or No	(sq. feet)	(cu. feet)	Yes or No	Yes or No	Yes or No	Comments												
<b>TREES (continued)</b>																																
<i>Vachellia gerrardii</i> (=Acacia)		Red Thorn	4★	S	15	20	236	S	S	V	----	Y	----	N	N	Y	80	300	N	N	Y											
<i>Vachellia rigidula</i> (=Acacia)		Blackbrush Acacia	5★	S	12	12	85	S	S	V	----	Y	----	N	N	Y	80	200	N	N	Y											
<i>Vachellia schaffneri</i> (=Acacia)		Twisted Acacia	5★	M	20	25	368	D	M	L	S	Y	M	N	Y	N	120	500	N	N	Y											
<i>Vitex agnus-castus</i>		Chaste Tree	3★	M	20	25	368	D	M	M	S	N	----	N	Y	N	120	500	Y	Y	Y	2,4,5										
<i>Vitex trifolia</i>	'Purpurea'	Arabian Lilac	2★	S	12	12	85															1,4										
<i>Xylosma congesta</i> (=Croton congestus)		Xylosma	3★	S	15	12	85	E	S, M	M	----	N	M	N	N	Y	80	200	N	Y	Y	1,4										
<i>Zelkova serrata</i>		Sawleaf Zelkova	2★	L	40	30	530															1,2,4,7										
<i>Ziziphus jujuba</i>		Jujube	4★	M	25	20	236	D	S	M	S	Y	H	N	N	N	80	300	N	Y	N	1,2										
<b>TREES - Under Review</b>																																
<i>Celtis africana</i>		African Hackberry	?	L	35	30	530	D	?	?	?	N	----	?	?	N	200	1000	?	?	N	1										
<i>Fraxinus cuspidata</i>		Fragrant Ash	?	M	20	15	133	D	?	?	?	N	----	?	?	N	120	200	N	?	Y	1,6,7										
<i>Juglans major</i>		Arizona Walnut	?	L	30	30	530	D	?	?	?	N	----	?	?	N	200	1000	N	?	N	1,7										
<i>Juniperus deppeana</i>	'McFetter'	Alligator Juniper	?	L	40	20	236	E	?	?	?	N	L	?	?	Y	200	300	N	?	Y	1										
<i>Mariosousa willardiana</i>		Palo Blanco	?	M	20	15	133	S	?	?	?	N	----	?	?	Y	120	200	?	?	Y	4										
<i>Pinus cembroides</i>		Mexican Pinyon	?	M	25	15	133	E	?	?	?	N	M	?	?	Y	120	200	N	?	Y	1										
<i>Pinus engelmannii</i>		Apache Pine	?	X	60	35	722	E	?	?	?	N	----	?	?	Y	240	1300	N	?	N	1										
<i>Pinus edulis</i>		Two Needle Pinyon	?	M	20	15	133	E	?	?	?	N	M	?	?	Y	120	300	N	?	N	1										
<i>Pinus monophylla</i>		Single Needle Pinyon	?	M	20	20	236	E	?	?	?	N	H	?	?	Y	120	300	N	?	Y	1,6										
<i>Pinus quadrifolia</i>		Parry Pinyon	?	M	25	20	236	E	?	?	?	N	----	?	?	Y	120	300	N	?	N	1										
<i>Psoralea argophylla</i>		Desert Smoke Tree	?	S	15	15	133	D	?	?	?	Y	M	?	?	Y	80	200	?	N	Y	6										
<i>Quercus arizonica</i>		Arizona White Oak	?	X	45	40	942	S	?	?	?	N	----	?	?	Y	240	1300	N	?	N	1										
<i>Quercus chrysolepis</i>		Canyon Live Oak	?	L	30	25	368	E	?	?	?	N	H	?	?	Y	200	500	N	?	N	1,6										
<i>Quercus emoryi</i>		Emory Oak	?	L	30	25	368	S	?	?	?	N	----	?	?	Y	200	500	N	?	Y	1										
<i>Quercus gambelii</i> x <i>macrocarpa</i>		Bur-gambel Oak	?	L	30	30	530	D	?	?	?	N	----	?	?	Y	200	1000	N	?	Y	1										
<i>Quercus gravesii</i>		Chisos Red/Grave's Oak	?	L	35	30	530	D	?	?	?	N	----	?	?	Y	200	1000	N	?	N	1										
<i>Quercus grisea</i>		Gray Oak	?	L	30	25	368	S	?	?	?	N	----	?	?	Y	200	500	N	?	N	1										
<i>Quercus hypoleucoides</i>		Silverleaf Oak	?	L	35	30	530	E	?	?	?	N	----	?	?	Y	200	1000	N	?	N	1										
<i>Quercus oblongifolia</i>		Mexican Blue Oak	?	M	25	25	368	E	?	?	?	N	----	?	?	Y	120	500	N	?	N	1										
<i>Quercus sartorii</i>		Mexican Red/Sator's Oak	?	M	25	25	368	D	?	?	?	N	----	?	?	Y	120	500	N	?	N	1										
<i>Styphnolobium affine</i> (=Sophora affinis)		Eve's Necklace	?	M	25	15	133	S	?	?	?	N	----	?	?	Y	120	350	N	?	N	1										
<b>PALMS AND CYCADS</b>																																
<i>Bismarckia nobilis</i>		Bismarck Palm	1★	M	30	20	236															1,7										
<i>Brahea armata</i>		Mexican Blue Palm	4★	M	25	15	133	E	S	M	----	Y	M	N	Y	N	120	200	N	N	N	1,7										
<i>Brahea decumbens</i>		Mexican Dwarf Blue Palm	4★	M	15	25	368	E	S, M	M	----	Y	----	N	N	N	120	500		Y	Y											
<i>Butia capitata</i>		Pindo Palm	2★	M	20	15	133															1,4,7										
<i>Chamaerops humilis</i>		Mediterranean Fan Palm	3★	S	15	15	133	E	S	M	S	Y	M	N	N	N	80	200	Y	Y	Y	7										
<i>Cycas revoluta</i>		Japanese Sago Palm	2★	-	5	6	28															1,7,10										
<i>Livistona chinensis</i>		Chinese Fan Palm	3★	S	15	10	59	E	S	M	----	Y	----	N	N	N	80	100	N	N	Y											
<i>Livistona decipiens</i>		Ribbon Fan Palm	3★	L	30	10	59	E	M	L, M	----	Y	----	N	N	N	200	100	N	N	Y											
<i>Livistona nitida</i>		Carnarvon Fan Palm	3★	L	40	15	133	E	M, F	M	----	Y	----	Y	Y	N	200	200	N	Y	N											
<i>Livistona saribus</i>		Taraw Fan Palm	3★	L	30	15	133	E	S	M	S	Y	----	N	N	N	200	200	N	N	Y											
<i>Nannorrhops ritchieana</i>		Mazari Palm	5★	S	10	12	85	E	M	L	----	N	----	Y	Y	N	80	150	N	N	Y											
<i>Phoenix canariensis</i>		Canary Island Date Palm	3★	L	40	30	530	E	S	M	S	Y	M	N	Y	N	200	1000	Y	Y	N	1,5,7,8										
<i>Phoenix dactylifera</i>		Date Palm	3★	X	60	20	236	E	S	M	S	Y	M	N	Y	N	240	300	Y	Y	N	1,5,7										
<i>Phoenix reclinata</i>		Senegal Date Palm	2★	M	20	15	133															5,7										
<i>Phoenix roebelenii</i>		Pygmy Date Palm	1★	-	6	7	38															1,4,7,10										
<i>Phoenix rupicola</i>		Cliff Date	3★	M	20	15	133	E	S	M	F, S	Y	----	N	N	N	120	200	N	Y	Y											
<i>Phoenix sylvestris</i>		Wild Date	3★	M	25	10	59	E	S	M	F, S	Y	----	N	N	N	120	100	N	Y	Y											
<i>Phoenix theophrasti</i>		Greek/Cretan Date Palm	3★	L	40	15	133	E	M	M	F	Y	----	Y	Y	N	200	200	N	Y	N											
<i>Sabal causiarum</i>		Puerto Rican Hat Palm	3★	L	35	15	133	E	M	M	F, S	N	----	Y	Y	N	200	200	N	Y	N											
<i>Sabal domingensis</i>		Hispaniolan Palmetto	3★	M	20	15	133	E	M	M	F, S	N	----	Y	Y	N	120	200	N	Y	N											
<i>Sabal mexicana</i>		Mexican Sabal Palm	4★	L	30	15	133	E	M	M	F	Y	----	Y	Y	N	200	200	N	Y	N											
<i>Sabal palmetto</i>		Palmetto	3★	L	45	15	133	E	M	M	F, S	N	----	Y	Y	N	200	200	N	Y	N											
<i>Sabal</i> x 'Riverside'	'Riverside'	Riverside Sabal Palm	4★	L	35	20	236	E	M	M, H	F, S	Y	----	Y	Y	N	200	300	N	Y	N											
<i>Syagrus romanzoffiana</i>		Queen Palm	1★	M	25	10	59															4,7										
<i>Trachycarpus fortunei</i>		Windmill Palm	3★	M	20	10	59	E	S	M	F, S	N	----	N	N	N	120	100	N	Y	Y	1,7										
<i>Washingtonia filifera</i>		California Fan Palm	3★	X	50	15	133	E	S, M	L, M	F, S	Y	M	N	Y	N	240	200	Y	Y	N	1,7										
<i>Washingtonia robusta</i>		Mexican Fan Palm	3★	X	60	15	133	E	M, F	M	F, S	Y	M	N	Y	N	240	200	Y	Y	N	1,5,7										

KEY		"Bulletproof"	Height (average)	Width (average)	Coverage	Type	Growth Rate	Water Use	Drought Tolerance	Spines or Thorns	Physical Barrier	Hedge or Screen	Exposure	COMMENTS
"Bulletproof": Extremely drought tolerant, cold hardy, and pest and disease resistant once established.	Comments: 1. Organic mulch recommended. 2. Many cultivars. 3. Some species may form dense thickets. 4. Not cold hardy below 28°F. 5. Invasive species. 6. Mojave native. 7. Toxic (parts specified). 8. May be trained as a small tree. 9. Needs a protected site (north facing site or afternoon shade).													
BOTANICAL NAME	COMMON NAME	(feet)	(feet)	(sq. feet)	D, E, S	S, M, F	VL, L, M, H	L, M, H	Yes or No	Yes or No	Yes or No	No	F, P, S	
<b>SHRUBS</b>														
<i>Abelia x grandiflora</i>	Glossy Abelia	5	5	20	E, S	F	M	M	N	Y	Y	F, P		
<i>Phoenix sylvestris</i>	Velvet-leaf Mallow, Superstition Mallow	4	4	13	E, S	M	L, M	M	N	N	N	F, P		
<i>Acacia craspedocarpa</i>	Leatherleaf Acacia, Waxleaf A.	10	15	177	E	S	L	M	N	N	Y	F		
<i>Acacia cultriformis</i>	Knifeleaf Acacia, Knife Acacia	10	10	79	E	M	L	M	N	N	Y	F, P	4	
<i>Acacia redolens</i>	Creeping Acacia, Prostrate Acacia	3	10	79	E	F	VL	H	N	N	F			
<i>Acca sellowiana (=Feijoa)</i>	Pineapple Guava	15	15	177	E	S	L	H	N	Y	F, P		1, 8	
<i>Alyogne huegelii</i>	Blue Hibiscus	6	6	28	E	M	L	M	N	N	F			
<i>Ambrosia dumosa</i>	White Bursage, Burrobush	2	4	13	E	F	L	H	N	N	F		6	
<i>Ambrosia eriocentra</i>	Wooly Bursage	3	3	7	E	M	L	H	N	N	F, P		6	
<i>Anisacanthus quadrifidus-wrightii 'Mexican Flame'</i>	Mexican Flame	4	4	13	D	M	L	H	N	N	Y	F, P		
<i>Anisodonte x hypomandarum</i>	Pink Desert Hibiscus, African Mallow	4	4	13	E	F	M	L	N	Y	F, P			
<i>Artemisia filifolia</i>	Sand Sage	4	3	7	E	M	L	H	N	N	Y	F	6	
<i>Artemisia tridentata</i>	Big Sage Brush	4	3	7	E	M	L	H	N	N	Y	F	6	
<i>Asclepias subulata</i>	Desert Milkweed	5	5	20	E	S	L	H	N	Y	F		6	
<i>Atriplex canescens</i>	Four-Wing Saltbush	5	8	50	S	M	M	H	N	N	P		6	
<i>Atriplex confertifolia</i>	Shadscale	2	3	7	D	F	VL	H	Y	N	F		6	
<i>Atriplex hymenelytra</i>	Saltbush, Desert Holly	2	2	3	E	S	VL	H	N	N	F		6	
<i>Atriplex lentiformis</i>	Quailbush, Big Saltbush	6	8	50	D	M	L	H	Y	Y	F		6	
<i>A. l. breweri</i>	Brewer's Saltbush, Quail Bush	7	7	38	E	M	L	H	Y	Y	F		6	
<i>Atriplex polycarpa</i>	Desert Saltbush	6	6	28	D	S	M	H	N	N	F		6	
<i>Baccharis sarothroides</i>	Desert Broom, Coyote Bush	6	7	38	E	M	L	H	N	Y	F		3, 5, 6	
<i>Baccharis x 'Centennial' (female hybrid)</i>	Centennial Broom	3	5	20	E	F	L	H	N	N	F			
<i>Baccharis x 'Starn' (male hybrid)</i>	Thompson Broom	3	5	20	E	M	L	H	N	N	F			
<i>Bebbia juncea</i>	Sweet Bush	3	3	7	S	M	L	H	N	N	F		6	
<i>Berberis fremontii</i>	Fremont's Barberry	6	4	13	E	S	L	H	Y	Y	F, P		6	
<i>Berberis thunbergii</i>	Japanese Barberry	4	4	13	D	M	L	Y	Y	Y	F, P		2	
<i>Buddleja davidii</i>	Butterfly Bush	8	6	28	D, S	F	L, M	L	N	Y	F, P			
<i>Buddleja marrubifolia</i>	Wooly Butterfly Bush	5	5	20	E	F	L	H	N	Y	F, P			
<i>Buddleja utahensis</i>	Utah Butterfly Bush	2	2	3	E	M	L	H	N	N	F, P		6	
<i>Buxus microphylla 'Japonica'</i>	Japanese Boxwood	4	4	13	E	S	L	M	N	N	Y	F, P, S	1	
<i>Caesalpinia gilliesii</i>	Yellow Bird of Paradise	8	6	28	D, E	F	L	H	N	N	F		2, 7 (seed pods)	
<i>Caesalpinia mexicana</i>	Mexican Bird of Paradise	12	6	28	D, E	F	L	H	N	N	F, P		2, 7 (seed pods)	
<i>Caesalpinia pulcherrima</i>	Red Bird of Paradise	6	6	28	D, E	F	L	H	Y	N	F		2, 7 (seed pods)	
<i>Calliandra californica</i>	Baja Fairy Duster	5	6	28	E	S, M	L	H	N	N	F, P			
<i>Calliandra eriophylla</i>	Pink Fairy Duster	3	3	7	E	S, M	L	H	N	N	F, P			
<i>Callistemon citrinus</i>	Bottlebrush, Lemon Bottlebrush	8	8	50	E	M	M	M	N	Y	F		1, 8	
<i>C. c. 'Nana'</i>	Dwarf Bottlebrush	2	3	7	E	S	M	M	N	N	F		1	
<i>Caryopteris x clandonensis 'Dark Knight'</i>	Blue Mist Spirea	3	4	13	D	M	M	L	N	Y	F, P			
<i>Chamaebatiaria millefolium</i>	Fern Bush, Desert Sweet	5	5	20	S	M	L	M	N	Y	F, P			
<i>Chrysaetina mexicana</i>	Damianita	2	2	3	E	S, M	L	M	N	N	F			
<i>Chrysothamnus viscidiflorus</i>	Yellow Rabbit Brush, Green Rabbit Brush	3	3	7	D	M	L	H	N	N	F			
<i>Cistus hybridus</i>	White Rockrose	3	5	20	E	F	L	H	N	N	F			
<i>Cistus purpureus</i>	Purple Rock Rose, Orchid Rockrose	4	4	13	E	F	L	H	N	N	F			
<i>Coleogyne ramosissima</i>	Blackbrush	5	5	20	S	S	L	H	N	Y	F			
<i>Cordia parvifolia</i>	Little Leaf Cordia	6	8	50	E	M	M	H	N	Y	F			
<i>Cotoneaster congestus</i>	Pyrenees Cotoneaster	2	3	7	E	M	L, M	M	N	N	F, P			
<i>Cotoneaster glaucophyllus</i>	Gray-Leaf Cotoneaster	5	6	28	E	M	M	M	N	Y	F, P			
<i>Cotoneaster lacteus</i>	Red Clusterberry	6	6	28	E	M	L, M	M	N	Y	F, P			
<i>Cotoneaster microphyllus</i>	Rockspray	3	6	28	E	M	L, M	M	N	N	F, P			
<i>Dalea bicolor 'argyraea'</i>	Silver Dalea	3	3	7	E	F	L	H	N	N	F			
<i>Dalea frutescens</i>	Black Dalea	4	5	20	S	M	L	H	N	Y	F			
<i>Dalea pulchra</i>	Pink Indigo Bush	4	5	20	E	M, F	L	H	N	Y	F			
<i>Dodonaea viscosa</i>	Purple Hopseed Bush	10	6	28	E	M	L, M	M	N	Y	F			
<i>Duranta erecta 'Sweet Memory'</i>	Golden Dewdrop, Sky Flower	15	10	79	S	S	M	L, M	N	N	Y	F, P	7 (berries), 8	
<i>Elaeagnus pungens</i>	Silverberry	8	8	50	E	F	L, M	M	Y	Y	F, P			
<i>Elaeagnus x ebbingei</i>	Ebbing's Silverberry	8	8	50	E	F	L, M	M	N	Y	F, P			
<i>Encelia farinosa</i>	Brittlebush	3	4	13	D	M	VL	H	N	N	F		6	
<i>Encelia virginensis</i>	Virgin River Brittlebush	2	2	3	S	M	VL	H	N	N	F		6	
<i>Ephedra nevadensis</i>	Nevada Jointfir, Nevada Mormon Tea	3	3	7	E	M	VL	H	N	N	F		6	
<i>Ephedra viridis</i>	Mormon Tea	3	3	7	E	S	L	H	N	N	F		6	
<i>Eremophila decipiens</i>	Slender Fuchsia	3	3	7	E	M	L	H	N	Y	F, P			
<i>Eremophila laanii 'Pink Beauty'</i>	Pink Beauty Emu Bush	6	6	28	E	F	M	H	N	Y	F			
<i>Eremophila glabra 'Murchinson River'</i>	Fire and Ice Emu Bush	3	6	28	E	M	L	H	N	Y	F			
<i>Eremophila maculata</i>	Spotted Emu Bush	6	6	28	E	S	L	H	N	Y	F, P			
<i>E. m. 'Valentine'</i>	Valentine Emu Bush	4	5	20	E	M	L	H	N	Y	F			

KEY		"Bulletproof"	Height (average)	Width (average)	Coverage	Type	Growth Rate	Water Use	Drought Tolerance	Spines or Thorns	Physical Barrier	Hedge or Screen	Exposure	COMMENTS
		(feet)	(feet)	(sq. feet)	D, E, S	S, M, F	VL, L, M, H	L, M, H	Yes or No	Yes or No	Yes or No	Yes or No	F, P, S	
"Bulletproof": Extremely drought tolerant, cold hardy, and pest and disease resistant once established.		Comments:												
Height, Width, Coverage at mature growth.		1. Organic mulch recommended.												
Type: Deciduous, Evergreen, Semi-evergreen		2. Many cultivars.												
Growth Rate: Slow, Medium, Fast		3. Some species may form dense thickets.												
Water Use: Very Low, Low, Medium, High		4. Not cold hardy below 28°F.												
Drought Tolerance: Low, Medium, High		5. Invasive species.												
Exposure: Full sun, Partial shade, Shade		6. Mojave native.												
		7. Toxic (parts specified).												
		8. May be trained as a small tree.												
		9. Needs a protected site (north facing site or afternoon shade).												
BOTANICAL NAME	COMMON NAME													
<b>SHRUBS (continued)</b>														
<i>E. m.</i> 'Winter Gold'	Winter Gold Emu Bush		4	6	28	E	M	L	H	N	Y	Y	F,P	
<i>Eremophila racemosa</i>	Easter Egg Eremophila		5	5	20	E	M	L	H	N	Y	Y	F	
<i>Eremophila</i> x 'Summertime Blue' ( <i>polyclada</i> x <i>divaricata</i> )	Summertime Blue Emu Bush		6	10	79	E	F	L	H	N	Y	Y	F	
<i>Eremophila</i> sp.	Eremophila, Emu Bush	●	4	4	13	E	M	L	H	N	Y	Y	F,P	
<i>Ericameria cuneata</i>	Cliff Goldenbush	●	2	3	7	D	S	L	H	N	N	N	F	6
<i>Ericameria laricifolia</i>	Turpentine Bush	●	2	3	7	D	S	VL	H	N	N	N	F	
<i>Eriodictyon angustifolium</i>	Yerba Santa		3	3	7	E	M	L	H	N	N	N	F,P	6
<i>Eriogonum corymbosum</i> var. <i>nilesii</i>	Las Vegas Valley Buckwheat	●	3	3	7	D	M	VL	H	N	N	N	F	6
<i>Eriogonum fasciculatum</i>	Wild Buckwheat, California Buckwheat	●	2	3	7	E	F	L	H	N	N	N	F	6
<i>Eriogonum</i> sp.	Buckwheat	●	3	3	7	D	M	L	H	N	N	N	F	
<i>Euonymus japonica</i>	Evergreen Euonymus		6	6	28	E	S	M	M	N	Y	Y	P, S	1
<i>E. j.</i> 'Aureo-Variegata'	Gold Spot Euonymus		5	6	28	E	S,M	M	M	N	Y	Y	P, S	1
<i>E. j.</i> 'Microphylla'	Box-leaf Euonymus		2	2	3	E	S	M	M	N	N	Y	P, S	1
<i>E. j.</i> 'Silver King'	Silver King Euonymus		5	6	28	E	S	M	M	N	N	Y	P, S	1
<i>Fallugia paradoxa</i>	Apache Plume	●	6	4	13	S	F	L	H	N	Y	Y	F,P	6
<i>Forestiera pubescens</i> (= <i>neomexicana</i> )	Desert Olive, New Mexico Privet	●	6	6	28	D	M	L	H	N	Y	Y	F,P	6
<i>Fraxinus greggii</i>	Little Leaf Ash	●	15	12	113	E	S	M	M	N	Y	Y	F,P	8
<i>Genista tinctoria</i>	Dyer's Greenwood		6	6	28	D	S	L	H	N	N	N	F	
<i>Gutierrezia sarothrae</i>	Snakeweed	●	2	2	3	S	M	VL	H	N	N	N	F,P	6
<i>Juniperus chinensis</i> 'Blue Point'	Blue Point Juniper		10	4	13	E	M	M	M	N	Y	Y	F,P	
<i>J. c.</i> 'Spartan'	Spartan Chinese Juniper		15	6	28	E	M	L	H	N	Y	Y	F,P	
<i>J. c.</i> 'Sea Green'	Sea Green Juniper		5	6	28	E	M	M	M	N	Y	Y	F,P	
<i>J. c.</i> 'Torulosa'	Hollywood Twisted Juniper		15	10	79	E	M	L	H	N	Y	Y	F,P	8
<i>Juniperus sabina</i> 'Tamariscifolia'	Tam Juniper		3	10	79	E	M	M	L	N	N	N	P	1
<i>Juniperus scopulorum</i> 'Gray Gleam'	Gray Gleam Juniper		15	6	28	E	S	M	M	N	Y	Y	F,P	8
<i>Juniperus</i> sp.	Juniper		20	10	79	E	M	L, M	M	N	var.	var.	F, P	2
<i>Justicia californica</i>	California Justicia, Chuparosa	●	3	4	13	D	M	L	H	N	N	N	F	
<i>Justicia candidans</i>	Red Justicia	●	5	3	7	D	M	H	L	N	N	N	P,S	
<i>Justicia spicigera</i>	Mexican Honeysuckle	●	3	4	13	E	M	M	M	N	N	N	F,P	2
<i>Keckelia antirrhinoides</i>	Yellow Snapdragon Bush	●	4	4	13	S	M	L	H	N	N	Y	F,P	6
<i>Krascheninnikovia lanata</i>	Winterfat	●	2	3	7	E	F	VL	H	N	N	N	F	6
<i>Lantana camara</i>	Bush Lantana		3	6	28	E	F	L	H	N	N	N	F	2,7 (berries, leaves)
<i>Larrea tridentata</i>	Creosote Bush	●	8	6	28	E	M	VL	H	N	N	Y	F	6
<i>Leucophyllum candidum</i> 'Silver Cloud'	Silver Cloud Texas Ranger	●	5	5	20	E	S	L	H	N	Y	Y	F	
<i>L. c.</i> 'Thunder Cloud'	Thunder Cloud Texas Ranger	●	3	4	13	E	S	L	H	N	Y	Y	F	
<i>Leucophyllum frutescens</i>	Texas Ranger, Texas Sage, Cenizo	●	6	6	28	E	S	L	H	N	Y	Y	F	
<i>L. f.</i> 'Compacta'	Compact Texas Ranger	●	5	5	20	E	S	L	H	N	Y	Y	F	
<i>L. f.</i> 'Green Cloud'	Green Cloud Texas Ranger	●	6	6	28	E	S	L	H	N	Y	Y	F	
<i>L. f.</i> 'White Cloud'	White Cloud Texas Ranger	●	6	6	28	E	S	L	H	N	Y	Y	F	
<i>Leucophyllum langmaniae</i> 'Lynn's Legacy'	Lynn's Legacy Texas Ranger	●	5	5	20	E	S	L	H	N	Y	Y	F	
<i>L. l.</i> 'Rio Bravo'	Rio Bravo Texas Ranger	●	6	6	28	E	S	L	H	N	Y	Y	F	
<i>Leucophyllum laevigatum</i>	Chihuahuan Sage	●	6	6	28	E	S	L	H	N	Y	Y	F	
<i>Leucophyllum pruinosum</i> 'Sierra Bouquet'	Sierra Bouquet Texas Ranger	●	6	6	28	E	S	L	H	N	Y	Y	F	
<i>Leucophyllum revolutum</i> 'Houdini'	Houdini Texas Ranger		4	4	13	E	S	L	H	N	Y	Y	F	
<i>Leucophyllum zygophyllum</i> 'Cimarron'	Blue Texas Ranger, Cimarron Ranger	●	3	3	7	E	S	L	H	N	Y	Y	F	
<i>Leucophyllum</i> x 'Rain Cloud'	Rain Cloud Texas Ranger	●	5	4	13	E	S	L	H	N	Y	Y	F	
<i>Lycium andersonii</i>	Wolf Berry	●	6	4	13	D	M	VL	H	Y	N	Y	F	6
<i>Lycium cooperi</i>	Cooper's Wolfberry	●	5	6	28	E	F	L	H	Y	Y	Y	F,P	6
<i>Lycium pallidum</i> var. <i>oligospermum</i>	Pale Wolfberry	●	5	6	28	E	F	L	H	Y	Y	Y	F,P	6
<i>Malpighia glabra</i> 'Mariquita'	Barbados Cherry		3	3	7	S	M	L, M	L	N	N	N	P	1, 4
<i>Myrtus communis</i>	Classic Myrtle		6	6	28	E	S	L	H	N	Y	Y	F,P	1
<i>M. c. boetica</i>	Twisted Myrtle		10	10	79	E	S	L	H	N	N	Y	F,P	1, 8
<i>M. c.</i> 'Compacta'	Compact Myrtle		4	4	13	E	S	L	H	N	N	Y	F,P	1
<i>Nerium oleander</i>	Oleander		15	15	177	E	M	L	H	N	Y	Y	F	** 2, 7 (all parts), 8
<i>N. o.</i> 'Petite'	Dwarf Oleander		6	5	20	E	M	L	H	N	Y	Y	F	** 2, 7 (all parts)
<i>Phlomis fruticosa</i>	Shrubby Jerusalem Sage		3	3	7	E	M	L, M	M	N	N	N	F, P	1
<i>Phlomis lanata</i>	Jerusalem Sage		3	4	13	E	M	L, M	M	N	N	N	F, P	1
<i>Plumbago auriculata</i>	Cape Plumbago		6	8	50	E, S	M, F	L, M	M	N	N	N	F, P	
<i>Poliomintha maderensis</i>	Lavender Spice, Mexican Oregano		3	3	7	E, S	M	L, M	M	N	N	N	F, P	
<i>Prunus fasciculata</i>	Desert Almond	●	4	4	13	D	M	L	H	N	N	N	F	6
<i>Psoralea fremontii</i>	Indigo Bush	●	3	4	13	D	S	VL	H	N	N	N	F	6
<i>Psoralea polydenius</i>	Nevada Smokebush	●	5	4	13	D	S	VL	H	N	N	N	F	6
<i>Punica granatum</i> 'Nana'	Dwarf Pomegranate		3	3	7	D	M	M	M	Y	N	N	F, P	
<i>Purshia mexicana</i>	Mexican Cliffrose	●	7	4	13	E	S	L	M	N	N	N	F	6

\*\*NOT ACCEPTED IN THE CITY OF HENDERSON

KEY		"Bulletproof"	Height (average)	Width (average)	Coverage	Type	Growth Rate	Water Use	Drought Tolerance	Spines or Thorns	Physical Barrier	Hedge or Screen	Exposure	COMMENTS
BOTANICAL NAME	COMMON NAME													
<p><b>"Bulletproof":</b> Extremely drought tolerant, cold hardy, and pest and disease resistant once established.</p> <p><b>Comments:</b></p> <ol style="list-style-type: none"> <li>1. Organic mulch recommended.</li> <li>2. Many cultivars.</li> <li>3. Some species may form dense thickets.</li> <li>4. Not cold hardy below 28°F.</li> <li>5. Invasive species.</li> <li>6. Mojave native.</li> <li>7. Toxic (parts specified).</li> <li>8. May be trained as a small tree.</li> <li>9. Needs a protected site (north facing site or afternoon shade).</li> </ol> <p><b>Height, Width, Coverage</b> at mature growth.</p> <p><b>Type:</b> Deciduous, Evergreen, Semi-evergreen</p> <p><b>Growth Rate:</b> Slow, Medium, Fast</p> <p><b>Water Use:</b> Very Low, Low, Medium, High</p> <p><b>Drought Tolerance:</b> Low, Medium, High</p> <p><b>Exposure:</b> Full sun, Partial shade, Shade</p>														
<b>SHRUBS (continued)</b>														
<i>Purshia stansburiana</i> (=Cowania)	Cliff Rose	●	6	6	28	E	S	L	H	N	N	Y	F,P	6
<i>Pyracantha</i> sp.	Pyracantha, Firethorn	●	8	8	50	E	F	M	M	Y	Y	Y	F,P	1
<i>Rhus microphylla</i>	Littleleaf Sumac	●	8	12	113	D	M	L	H	Y	Y	Y	F,P	
<i>Rhus ovata</i>	Sugar Bush	●	12	12	113	E	S,M	L,M	H	N	Y	Y	F,P	
<i>Rhus trilobata</i>	Squaw Bush / Skunk Bush	●	5	8	50	D	M	L	H	N	Y	Y	F,P	
<i>Rhus virens</i>	Evergreen Sumac	●	10	15	177	E	M	L	H	N	Y	Y	F,P	8
<i>Romneya coulteri</i>	Matilija Poppy, Fried Egg Poppy		6	6	28	S	S	L,M	M	N	N	N	F,P	
<i>Rosa</i> sp.	Rose		4	3	7	D,E	F	M	M	Y	Y	Y	F,P	1, 2
<i>Rosa woodsii</i>	Woods' Rose		4	4	13	D	M	M	M	Y	Y	N	F,P	3, 6
<i>Rosmarinus officinalis</i>	Rosemary		4	6	28	E	M,F	L,M	M	N	Y	Y	F,P	
<i>Ruellia peninsularis</i>	Desert Ruellia	●	4	5	20	S	M	L	H	N	N	Y	F	
<i>Russelia equisetiformis</i>	Coral Fountain		4	6	28	E,S	M	M	H	N	N	N	F,P	4
<i>Salazaria mexicana</i>	Bladdersage	●	3	3	7	D	M	VL	H	N	N	N	F	6
<i>Salvia chamaedryoides</i>	Mexican Blue Sage	●	2	2	3	E,S	M	M	M	N	N	N	F,P	
<i>Salvia clevelandii</i>	Chaparral Sage	●	5	6	28	E	M	L	H	N	Y	N	F,P	
<i>Salvia coccinea</i>	Scarlet Sage		3	4	13	S	M	L,M	M	N	N	N	F,P	
<i>Salvia dorrii</i>	Purple Sage, Desert Sage	●	2	3	7	E,S	M	L	H	N	N	N	F,P	6
<i>Salvia greggii</i>	Autumn Sage		2	2	3	S	F	L,M	M	N	N	N	F,P	2
<i>Salvia leucantha</i>	Mexican Bush Sage		4	4	13	S	M,F	M	M	N	N	N	F,P	1
<i>Salvia microphylla</i> 'Sierra Madre'	Sierra Madre Sage		3	3	7	E	M	M	M	N	N	N	F,P	
<i>Salvia mohavensis</i>	Mojave Sage	●	3	3	7	E	M	VL	H	N	N	N	F,P,S	6
<i>Salvia</i> sp.	Sage		4	4	13	D,E	M,F	M	M	N	N	N	F,P	
<i>Sambucus mexicana</i>	Mexican Elderberry	●	15	15	177	D,S	M,F	L,M	H	N	Y	Y	F,P	6, 8
<i>Santolina chamaecyparissus</i>	Lavender Cotton, Gray Santolina		2	3	7	E	M	L,M	M	N	N	N	F,P	
<i>Santolina rosmarinifolia</i> (=S. virens)	Green Lavender Cotton, Green Santolina		2	3	7	E	M	L,M	M	N	N	N	F,P	
<i>Senegalia berlandieri</i> (=Acacia)	Berlandier Acacia, Guajillo		12	12	113	D	M	L,M	H	N	N	N	F,P	
<i>Senna arnata</i> (=Cassia)	Spiny Senna	●	3	4	13	D	M	VL	H	Y	N	N	F	6
<i>Senna artemisioides</i> (=Cassia)	Feathery Senna, Feathery Cassia	●	6	6	28	E	M	VL, L	H	N	N	Y	F,P	
<i>Senna lindheimeriana</i> (=Cassia)	Velvet-leaf Senna	●	3	3	7	E	M	L	H	N	N	N	F,P	
<i>Senna nemophila</i> (=Cassia)	Desert Senna, Desert Cassia		6	6	28	E	M	L	H	N	N	N	F,P	4
<i>Senna phyllodinea</i> (=Cassia)	Silvery Senna, Silver Leaf Cassia		6	6	28	E	M	L	H	N	N	N	F,P	4
<i>Senna wislizenii</i> (=Cassia)	Shrubby Senna, Shrubby Cassia		8	6	28	D	M	L	H	N	N	N	F,P	
<i>Simmondsia chinensis</i>	Jojoba	●	6	6	28	E	S,M	VL, L	H	N	Y	Y	F,P	
S. c. 'Vista'	Compact Jojoba	●	4	4	13	E	S,M	VL, L	H	N	Y	N	F,P	
<i>Sophora arizonica</i>	Arizona Mescal Bean	●	10	8	50	E	S	L,M	M	N	N	N	F,P	8
<i>Tecoma stans</i>	Yellow Trumpet Flower, Yellow Bells		8	8	50	S	F	L,M	M	N	N	N	F,P	2, 8
<i>Tecoma</i> x 'Orange Jubilee'	'Orange Jubilee' Tecoma, Orange Bells		8	8	50	D,S	F	L,M	M	N	N	N	F,P	
<i>Tecoma</i> x 'Sunrise' <sup>TM</sup>	'Sunrise' Tecoma		8	8	50	D,S	F	L,M	M	N	N	N	F,P	
<i>Teucrium chamaedrys</i>	Germander		2	2	3	E	M	L,M	M	N	N	N	F,P	
<i>Thamnosma montana</i>	Turpentine Broom	●	2	2	3	D	S	VL	H	N	N	N	F	6
<i>Vauquelinia californica</i>	Arizona Rosewood	●	15	10	79	E	M	L	H	N	Y	Y	F,P	8
<i>Vauquelinia corymbosa</i> var. <i>heterodon</i>	Narrowleaf Rosewood	●	15	15	177	E	M	L,M	H	N	Y	Y	F,P	8
<i>Wedelia texana</i> 'Devil's River' (= <i>Zexmenia hispida</i> )	Devil's River, Orange Daisy		3	3	7	S, D	M	L,M	H	N	N	N	F,P	
<i>Xylosma congesta</i> 'Compacta'	Dwarf Xylosma		5	6	28	E	M	M	M	N	N	Y	F,P,S	
<i>Ziziphus obtusifolia</i>	Greythorn	●	6	8	50	D	S,M	L	H	Y	Y	Y	F,P	6
<b>GROUNDCOVERS</b>														
<i>Abronia villosa</i>	Desert Sand Verbena	●	1	2	3	D	M	L	H	N	N	N	F	6
<i>Acacia redolens</i> 'Desert Carpet'	Desert Carpet Creeping Acacia	●	2	12	113	E	S,M	VL	H	N	N	N	F	
<i>Acalypha monostachys</i>	Raspberry Fuzzies		1	1	1	S	M	M	M	N	N	N	F	
<i>Aptenia cordifolia</i>	Hearts and Flowers, Red Apple Ice Plant		1	3	7	E	M	L,M	L,M	N	N	N	F,P	
<i>Asteriscus maritimus</i>	Gold Coin Daisy		1	3	7	E	M	L,M	M	N	N	N	F	
<i>Baccharis pilularis</i> 'Pigeon Point'	Dwarf Coyote Brush		1	8	50	E	F	L	L	N	N	N	F	
<i>Berberis repens</i> (=Mahonia)	Creeping Oregon Grape		2	4	13	E	S	M	M	N	N	N	P,S	1
<i>Calylophus hartwegii</i>	Sierra Sundrop		1	2	3	D	F	L	H	N	N	N	F	
<i>Cephalophyllum speciosum</i> 'Red Spike'	Red Spike Iceplant		1	2	3	E	M	L	M	N	N	N	F,P	4
<i>Cerastium tomentosum</i>	Snow-in-Summer		1	1	1	D	F	L	L	N	N	N	F,P	
<i>Conoclinium greggii</i> 'Boothill' (=Eupatorium)	Boothill Eupatorium		2	2	3	E	F	M	M	N	N	N	P	
<i>Convolvulus cneorum</i>	Bush Morning Glory		2	4	13	E	F	L	M	N	N	N	F	
<i>Convolvulus mauritanicus</i>	Ground Morning Glory		1	3	7	P	F	L	M	N	N	N	F	
<i>Cotoneaster horizontalis</i>	Rock Cotoneaster		2	6	28	E	M	M	L	N	N	N	P	
<i>Dalea capitata</i> 'Sierra Gold'	Sierra Gold Dalea	●	1	3	7	D	F	L	H	N	N	N	F	1
<i>Dalea greggii</i>	Prostrate Indigo Bush	●	1	8	50	E	F	L	H	N	N	N	F	
<i>Dichondra argentea</i> 'Silver Falls'	Silver Dichondra, Kidneyweed		1	3	7	S	F	L	M	N	N	N	F,P	
<i>Dichondra micrantha</i>	Green Dichondra		1	3	7	E	M	M	L	N	N	N	P,S	1
<i>Drosanthemum cooperi</i>	Purple Iceplant		1	4	13	E	M,F	L	M	N	N	N	F,P	



KEY		"Bulletproof"	Height (average)	Width (average)	Coverage	Type	Growth Rate	Water Use	Drought Tolerance	Spines or Thorns	Physical Barrier	Hedge or Screen	Exposure	COMMENTS
		(feet)	(feet)	(sq. feet)	D, E, S	S, M, F	VL, L, M, H	L, M, H	Yes or No	Yes or No	Yes or No	No	F, P, S	
"Bulletproof": Extremely drought tolerant, cold hardy, and pest and disease resistant once established.		Comments:												
Height, Width, Coverage at mature growth.		1. Organic mulch recommended.												
Type: Deciduous, Evergreen, Semi-evergreen		2. Many cultivars.												
Growth Rate: Slow, Medium, Fast		3. Some species may form dense thickets.												
Water Use: Very Low, Low, Medium, High		4. Not cold hardy below 28°F.												
Drought Tolerance: Low, Medium, High		5. Invasive species.												
Exposure: Full sun, Partial shade, Shade		6. Mojave native.												
		7. Toxic (parts specified).												
		8. May be trained as a small tree.												
		9. Needs a protected site (north facing site or afternoon shade).												
BOTANICAL NAME	COMMON NAME													
<b>GROUNDCOVERS (continued)</b>														
<i>Euonymus fortunei</i> 'Coloratus'	Purple-leaf Wintercreeper		1	3	7	E	M	M	L	N	N	N	P	1
<i>Euphorbia rigida</i>	Spurge, Gopher Plant	●	2	3	7	E	F	L	H	N	N	N	F	
<i>Gazania rigens</i>	Gazania, Treasure Flower		1	1	1	E	F	L	M	N	N	N	F,P	2
<i>Glandularia gooddingii</i> (=Verbena)	Goodding Verbena	●	1	3	7	D	M	L	H	N	N	N	F	6
<i>Glandularia peruviana</i> (=Verbena)	Peruvian Verbena		1	2	3	D	F	L	L	N	N	N	P	
<i>Glandularia pulchella</i> (= Verbena)	Moss Verbena		1	3	7	E	M	L,M	L	N	N	N	F,P	
<i>Glandularia tenera</i> (=Verbena)	Rock Verbena		1	2	3	P	F	L	L	N	N	N	P	
<i>Juniperus chinensis procumbens</i>	Japanese Garden Juniper		2	8	50	E	S	M	L	N	N	N	P	1
<i>Juniperus conferta</i>	Shore Juniper		1	8	50	E	S	M	L	N	N	N	P	1
<i>Juniperus horizontalis</i> 'Prince of Wales'	Prince of Wales Juniper		1	4	13	E	S	M	L	N	N	N	P	1
<i>J. h. 'Wiltonii'</i>	Blue Carpet Juniper		1	6	28	E	S	M	L	N	N	N	P	1
<i>Juniperus sabina</i> 'Buffalo'	Buffalo Juniper		1	8	50	E	S	M	L	N	N	N	P	1
<i>Lantana montevidensis</i>	Trailing Lantana		1	6	28	D	F	L	M	N	N	N	F	7 (berries, leaves)
<i>Malephora crocea</i>	Gray Ice Plant, Coppery Mesemb		1	3	7	E	M	L,M	M	N	N	N	F,P	
<i>Malephora lutea</i>	Rocky Point Ice Plant		1	3	7	E	M	L,M	M	N	N	N	F,P	
<i>Mirabilis multiflora</i>	Four O'Clock	●	2	2	3	D	F	L	H	N	N	N	F,P,S	6
<i>Muehlenbeckia axillaris</i>	Creeping Wire Vine		1	3	7	E	F	M	M	N	N	N	P	
<i>Myoporum brevifolium</i> 'Emerald Gem'	Small Leaf Myoporum		1	4	13	D	M	L,M	H	N	N	N	F,P	
<i>Myoporum parvifolium</i>	Prostrate Myoporum		1	8	50	D	F	L	H	N	N	N	F	
<i>Pyracantha fortuneana</i> 'Santa Cruz'	Santa Cruz Pyracantha, Firethorn		2	5	20	E	M	M	M	Y	Y	Y	P	1
<i>Rosmarinus officinalis</i> 'prostratus'	Prostrate Rosemary		2	4	13	E	F	L	H	N	N	Y	F	
<i>Sedum spectabile</i>	Stonecrop		1	2	3	E	F	L	M	N	N	N	P	
<i>Sphaeralcea grossulariifolia</i>	Goosefoot Mallow	●	2	4	13	E	F	VL	H	N	N	N	P	6
<i>Stachys coccinea</i>	Texas Betony, Scarlet Hedge Nettle		1	2	3	E, S	M	M	M	N	N	N	F,P	
<i>Tradescantia pallida</i> 'Purpurea'	Purple Heart, Wandering Jew		1	2	3	E	M	L,M	L	N	N	N	F,P	1
<i>Verbena rigida</i>	Sandpaper Verbena, Coarse Verbena		1	3	7	P	F	L	L	N	N	N	F	
<i>Vinca minor</i>	Dwarf Periwinkle		2	2	3	E	S,M	M, H	L	N	N	N	P, S	1
<b>VINES</b>														
<i>Antigonon leptopus</i>	Queen's Wreath, Coral Vine		15	10	79	D	M,F	L, M	M	N	N	N	F	
<i>Callaeum illicaeana</i> (=Mascagnia)	Orchid Vine		12	5	20	D	F	L	H	N	N	N	F	
<i>Campsis</i> sp.	Trumpet Creeper		10	10	79	D	F	M	L	N	N	N	P	2
<i>Cissus trifoliata</i> var. <i>incisa</i>	Grape Ivy, Arizona Grape Ivy		10	5	20	S	M	L, M	M	N	N	N	P, S	
<i>Clematis ligusticifolia</i>	Western Virgin's Bower	●	12	5	20	S	F	M	M	N	N	N	F,P,S	6
<i>Ficus pumila</i>	Creeping Fig		10	5	20	E	M	M	M	N	N	N	P, S	
<i>Gelsemium sempervirens</i>	Carolina Jasmine		10	5	20	E	M	H	L	N	N	N	P	1
<i>Hardenbergia violacea</i>	Happy Wanderer, Lilac Vine		10	5	20	E	M	H	L	N	N	N	P	
<i>Jasminum mesnyi</i>	Primrose Jasmine		10	5	20	E	M	M	L	N	N	N	P	1
<i>Lonicera japonica</i> 'Halliana'	Hall's / Japanese Honeysuckle		15	10	79	E	F	M	M	N	N	Y	F, P	
<i>Macfadyena unguis-cati</i>	Cat's Claw Vine		15	10	79	S	M	L	L	N	N	Y	F, P	3
<i>Maurandya antirrhiniflora</i>	Snapdragon Vine		8	5	20	D	M	L	M	N	N	N	F, P	6
<i>Parthenocissus</i> sp. 'Hacienda Creeper'	Hacienda Creeper		15	10	79	D	F	L, M	M	N	N	N	F, P	
<i>Polygonum aubertii</i>	Silver Lace Vine		15	5	20	E	M	L	M	N	N	N	F, P	
<i>Rosa banksiae</i>	Lady Bank's Rose		15	10	79	E	M	M	M	Y	N	N	P, F	3
<i>Solanum jasminoides</i>	Potato Vine		10	5	20	S, D	M, F	M	M	N	N	N	P, F	1, 4
<i>Tecoma capensis</i>	Cape Honeysuckle		8	5	20	E	M	L	L	N	N	Y	F, P	4
<i>Vitis arizonica</i>	Canyon Grape	●	10	10	79	D	M	L	M	N	N	N	F	6
<i>Vitis californica</i>	California Grape	●	10	10	79	D	M	L	M	N	N	N	F, P	
<i>V. c.</i> 'Roger's Red'	Rogers Red Grape	●	10	10	79	D	M	L	M	N	N	N	F, P	
<i>Vitis</i> sp.	Grape		10	10	79	D	M	L	M	N	N	Y	F, P	1
<b>AGAVES, CACTI, SUCCULENTS, AND YUCCAS</b>														
<i>Agave americana</i>	Century Plant		5	8	50	E	M	L	H	Y	Y	N	F	
<i>A. a.</i> var. <i>aurea-marginata</i>	Yellow Margin Century Plant		4	5	20	E	S	L	H	Y	Y	N	F, P	
<i>A. a.</i> var. <i>medio-picta</i>	Medio Picta Century Plant		4	6	28	E	S	L	H	Y	Y	N	F	
<i>Agave angustifolia</i> var. <i>marginata</i>	Variagated Agave		3	3	7	E	S	L	H	Y	Y	N	F, P	
<i>Agave bovicornuta</i>	Cow's Horn Agave		4	4	13	E	F	L	H	Y	N	N	P	
<i>Agave bracteosa</i>	Green Spider Agave		1	1	1	E	S	L	H	N	N	N	F, P	
<i>Agave colorata</i>	Mescal Ceniza		3	3	7	E	M	L	H	Y	Y	N	F	
<i>Agave desmettiana</i>	Smooth Agave		3	3	7	E	F	L	H	Y	Y	N	F, P	
<i>Agave filifera</i>	Thread-leaf Agave, Dark Green Agave		2	2	3	E	M	L	H	Y	Y	N	F, P	
<i>Agave geminiflora</i>	Twin-Flowered Agave		3	4	13	E	M	L	H	Y	Y	N	F, P, S	
<i>Agave havardiana</i>	Havard Agave		3	4	13	E	M	L	H	Y	Y	N	F, P	
<i>Agave montana</i>	Mountain Agave		4	5	20	E	S	L	H	Y	Y	N	F, P	
<i>Agave multiflora</i>	Chahuíqui		3	4	13	E	S	L, M	M	Y	Y	N	F, P	
<i>Agave murpheyi</i>	Murphey's Agave		3	3	7	E	M	L	H	Y	N	N	F	
<i>Agave ocahui</i>	Agave Ocahui		2	3	7	E	S	VL	H	Y	Y	N	F	
<i>Agave ovatifolia</i>	Whale's Tongue Agave		3	4	13	E	S, M	L	H	Y	Y	N	F, P	

KEY		"Bulletproof"	Height (average)	Width (average)	Coverage	Type	Growth Rate	Water Use	Drought Tolerance	Spines or Thorns	Physical Barrier	Hedge or Screen	Exposure	COMMENTS
		(feet)	(feet)	(sq. feet)	D, E, S	S, M, F	VL, L, M, H	L, M, H	Yes or No	Yes or No	Yes or No	No	F, P, S	
BOTANICAL NAME		COMMON NAME												
<b>AGAVES, CACTI, SUCCULENTS, AND YUCCAS (continued)</b>														
<i>Agave palmeri</i>	Palmer's Agave		3	3	7	E	S	L	H	Y	Y	N	F	
<i>Agave parvasana</i>	Cabbage Head Agave		2	2	3	E	S	L	H	Y	Y	N	F, P	
<i>Agave parryi</i>	Parry's Agave		3	3	7	E	S	L	H	Y	Y	N	F	
<i>A. p. var. huachuensis</i>	Huachuca Agave		2	3	7	E	S	L	H	Y	N	N	F, P	
<i>A. p. var. neomexicana</i>	New Mexico Agave		1	2	3	E	S	L, M	M	Y	Y	N	F, P	
<i>A. p. var. truncata</i>	Artichoke Agave		3	3	7	E	S, M	VL	H	Y	N	N	F, P	
<i>Agave salmiana ssp. ferox</i>	Ferox Agave		6	8	50	E	S, M	L, M	M	Y	Y	N	F, P	
<i>Agave scabra</i>	Rough-Leaved Agave		4	4	13	E	S	L	H	Y	Y	N	F	
<i>Agave schidigera 'Durango Delight'™</i>	Durango Delight Agave		2	3	7	E	F	L	H	Y	Y	N	F, P	
<i>Agave utahensis ssp. nevadensis</i>	Nevada Agave	●	1	1	1	E	S	VL	H	Y	N	N	F	6
<i>Agave victoriae-reginae</i>	Queen Victoria Agave	●	2	2	3	E	S	L	H	Y	N	N	F	
<i>Agave vilморiniana</i>	Octopus Agave		4	4	13	E	F	M	M	N	N	N	F, P	
<i>Agave weberi</i>	Weber Agave		5	8	50	E	M, F	L	H	Y	Y	N	F, P	
<i>Aloe arborescens</i>	Tree Aloe		6	6	28	E	S	L	M	Y	N	N	F, P	4
<i>Aloe barbadensis</i>	Aloe Vera		2	2	3	E	S, M	L	M	Y	N	N	F, P	
<i>Aloe ferox</i>	Tap Aloe, Cape Aloe		6	5	20	E	S	L	M	Y	N	N	F, P	4
<i>Aloe nobilium</i>	Gold Tooth Aloe		1	1	1	E	S, M	L	M	Y	N	N	F, P	
<i>Aloe saponaria</i>	African Aloe		2	1	1	E	M	L	M	Y	N	N	P	
<i>Aloe x 'Blue Elf'</i>	Blue Elf Aloe		2	2	3	E	S, M	M	M	Y	N	N	P, S	
<i>Aloe x spinosissima</i>	Spider Aloe		3	3	7	E	S	L	H	Y	N	N	P	
<i>Carnegiea gigantea</i>	Saguaro (spear)		12	2	3	E	S	L	H	Y	Y	N	F	
<i>Carnegiea gigantea</i>	Saguaro (with arms)		20	6	28	E	S	L	H	Y	Y	N	F	
<i>Cereus hildmannianus (= peruvianus)</i>	Peruvian Apple		8	3	7	E	M	L	H	Y	Y	N	F	4
<i>Cylindropuntia acanthocarpa (=Opuntia)</i>	Buckhorn Cholla	●	6	6	28	E	M	L	H	Y	Y	N	F	6
<i>Cylindropuntia arbuscula (=Opuntia)</i>	Pencil Cholla	●	8	3	7	E	M	L	H	Y	Y	N	F	
<i>Cylindropuntia bigelovii (=Opuntia)</i>	Teddy Bear Cholla	●	6	4	13	E	M	L	H	Y	Y	N	F	6
<i>Cylindropuntia echinocarpa (=Opuntia)</i>	Silver Cholla	●	3	4	13	E	M	L	H	Y	Y	N	F	6
<i>Cylindropuntia fulgida (=Opuntia)</i>	Chain-Fruit Cholla, Jumping Cactus		8	5	20	E	M	L	H	Y	Y	N	F	
<i>Cylindropuntia ramosissima (=Opuntia)</i>	Diamond Cholla	●	3	5	20	E	S, M	L	H	Y	Y	N	F	6
<i>Cylindropuntia versicolor (=Opuntia)</i>	Staghorn Cholla	●	6	5	20	E	M	L	H	Y	Y	N	F	
<i>Dasyliirion acrotiche</i>	Green Desert Spoon	●	5	6	28	E	M	L	H	Y	Y	N	F	
<i>Dasyliirion longissimum</i>	Stick Palm, Mexican Grass Tree	●	8	6	28	E	M	L	H	Y	Y	N	F	
<i>Dasyliirion wheeleri</i>	Desert Spoon	●	5	6	28	E	M	L	H	Y	Y	N	F	
<i>Echinocactus grusonii</i>	Golden Barrel		2	3	7	E	M	L	H	Y	Y	N	F	
<i>Echinocactus polycephalus</i>	Cottontop Cactus	●	2	3	7	E	S	VL	H	Y	N	N	F	6
<i>Echinocereus engelmannii</i>	Strawberry Hedgehog	●	1	3	7	E	S	L	H	Y	N	N	F	6
<i>Echinocereus triglochidiatus</i>	Claret Cup	●	1	2	3	E	S, M	L	H	Y	N	N	F	6
<i>Escobaria vivipara (=Coryphantha)</i>	Common Pincushion	●	1	1	1	E	S, M	L	H	Y	N	N	F, P	6
<i>E. v. var. bisbeena</i>	Beehive Cactus	●	1	1	1	E	S, M	L	H	Y	N	N	F, P	
<i>Ferocactus acanthodes (=Cylindraceus)</i>	Compass Barrel Cactus	●	6	2	3	E	S	L	H	Y	N	N	F	6
<i>Ferocactus wislizenii</i>	Fishhook Barrel Cactus	●	6	2	3	E	S, M	L	H	Y	N	N	F	
<i>Fouquieria splendens</i>	Ocotillo	●	12	6	28	D	S	L	H	Y	Y	N	F, P	6
<i>Hesperaloe campanulata</i>	Bell-flowered Hesperaloe		3	3	7	E	M	L	H	N	N	Y	F, P	
<i>Hesperaloe funifera</i>	Giant Sword Flower	●	6	6	28	E	M	L	H	N	N	Y	F	
<i>Hesperaloe nocturna</i>	Night Blooming Yucca	●	5	6	28	E	M	L	H	N	N	Y	F	
<i>Hesperaloe parviflora</i>	Red Yucca	●	3	3	7	E	M	L	H	N	N	Y	F	
<i>H. p. 'Yellow'</i>	Yellow Yucca	●	3	3	7	E	M	L	H	N	N	Y	F	
<i>Mammillaria tetrancistra</i>	Pincushion / Fishhook Cactus	●	1	1	1	E	S, M	L	H	Y	N	N	F, P	6
<i>Nolina bigelovii</i>	Bigelow's Nolina	●	6	4	13	E	M	L	H	N	N	Y	F	6
<i>Nolina matapensis</i>	Treebear Grass	●	12	6	28	E	M	L	H	N	N	Y	F	
<i>Nolina microcarpa</i>	Bear Grass	●	4	5	20	E	M	L	H	N	N	Y	F	
<i>Nolina nelsoni</i>	Blue Nolina	●	5	5	20	E	M	L	H	N	N	Y	F	
<i>Nolina texana</i>	Texas Bear Grass, Devil's Shoestring	●	3	3	7	E	M	L	H	N	N	Y	F	
<i>Opuntia basilaris</i>	Beavertail Cactus	●	1	4	13	E	M	L	H	Y	Y	N	F	6
<i>Opuntia chlorotica</i>	Pancake Prickly Pear	●	4	5	20	E	M	L	H	Y	Y	N	F	6
<i>Opuntia engelmannii</i>	Englemann's Prickly Pear	●	6	6	28	E	S, M	L	H	Y	Y	N	F, P	6
<i>O. e. acicularis</i>	Bristly Prickly Pear	●	8	10	79	E	M	L	H	Y	Y	N	F, P	
<i>O. e. linguiformis</i>	Cow's Tongue, Angel's Wing Cactus	●	6	8	50	E	M	L	H	Y	Y	N	F	
<i>Opuntia erinacea 'erinacea'</i>	Old Man Prickly Pear	●	2	3	7	E	S, M	L	H	Y	Y	N	F	6
<i>Opuntia ficus-indica</i>	Indian Fig Cactus	●	15	10	79	E	M, F	L	M	N/ Y	Y	Y	F	
<i>Opuntia macrocentra</i>	Black Spine Prickly Pear	●	4	3	8	E	M	L	H	N	N	Y	F	
<i>Opuntia microdasys</i>	Bunny Ears	●	3	5	20	E	M	L	H	Y	Y	N	F	
<i>Opuntia phaeacantha</i>	Mojave Prickly Pear	●	3	6	28	E	S	L	H	Y	Y	N	F	6
<i>Opuntia paraguayensis</i>	Paraguay Cactus, Orange Tuna Cactus		6	4	13	E	M	L	M	Y	Y	N	F, P	
<i>Opuntia riviereana</i>	Orange Tuna Cactus	●	5	8	50	E	M	L	H	Y	Y	N	F	
<i>Opuntia robusta</i>	Silver Dollar Cactus, Giant Prickly Pear	●	18	10	79	E	M	L	H	Y	Y	N	F	

KEY		"Bulletproof"	Height (average)	Width (average)	Coverage	Type	Growth Rate	Water Use	Drought Tolerance	Spines or Thorns	Physical Barrier	Hedge or Screen	Exposure	COMMENTS
BOTANICAL NAME	COMMON NAME	(feet)	(feet)	(sq. feet)	D, E, S	S, M, F	VL, L, M, H	L, M, H	Yes or No	Yes or No	Yes or No	No	F, P, S	
<b>AGAVES, CACTI, SUCCULENTS, AND YUCCAS (continued)</b>														
<i>Opuntia santa rita</i> 'Tubac' (= <i>O. violacea</i> 'Santa Rita')	Purple Prickly Pear, Purple Pancake	●	4	6	28	E M	L H	Y Y	N	F				
<i>Opuntia turpinii</i> (= <i>Tephrocactus</i> )	Pine Cone Prickly Pear, Paper Spine Cactus	●	1	2	3	E M	L H	N N	N	P				
<i>Oreocereus celsianus</i>	Old Man Of The Andes		6	2	3	E M	L H	Y N	N	F, P				
<i>Tephrocactus articulatus</i>	Paper Spine Cactus, Pine Cone Cactus		1	3	7	E S	L M	Y Y	N	F, P				
<i>Trichocereus pachanoi</i> (= <i>Echinopsis</i> )	San Pedro Cactus		8	6	28	E M	L H	Y N	N	F				
<i>Trichocereus spachianus</i> (= <i>Echinopsis</i> )	Golden Torch Cactus		6	3	7	E S, M	L H	Y N	N	F, P			2	
<i>Trichocereus</i> sp (= <i>Echinopsis</i> )	Cacti		15	3	7	E M	L H	Y N	N	F				
<i>Yucca aloifolia</i>	Spanish Bayonet		8	8	50	E S	L H	Y Y	N	F				
<i>Yucca australis</i>	Australis Yucca		30	10	79	E S	L H	Y N	N	F				
<i>Yucca baccata</i>	Banana Yucca	●	4	6	28	E S	L H	Y Y	N	F, P			6	
<i>Yucca brevifolia</i>	Joshua Tree	●	15	10	79	E S	L H	Y N	N	F			6	
<i>Yucca constricta</i>	Constricta Yucca		4	3	7	E S	L H	Y N	N	F				
<i>Yucca elata</i>	Soaptree Yucca	●	10	8	50	E S	L H	Y N	N	F, P				
<i>Yucca faxoniana</i>	Palm Yucca	●	12	6	28	E S	L H	Y N	N	F				
<i>Yucca filamentosa</i>	Adam's Needle		3	3	7	E M	L H	Y Y	N	F, P				
<i>Yucca glauca</i>	Soapweed, Narrowleaf Yucca		3	4	13	E S	L H	Y Y	N	F				
<i>Yucca gloriosa</i>	Spanish Dagger		10	8	50	E S, M	L H	N N	N	F, P				
<i>Yucca harrimaniae</i>	Harriman's Yucca	●	1	1	1	E S	L H	Y N	N	F				
<i>Yucca pallida</i>	Pale Leaf Yucca		1	2	3	E S	L H	Y N	N	F				
<i>Yucca gloriosa</i> var. <i>tristis</i> (= <i>Y. recurvifolia</i> )	Weeping Yucca, Pendulous Yucca		6	6	28	E S	L H	Y N	N	F, P				
<i>Yucca rigida</i>	Blue Yucca	●	12	3	7	E M	L H	Y N	N	F				
<i>Yucca rostrata</i>	Beaked Yucca	●	10	3	7	E S, M	L H	Y N	N	F				
<i>Yucca rupicola</i>	Twisted Yucca	●	2	3	7	E S	L H	N N	N	F, P				
<i>Yucca schidigera</i>	Mojave Yucca	●	8	8	50	E S	L H	Y N	N	F			6	
<i>Yucca schottii</i>	Mountain Yucca		12	5	20	E S, M	L H	Y N	N	F, P				
<i>Yucca thompsoniana</i>	Thompson's Yucca		10	8	50	E S	L H	Y Y	N	F				
<i>Yucca torreyi</i>	Torrey Yucca		15	6	28	E S	L H	Y Y	N	F				
<i>Yucca whipplei</i>	Our Lord's Candle, Chaparral Yucca	●	3	6	28	E S	L H	Y Y	N	F			6	
<b>ORNAMENTAL GRASSES</b>														
<i>Achnatherum hymenoides</i> (= <i>Oryzopsis</i> )	Indian Ricegrass	●	1	1	1	D F	VL	H	N	N	N	F	6	
<i>Achnatherum speciosum</i>	Desert Needlegrass	●	1	1	1	D F	VL	H	N	N	N	F	6	
<i>Aristida purpurea</i>	Purple Threeawn	●	2	2	3	E F	L H	N	N	N	F	5, 6		
<i>Bouteloua curtipendula</i>	Side-Oats Grama	●	2	2	3	D F	L H	N	N	N	F, P	6		
<i>Bouteloua gracilis</i>	Blue Grama Grass	●	2	2	3	E F	VL	H	N	N	F	6		
<i>Calamagrostis x acutifolia</i>	Feather Reed Grass		3	3	7	E F	L H	N	N	N	F, P			
<i>Cortaderia selloana</i>	Pampas Grass		8	15	177	E F	L H	N	Y	Y	F, P	5		
<i>C. s. 'Pumila'</i>	Dwarf Pampas Grass		4	4	13	E F	L H	N	Y	Y	F, P	5		
<i>Festuca ovina</i>	Blue Fescue		1	1	1	E F	M	M	N	N	F	2		
<i>F. o. var. brachyphylla</i>	Sheep Fescue		1	1	1	E F	M	M	N	N	F	6		
<i>Helictotrichon sempervirens</i>	Blue Oat Grass		2	2	3	E, S	M	M	N	N	F			
<i>Miscanthus sinensis</i>	Maiden Grass, Japanese Silver Grass		5	4	12	D M	M	M	N	N	F, P			
<i>M. s. 'Variegata'</i>	Variegated Maiden Grass		5	4	12	D M	M	M	N	N	F, P			
<i>Muhlenbergia capillaris</i> 'Regal Mist'	Regal Mist Muhly Grass	●	3	3	7	D F	L	M	N	N	F, P			
<i>Muhlenbergia dumosa</i>	Bamboo Muhly, Fairy Bamboo		4	4	13	E, S	M, F	L, M	N	N	F, P			
<i>Muhlenbergia emersleyi</i> 'El Toro'	Bull Grass	●	3	3	7	E F	VL	H	N	N	F, P			
<i>Muhlenbergia lindheimeri</i> 'Autumn Glow'	Autumn Glow	●	5	5	20	D F	L H	N	N	Y	F, P			
<i>Muhlenbergia rigens</i>	Deer Grass	●	4	4	13	D M	M	H	N	N	F, P	6		
<i>Muhlenbergia rigida</i> 'Nashville'	Nashville	●	2	2	3	E M	M	H	N	N	F, P			
<i>Nasella tenuisima</i> (= <i>Stipa tenuisima</i> )	Mexican Feather Grass		2	2	3	D M	M	M	N	N	F, P	5		
<i>Ophiopogon japonicus</i>	Mondo Grass		1	1	1	E M	M	L	N	N	P, S	2		
<i>Pennisetum alopecuroides</i>	Black Moudry		5	5	20	S F	M	L	N	N	Y	F, P	2	
<i>Pennisetum x advena</i> 'Rubrum' 'Cupreum'	Purple Fountain Grass		4	3	7	S F	M	L	N	N	Y	F		
<i>Phyllostachys aurea</i>	Golden Bamboo		15	10	79	D F	M	L	N	Y	Y	F, P	3, 5	
<i>Pleuraphis rigida</i> (= <i>Hilaria rigida</i> )	Big Galleta Grass	●	3	2	3	S F	VL	H	N	N	F	6		
<i>Sorghastrum nutans</i>	Indian Grass		4	2	3	S F	M	M	N	N	F			
<i>Sporobolus airoides</i>	Alkali Sacaton Grass	●	4	2	3	D M	L	M	N	N	F	6		
<i>Stipa gigantea</i>	Giant Feather Grass, Golden Oats		3	2	3	S M	M	L	N	N	F			
<b>PERENNIALS (small accent areas only)</b>														
<i>Achillea filipendulina</i>	Fern Leaf Yarrow		3	3	7	E F	L	M	N	N	N	F	2	
<i>Agapanthus africanus</i>	Lily of the Nile		3	3	7	E M	M	L	N	N	N	P	1	
<i>Amsonia tomentosa</i>	Desert Bluestar	●	1	1	1	D M	VL	H	N	N	F	6		
<i>Anemopsis californica</i>	Yerba Mansa		1	1	1	D M	M	L	N	N	P, S	6, 7 (leaves)		
<i>Artemisia ludoviciana</i>	Prairie Sage	●	3	3	7	D F	L	M	N	N	F, P	6		
<i>A. l. albula</i> 'Silver King'	Silver King Artemisia	●	3	3	7	D F	L	M	N	N	F, P			
<i>Artemisia x 'Powis Castle'</i>	Powis Castle Wormwood	●	2	3	7	E F	L	M	N	N	F, P			
<i>Artemisia schmidtiana</i> 'Silver Mound'	Angel's Hair, Silver Mound Artemisia		1	2	3	E M	L	M	N	N	F, P			

KEY		"Bulletproof"	Height (average)	Width (average)	Coverage	Type	Growth Rate	Water Use	Drought Tolerance	Spines or Thorns	Physical Barrier	Hedge or Screen	Exposure	COMMENTS	
"Bulletproof": Extremely drought tolerant, cold hardy, and pest and disease resistant once established.	Comments: 1. Organic mulch recommended. 2. Many cultivars. 3. Some species may form dense thickets. 4. Not cold hardy below 28°F. 5. Invasive species. 6. Mojave native. 7. Toxic (parts specified). 8. May be trained as a small tree. 9. Needs a protected site (north facing site or afternoon shade).														
BOTANICAL NAME	COMMON NAME	(feet)	(feet)	(sq. feet)	D, E, S	S, M, F	V, L, M, H	L, M, H	Yes or No	Yes or No	Yes or No	No	F, P, S		
<b>PERENNIALS (continued)</b>															
<i>Astragalus preussii</i>	Preuss' Milkvetch	● 2	2	3	D	F	VL	H	N	N	N	N	F	6	
<i>Baileya multiradiata</i>	Desert Marigold	● 1	2	3	D	M	L	H	N	N	N	N	F	6	
<i>Berlandiera lyrata</i>	Chocolate Flower	● 1	2	3	E	F	L	H	N	N	N	N	F, P		
<i>Convolvulus tricolor</i>	Dwarf Morning Glory		1	2	3	D	F	L	N	N	N	N	F, P		
<i>Coreopsis lanceolata</i>	Sunray		1	1	1	S	F	M	L	N	N	N	F		
<i>Echinacea purpurea</i>	Purple Coneflower		3	2	3	S	M	M	L	N	N	N	F, P	1	
<i>Enceliopsis argophylla</i>	Silverleaf Sunray	● 1	1	1	S	F	VL	H	N	N	N	N	F	6	
<i>Epilobium canum (=Zauschneria californica)</i>	Hummingbird Flower		3	4	13	D	M	L	M	N	N	N	F, P	3	
<i>Erigeron divergens</i>	Native Fleabane	● 1	3	7	E	F	VL	H	N	N	N	N	F, P	6	
<i>Erigeron karvinskianus</i>	Santa Barbara Daisy, Mexican Daisy		1	3	7	E	F	L	H	N	N	N	F, P		
<i>Eschscholzia californica</i>	California Poppy, Golden Poppy		1	1	1	D	F	L	M	N	N	N	F	6	
<i>Gaillardia aristata (=grandiflora)</i>	Blanket Flower		2	2	3	E	F	M	L	N	N	N	F		
<i>Gaura coccinea</i>	Scarlet Gaura	● 1	2	3	D	F	L	H	N	N	N	N	F, P	6	
<i>Gaura lindheimeri</i>	Gaura		3	4	13	D	M	M	L	N	N	N	F, P	2	
<i>Gazania rigida</i>	Gazania		1	1	1	E	M	L	M	N	N	N	F, P		
<i>Iberis sempervirens</i>	Evergreen Candytuft		1	2	3	E	M	L	L	N	N	N	F, P		
<i>Ipomopsis arizonica (=Gilia aggregata)</i>	Skyrocket	● 2	1	1	E	F	L	H	N	N	N	N	F, P, S	6	
<i>Kallstroemia grandiflora</i>	Arizona Poppy, Orange Caltrop		1	1	1	S	F	L	M	N	N	N	F		
<i>Lavandula</i> sp.	Lavender		2	3	7	E	F	M	M	N	N	N	F	2	
<i>Lepidium fremontii</i>	Desert Alyssum	● 2	2	3	D	F	VL	H	N	N	N	N	F	6	
<i>Liatris spicata</i>	Gayfeather, Blazing Star		2	2	3	S	M	L, M	M	N	N	N	F, P		
<i>Linum lewisii</i>	Blue Flax		2	1	1	D	M	L	M	N	N	N	F	6	
<i>Lippia repens</i>	Lippia		1	2	3	S	M	L	M	N	N	N	F, P		
<i>Liriope gigantea</i>	Giant Lily Turf		2	2	3	S	F	M	L	N	N	N	P, S		
<i>Liriope muscari</i>	Lily Turf		1	1	1	E	F	M	L	N	N	N	P, S		
<i>Lobularia maritima</i>	Sweet Alyssum		1	1	1	S	M	M	L	N	N	N	F, P	1	
<i>Manfreda maculosa</i>	Texas Tuberose, Spice Lily		1	1	1	D	S, M	L, M	M	N	N	N	P, S		
<i>Melampodium leucanthum</i>	Blackfoot Daisy		1	2	3	S	M	L	M	N	N	N	F, P		
<i>Oenothera caespitosa</i>	Angel Wing/White Evening Primrose	● 1	2	3	E	F	M	L	N	N	N	N	F, P	6	
<i>Oenothera elata (=O. hookeri)</i>	Hooker's Evening Primrose		3	1	1	D	F	M	M	N	N	N	F, P, S	5, 6	
<i>Osteospermum fruticosum</i>	African Trailing Daisy, Freeway Daisy		1	4	13	E, S	M, F	M	M	N	N	N	F, P, S		
<i>Penstemon amplexifolius</i>	Mexican Blue Penstemon		1	2	3	S	M	L, M	M	N	N	N	F, P		
<i>Penstemon baccharifolius 'Del Rio'</i>	Del Rio Penstemon		3	3	7	S	M	L	M	N	N	N	F, P		
<i>Penstemon barbatus</i>	Scarlet Bugler, Scarlet Beardtongue		4	2	3	E	M	L	M	N	N	N	F, P		
<i>Penstemon bicolor</i>	Pinto Beardtongue	● 2	2	3	E	F	VL	H	N	N	N	N	F	6	
<i>P. b. ssp.roseus</i>	Rosy Two-tone Beardtongue	● 2	2	3	S	F	L	H	N	N	N	N	F, P, S	6	
<i>Penstemon eatonii</i>	Firecracker Penstemon	● 3	2	3	E	M	L	H	N	N	N	N	F, P	6	
<i>Penstemon palmeri</i>	Scented Penstemon	● 4	2	3	E	F	VL	H	N	N	N	N	F	6	
<i>Penstemon parryi</i>	Parry's Penstemon	● 2	3	7	E	F	L	H	N	N	N	N	F, P		
<i>Penstemon pseudospectabilis</i>	Canyon Penstemon	● 2	4	13	E	F	L	H	N	N	N	N	F		
<i>Penstemon rostriflorus</i>	Bridge Penstemon		2	1	1	E	M	L	H	N	N	N	F, P	6	
<i>Penstemon strictus</i>	Rocky Mountain Penstemon		2	2	3	E	F	L	M	N	N	N	F, P		
<i>Penstemon superbus</i>	Superb Penstemon, Coral Beardtongue		4	3	7	E	F	L, M	M	N	N	N	F, P		
<i>Penstemon</i> sp.	Penstemon		2	3	7	S	M, F	L	M	N	N	N	F	2	
<i>Perovskia atriplicifolia</i>	Russian Sage	● 3	2	3	D	M	L	H	N	N	N	N	F, P		
<i>Psilostrophe cooperi</i>	Paper Flower	● 2	3	7	D	F	L	H	N	N	N	N	F, P	6	
<i>Psilostrophe tagetina</i>	Wooly Paper Flower	● 2	3	7	D	F	L	H	N	N	N	N	F, P		
<i>Ratibida columnifera</i>	Mexican Hat		1	2	3	D	F	L	H	N	N	N	F, P		
<i>Rudbeckia hirta</i>	Black-eyed Susan		2	2	3	D	F	L	H	N	N	N	F, P		
<i>Ruellia brittoniana</i>	Wild Petunia		2	3	7	E	F	L	H	N	N	N	F, P, S	5	
<i>R. b. vars. 'Katie', 'Rosa', 'Blanca'</i>	Dwarf Ruellia		1	2	3	E	M	M	M	N	N	N	F, P		
<i>Sphaeralcea ambigua</i>	Globe Mallow	● 3	3	7	S	F	L	H	N	N	N	N	F, P, S	2, 6	
<i>Stanleya pinnata</i>	Desert Prince's Plume	● 4	3	7	D	F	VL	H	N	N	N	N	F	6	
<i>Tagetes lemmonii</i>	Mountain Marigold		4	4	13	S	F	M	M	N	N	N	F		
<i>Tagetes lucida</i>	Mexican Tarragon, Mexican Marigold		3	3	7	S	M, F	M	M	N	N	N	F, P		
<i>Tetranneuris acaulis (=Hymenoxys)</i>	Angelita Daisy	● 1	1	1	E	M	L, M	M	N	N	N	N	F, P		
<i>Thymophylla pentachaeta (=Dyssodia)</i>	Golden Dogbane, Golden Dyssodia	● 1	2	3	E	F	VL	H	N	N	N	N	F	6	
<i>Thymophylla tenuiloba (=Dyssodia)</i>	Dahlberg Daisy	● 1	1	1	E	S	L	H	N	N	N	N	F		
<i>Tulbaghia violacea</i>	Society Garlic		1	1	1	S	M	M	M	N	N	N	F, P		
<i>Viguiera parishii (=deltoidea)</i>	Goldeneve	● 3	3	7	S	M	VL	H	N	N	N	N	F	6	
<i>Xylorhiza tortifolia</i>	Mojave Aster	● 1	1	1	D	M	VL	H	N	N	N	N	F	6	
<i>Zinnia acerosa</i>	Desert Zinnia	● 1	1	1	D	F	L	H	N	N	N	N	F, P		
<i>Zinnia grandiflora</i>	Prairie Zinnia		1	1	1	D	F	L	H	N	N	N	F, P		
<b>PLANTS WITH SPECIAL NEEDS (NOT SUITABLE FOR ALL LOCATIONS)</b>															
Shrub	<i>Asparagus densiflorus 'Meyers'</i>	Foxtail Fern		2	3	7	E	M	M	L	N	N	N	P, S	1
Groundcover	<i>A. d. 'Sprengerii'</i>	Asparagus Fern		2	4	13	E	M	M	M	N	N	N	P, S	1, 4
Shrub	<i>Aspidistra elatior</i>	Cast Iron Plant		2	2	3	E	M	H	L	N	N	N	S	1
Shrub	<i>Aucuba japonica 'Variegata'</i>	Gold Dust Plant		8	8	50	E	S	M	M	N	N	N	S	1
Shrub	<i>Berberis aquifolium (=Mahonia)</i>	Oregon Grape		4	5	20	E, S	S	L	M	Y	Y	Y	P, S	1
Vine	<i>Bougainvillea</i> sp.	Bougainvillea		10	5	20	D	M	M	M	Y	Y	N	S	4



KEY			"Bulletproof"													COMMENTS
BOTANICAL NAME		COMMON NAME	Height (average) (feet)	Width (average) (feet)	Coverage (sq. feet)	Type D, E, S	Growth Rate S, M, F	Water Use VL, L, M, H	Drought Tolerance L, M, H	Spines or Thorns Yes or No	Physical Barrier Yes or No	Hedge or Screen Yes or No	Exposure F, P, S			
<b>"Bulletproof":</b> Extremely drought tolerant, cold hardy, and pest and disease resistant once established. <b>Height, Width, Coverage</b> at mature growth. <b>Type:</b> Deciduous, Evergreen, Semi-evergreen <b>Growth Rate:</b> Slow, Medium, Fast <b>Water Use:</b> Very Low, Low, Medium, High <b>Drought Tolerance:</b> Low, Medium, High <b>Exposure:</b> Full sun, Partial shade, Shade			<b>Comments:</b> 1. Organic mulch recommended. 2. Many cultivars. 3. Some species may form dense thickets. 4. Not cold hardy below 28°F. 5. Invasive species. 6. Mojave native. 7. Toxic (parts specified). 8. May be trained as a small tree. 9. Needs a protected site (north facing site or afternoon shade).													
PLANTS WITH SPECIAL NEEDS (continued)																
Perennial	<i>Canna hybrids</i>	Canna	6	3	7	D	F	M,H	L	N	N	N	P	1, 2		
Agave, etc	<i>Cephalocereus senilis</i>	Old Man Cactus	6	4	13	E	S	L	M	Y	Y	N	P	4		
Perennial	<i>Cuphea llavea</i>	Bat-faced Cuphea	2	3	7	E	M	H	L	N	N	N	P	1		
Perennial	<i>Dietes bicolor</i>	Fortnight Lily, Evergreen Iris	2	2	3	E	M	M	M	N	N	N	P, S	1		
Perennial	<i>Dietes vegeta (=iridioides)</i>	Butterfly Iris, African Iris	2	2	3	E	M	M	M	N	N	N	P, S	1		
Perennial	<i>Erysimum linifolium</i>	Wallflower	2	2	3	E	M	L, M	M	N	N	N	P	1		
Shrub	<i>Euryops pectinatus</i>	Yellow Bush Daisy, Euryops Daisy	3	3	7	E	F	L	H	N	N	Y	F	1		
Shrub	<i>E. p. 'Viridis'</i>	Green Bush Daisy	3	3	7	E	F	L	H	N	N	Y	F	1		
Shrub	<i>Fatsia japonica</i>	Japanese Aralia	6	6	28	E	F	H	L	N	N	N	S	1		
Shrub	<i>Genista racemosa</i>	Sweet Broom	6	6	28	E	F	M	M	N	N	N	F	1		
Vine	<i>Hedera canariensis</i>	Algerian Ivy	10	5	20	E	F	M,H	L,M	N	N	N	P, S	1		
Vine	<i>Hedera helix</i>	English Ivy	10	5	20	E	F	M,H	L,M	N	N	N	P, S	1, 7(all parts)		
Perennial	<i>Hemerocallis hybrids</i>	Daylily Hybrids	2	2	3	E	M	M,H	L	N	N	N	P	1, 2		
Shrub	<i>Hibiscus sp.</i>	Hibiscus	4	4	13	D,E,S	M	M,H	L	N	N	N	P	1, 2, some 4		
Shrub	<i>Hyptis emoryi</i>	Desert Lavender	6	6	28	S	S,M	L	H	N	N	N	F, P	4, 6		
Shrub	<i>Ilex cornuta</i>	Chinese Holly	8	8	50	E	M	M	M	Y	Y	Y	F,P	2		
Shrub	<i>I. c. 'Burfordii Nana'</i>	Dwarf Burford Holly	6	6	28	E	M	M	M	N	Y	Y	F,P			
Shrub	<i>Ilex vomitoria 'Nana'</i>	Dwarf Yaupon Holly	3	3	7	E	M	M	M	N	Y	Y	F,P			
Shrub	<i>Ilex sp.</i>	Holly	20	10	79	D,E	S	M	M	Y	Y	Y	F,P	1, 2		
Perennial	<i>Iris sp.</i>	Iris	3	2	3	D, S	M	M,H	L	N	N	N	P	1, 2, some 4		
Vine	<i>Jasminum polyanthum</i>	Pink Jasmine	10	5	20	S	M,F	M	M	N	N	N	P	1		
Shrub	<i>Lagerstroemia indica dwarf</i>	Dwarf Crape Myrtle	6	6	28	D	S	M	M	N	N	Y	F, P	1, 2		
Shrub	<i>Ligustrum japonicum</i>	Waxleaf Privet, Japanese Privet	8	8	50	E	S	M	M	N	Y	Y	P, S	1		
Shrub	<i>Nandina domestica</i>	Heavenly Bamboo	6	4	13	E,S	S	L	M	N	Y	Y	P, S	1		
Shrub	<i>N. d. 'Nana'</i>	Dwarf Heavenly Bamboo	4	3	7	E,S	S	L	M	N	Y	Y	P, S	1		
Vine	<i>Parthenocissus quinquefolia</i>	Virginia Creeper	10	5	20	D, S	F	M	L	N	N	N	P, S	1, 5		
Vine	<i>Parthenocissus tricuspidata</i>	Boston Ivy, Japanese Creeper	10	5	20	D, S	F	M	L	N	N	N	P	1		
Shrub	<i>Phormium sp.</i>	Flax	3	3	7	E	M	M	L	N	N	N	P	1, 2, some 4		
Shrub	<i>Photinia x fraseri</i>	Redtip Photinia, Fraser's Photinia	8	6	28	E	S	M	M	N	Y	Y	P, S	1		
Shrub	<i>Pittosporum tobira</i>	Japanese Mock Orange	8	8	50	E	S	M	M	N	Y	Y	P, S	1		
Shrub	<i>P. t. 'Variegata'</i>	Variegated Mock Orange	8	8	50	E	S	M	M	N	Y	Y	P, S	1		
Shrub	<i>P. t. 'Wheeler's Dwarf'</i>	Wheeler's Dwarf Mock Orange	2	4	13	E	S	M	M	N	N	N	P, S	1		
Shrub	<i>Platycladus orientalis 'Aurea Nana'</i>	Golden Arborvitae	4	2	3	E	S	M	M	N	Y	Y	P, S	1		
Shrub	<i>Podocarpus gracillor</i>	Fern Pine	10	3	7	E	S	M	M	N	Y	Y	P, S	1		
Shrub	<i>Prunus caroliniana 'Compacta'</i>	Compact Carolina Cherry	8	6	28	E	S	M	M	N	Y	Y	P, S	1		
Shrub	<i>Rhaphiolepis indica</i>	Indian Hawthorn	4	4	13	E	S	L	M	N	N	Y	P, S	1, 2		
Groundcover	<i>Stachys byzantina</i>	Lamb's Ear	1	2	3	E	F	M	M	N	N	N	P	1		
Agave, etc	<i>Stenocereus thurberi</i>	Organ Pipe Cactus	10	3	7	E	S	L	H	Y	Y	N	F, P	4		
Vine	<i>Trachelospermum asiaticum</i>	Asiatic Jasmine	10	5	20	E	S	M	M	N	N	N	P, S	1		
Vine	<i>Trachelospermum jasminoides</i>	Star Jasmine	10	5	20	E	S	M	M	N	N	N	P, S	1		
Shrub	<i>Viburnum sp.</i>	Viburnum	8	8	50	E	S	M	M	N	Y	Y	P, S	1		
Vine	<i>Wisteria sinensis</i>	Chinese Wisteria	10	8	20	D	F	M,H	L	N	N	N	P, F	1		
Perennial	<i>Zephyranthes sp.</i>	Fairy Lily, Rain Lily	1	1	1	E, D	M	M	L	N	N	N	P	2		
REFERENCES																
Floridata Plant Profile List: <a href="http://www.floridata.com/lists/contents.cfm">http://www.floridata.com/lists/contents.cfm</a> Lady Bird Johnson Wildflower Center Native Plant Database: <a href="http://www.wildflower.org/plants/">http://www.wildflower.org/plants/</a> Learn2Grow Plants Search: <a href="http://www.learn2grow.com/plants/">http://www.learn2grow.com/plants/</a> Mountain States Wholesale Nursery: <a href="http://www.mswnc.com">http://www.mswnc.com</a> Sunset Plant Finder: <a href="http://plantfinder.sunset.com/sunset/">http://plantfinder.sunset.com/sunset/</a> United States Department of Agriculture Plants Database: <a href="http://plants.usda.gov/">http://plants.usda.gov/</a> University of Arizona Arid Plant List: <a href="http://ag.arizona.edu/pima/gardening/aridplants/aridplant_botindex.html">http://ag.arizona.edu/pima/gardening/aridplants/aridplant_botindex.html</a>																



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