INTRODUCTION: RECOMMENDED WOODY PLANTS FOR SANTA FE

This is a list of plants that can be expected to grow acceptably in the Santa Fe area, given proper siting and care. This list was originally compiled in 2001 and has been updated in light of climate change research, the appearance of new pests, and expectations for future changes. The situation regarding climate change variables and their impacts on plant adaptation is in a state of great unpredictability at this point, thus these recommendations will be reviewed periodically and may change at any time. One consideration concerning these recommendations is that, as temperatures and the length of the growing season increase, irrigation needs are likely to change. Plants that now need almost no supplemental irrigation (rated VL-L in the list) may need low-moderate watering, and plants that need only moderate watering now may need much more in the future. During droughts and water shortages, these limitations will be a very important consideration.

This list is not intended to be used to limit plant selection, but to serve as a guide for those who want to know more about reasonable choices for this area. For those who wish to experiment with plants not listed here, you should find out all that you can about the plants' expected hardiness, cultural requirements (especially heat and drought tolerance), and potential problems. The plants are listed in columns by botanical name, common name, water needs, cautions, and comments. When the terms "cultivars", "selections" and "forms" are used, it indicates that there is more than one variety of that type of plant sold.

Water needs are given for most plants as a range since soil type, site-related microclimates, seasonal weather patterns, and many other variables can affect the water needs of plants on a specific site. Plants that are healthy and growing under conditions that produce moderate annual growth tend to be more drought tolerant; plants that are pushed to grow at maximal rates usually need more water. Supplemental irrigation frequencies suggested are only a guideline meant to be used <u>after</u> new plantings are well established, typically from the second or third season on; most plants need more frequent irrigation during the initial establishment period. Large trees may need supplemental irrigation for additional years before these guidelines apply. These suggested supplemental watering frequencies are meant to be applied during dry spells when there is no significant natural precipitation.

Water needs categories are as follows:

<u>VL</u> (Very Low) is for plants that require little or no supplemental irrigation to grow acceptably once they are established. Most of these are native to a southwestern environment. During prolonged droughts they may need a thorough watering every four to six weeks to stay healthy. The next category,

L (Low), is for plants that usually need some supplemental irrigation to remain pest and disease free and reach their highest potential in the landscape. They grow well with relatively infrequent irrigation, typically every two to four weeks through the growing season. The third category,

M (Moderate), is for plants that need regular irrigation to grow well here, typically every seven to fourteen days during the growing season. These plants may also need supplemental irrigation monthly during dry winters. During prolonged droughts, some plants that generally have low water needs may move into this category,

H (High), is for plants that typically grow in areas with much more natural precipitation or available groundwater than is common in Santa Fe. These plants should be used sparingly, and only in areas where site variables like runoff patterns and shade/wind protection can help lessen their water needs, or in streamside areas where water is naturally available. They will usually need to be watered at least weekly or more often during the growing season and at least once a month in dry winters to stay healthy.

<u>Caution</u> categories are listed to help alert buyers to potential problems that certain plants may develop, especially if they are not sited in favorable locations and maintained in good health. The importance of matching the plant to the conditions of the site cannot be overstated; the right plant in the right place is naturally healthier and more pest and disease resistant. If you want to use plants with cautions applied to them, investigate what is meant by the caution category and what that means in regard to using the plants on your site.

The caution categories are as follows:

"Al" stands for <u>alkaline-sensitive</u>; these plants may develop iron and other trace mineral deficiencies and grow very poorly (or even die) in soils which are highly alkaline.

"Exp" is used to denote plants considered <u>experimental</u> in Santa Fe. Some of these are new introductions to the nursery trade, while others have not been used widely enough or long enough in the Santa Fe area to know what their cultural limits and needs are here.

"I" is for plants which tend to be <u>invasive</u> under certain conditions. Though many plants naturally spread to form clumps, these plants can easily get out of hand in certain locations and crowd out or overrun other plants near them. Some of these are useful for stabilizing slopes and rough areas, but they must be sited very carefully.

"P/D" stands for pest/disease potential. Plants marked with this notation have a high likelihood of developing significant problems with pests and/or diseases when they are grown under less than optimal conditions.

"<u>Sh</u>" indicates plants which either grow naturally in shadier environments or are easier to grow here when they are planted where they receive some <u>shade</u>, especially afternoon shade. The plants in this group also typically do best in locations where they are sheltered from high winds and heat-reflecting surfaces.

The Comments section includes other information useful in helping to decide whether or not to use certain plants. The USDA hardiness rating for Santa Fe used to be Zone 5, with potential winter lows between -10 and -20F. In 1991 Santa Fe experienced a Zone 5 winter, but throughout the rest of the 90's and the early part of this century winter lows were in Zone 6 (0 to -10) and even Zone 7 (10 to 0) ranges. This led the USDA to change Santa Fe's rating to Zone 6, since ratings are based on long term averages. In February of 2011, there were two nights where the temperatures dropped to somewhere between -10 in the warmest parts of town and -20 in the coldest areas around town. Given our location in the southern Rockies, there is always a possibility that we will experience Zone 5 temperatures in an unusual winter, something to keep in mind in the colder areas around Santa Fe.

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Deciduous Trees

Latin Name	Common Name	Water needs	Cautions	Comments
Acer ginnala	Amur Maple	L-M	AI, P/D	needs good drainage; prone to iron chlorosis in strongly alkaline soils
Acer grandidentatum	Bigtooth Maple	М	Ехр	uncommon native; slow growing; Mesa Glow is new form developed in Las Cruces
Acer negundo Sensation	Sensation Boxelder	L-M	P/D	male selection, less attractive to seed- eating bugs.
Acer tataricum cultivars	Tatarian Maple selections	L-M	Exp, Al	showy seeds; may develop chlorosis in highly alkaline soils
Acer truncatum	Shantung Maple	L-M ?	Ехр	reputedly tougher than Japanese maple; cultivars Fire Dragon and Main Street said to have good fall color
Acer (platanoides x truncatum hybrids)	Hybrid Norway Maple selections	L-M	Ехр	some new forms have good fall color
Amelanchier laevis Spring Flurry	Spring Flurry Serviceberry	M-H ?	Exp, Sh	new form that may work well in sites suited to aspens
Amelanchier x grandiflora Autumn Brilliance	Autumn Brilliance Serviceberry	M-H	Sh	grows well in part shade
Catalpa speciosa	Catalpa	L-M		surprisingly adaptable, with somewhat messy seed pods
Catalpa x erubescens Purpurea	Purpleleaf Catalpa	L-M ?	Ехр	hard to find hybrid
Celtis occidentalis	Hackberry	L-M	P/D	strongly prone to nipple galls

Celtis reticulata	Netleaf Hackberry	L-M	P/D	native; absolute hardiness uncertain
Celtis x Magnifica	Magnifica Hackberry	Μ?	Exp, P/D	new hybrid reported to be faster growing and more insect resistant
Cercis canadensis	Eastern Redbud	L-M		best with good drainage and wind protection; tolerates part shade
Cercis reniformis Oklahoma	Oklahoma Redbud	L-M	Ехр	zone 6 hardy; may be more heat tolerant than Eastern redbud
Chilopsis linearis	Desert Willow	VL-L	Ехр	zone 6 hardy but most in town survived 2011 freeze; best in well-drained soils
Cladrastis kentukea	Yellowwood	L-M ?	Ехр	summer blooming, slow growing
Corylus colurna	Turkish Filbert	L-M	Ехр	
Cotinus obovatus	American Smoke Tree	L-M	Ехр	shrubby, variable fall color
Crataegus ambigua	Russian Hawthorn	L-M		showy flowers, fruit and bark
Crataegus crusgalli	Cockspur Hawthorn	L-M		showy big thorns, messy fruit; broad spreading form; one of the most drought- tolerant hawthorns
Crataegus crusgalli inermis	Thornless Cockspur Hawthorn	L-M		thornless form of above
Crataegus phaenopyrum	Washington Hawthorn	L-M	AI	dense, thorny, nice fall foliage, good fruit show in late fall
Crataegus v. Winter King	Winter King Hawthorn	L-M ?	Al?, Exp	very showy fall & winter accent
Crataegus x lavallei	Lavalle Hawthorn	L-M ?	Al, Exp	showy persistent fruit, more upright in form than other hawthorns listed
Eucommia ulmoides	Hardy Rubber Tree	L-M ?	Ехр	
Euonymus bungeana	Winterberry Euonymus	L-M	Exp, P/D	large shrub/small tree
Gleditsia triacanthos cultivars	Honeylocust selections	L-M	P/D	honeylocust borer now common in Santa Feuse of Gleditsia may be untenable in the future

				slow to fill out; female forms messy Espresso and Prairie Titan are male
Gymnocladus dioicus	Kentucky Coffeetree	L-M ?	Ехр	(seedless) forms
Koelreuteria panniculata	Golden Raintree	L-M	P/D	summer bloom; can attract boxelder-like bugs; can reseed
Maackia amurensis	Amur Maackia	Μ?	Exp, Al ?	summer bloom
Maclura pomifera	Osage Orange	L-M		very adaptable species; look for thornless male forms like Whiteshield
Malus cultivars and species	Apple, Crabapple selections	L-M	P/D	large selection of well-adapted cultivars; look for fireblight-resistant forms
Morus x Illinois Everbearing	Illinois Everbearing Mulberry	L-M ?	Ехр	hardy form with good fruit; messy
Pistacia chinensis	Chinese Pistache	L-M	Ехр	rated hardy to zone 6; the few around Santa Fe at the time survived 2011 freeze
Platanus x acerifolia Bloodgood	Bloodgood London Plane	L-M	AI, P/D	sunscald/frost cracking sometimes a problem; messy
Platanus x acerifolia Exclamation!	Exclamation London Plane	L-M ?	Ехр	new selection with dense pyramidal form; reportedly more disease resistant
Populus deltoides wislizeni	Rio Grande Cottonwood	M-H	AI, P/D	riparian native; not for dry sites, though seems to be more adaptable than most cottonwoods
Prunus americana	American Plum	L-M	P/D	shrubby; suckers to form clumps
Prunus armeniaca cultivars	Apricot selections	VL-L	P/D	very adaptable; fruit drop can be very messy
Prunus avium cultivars	Sweet Cherry selections	М	P/D	best with good drainage; many suffered dieback after 2011 freeze
Prunus cerasifera cultivars	Purpleleaf Plum selections	L-M	P/D	many had significant dieback after 2011 freeze & prolonged drought (2010-2013)

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	Quercus robur cultivars	English Oak selections	L-M	Exp, P/D	can be mildew-prone

Quercus shumardii	Shumard Oak	L-M?	Exp, Al ?	
Quercus undulata	Wavyleaf Oak	VL-L	Ехр	large shrub/small tree, may be semi- evergreen
Quercus x cultivars	Oaknew hybrids	L-M	Ехр	look for hardy forms tolerant to drought and alkaline soils
Sophora japonica <aka Styphnolobium japonicum> cultivars</aka 	Japanese Pagoda Tree selections	L-M	Exp, P/D	showy summer bloom; messy; can be disease-prone
Syringa reticulata cultivars	Japanese Tree Lilac selections	L-M	Ехр	large shrub/small tree; bloom smells like Privet
Tilia cordata cultivars	Littleleaf Linden selections	L-M	P/D	young trees sometimes sunscald
Ulmus parvifolia cultivars	Lacebark Elm selections	L-M ?	Exp, P/D	disease resistant; use hardy cultivars
Ulmus x hybrids	Hybrid Elm selections	L-M ?	Ехр	look for new disease/pest resistant forms
Xanthoceras sorbifolium	Yellowhorn	VL-L	Ехр	hard-to-find large shrub/small tree with edible fruit
Zelkova serrata cultivars	Japanese Zelkova selections	L-M	Ехр	use improved cultivars
				research underway through NM State Extension Service
Zizyphus jujuba cultivars	Jujube selections	L-M	Ехр	re:best cultivars for NM

Evergreen Trees

Latin Name	Common Name	Water needs	Cautions	Comments
Arbutus texana	Texas Madrone	L-M?	Ехр	borderline hardyuse in warmest areas; hard to find, hard to transplant
Calocedrus decurrens	Incense Cedar	L-M	Ехр	absolute hardiness uncertain (to -15F, possibly)

Cedrus atlantica Glauca	Blue Atlas Cedar	L-M		can get very largespecies form is not for small yards; rated zone 6 hardy
Cedrus deodora Karl Fuchs, Kashmir, Shalimar	Deodar Cedar selections	L-M	Ехр	zone 6 hardy cultivars; may be hard to find
Cupressus arizonica	Arizona Cypress	VL-L	P/D	various selections with different foliage color and form; best with good drainage
Cupressus (arizonica) glabra cultivars	Smooth Arizona Cypress	VL-L	Exp, P/D	beautiful smooth reddish bark; some forms not reliably hardy
Juniperus chinensis cultivars	Chinese Juniper selections	L-M	P/D	
Juniperus deppeana	Alligator Juniper	L-M	P/D	
Juniperus monosperma	One-seed Juniper	VL-L	I, P/D	common juniper around Santa Fe; male forms cause allergy problems for many
Juniperus scopulorum cultivars	Rocky Mountain Juniper selections	L-M	P/D	
Juniperus utahensis	Utah Juniper	VL-L	Exp, P/D	
Juniperus virginiana cultivars	Eastern Red Cedar selections	L-M	P/D	
Pinus aristata	Bristlecone Pine	L-M		hard to transplant from the wild; best with good drainage
Pinus bungeana	Lacebark Pine	L-M ?	Exp, P/D	showy bark in age; susceptible to pine wilt nematode
Pinus cembra cultivars	Swiss Stone Pine selections	L-M	Al, Exp, P/D	best with good drainage, neutral pH soils; susceptible to pine wilt nematode
Pinus densiflora cultivars	Japanese Red Pine selections	L-M	AI, P/D	prone to chlorosis in highly alkaline soils; susceptible to pine wilt nematode

Pinus edulis	Pinon Pine	L-M	P/D	NM state tree, more pest-resistant with regular irrigation
Pinus heldreichii (leucodermis)	Bosnian Pine	L-M	P/D	dwarf and fastigiate forms available; susceptible to pine wilt nematode
Pinus monophylla	Single-leaf Pinon	L-M	Exp, P/D	southwestern native with grey foliage, single needles
Pinus mugo	Mugo Pine	L-M	P/D	P.m. Tannenbaum is a compact tree form; species is susceptible to pine wilt nematode
Pinus nigra	Austrian Pine	L-M	P/D	tends to get larger than expected; susceptible to pine wilt nematode
Pinus nigra Oregon Green	Oregon Green Austrian Pine	L-M	Exp, P/D	newer form with distinctive needles, may get 20-25' in age
Pinus ponderosa	Ponderosa Pine	L-M	P/D	more pest resistant with regular irrigation
Pinus sylvestris cultivars	Scotch Pine selections	L-M	P/D	highly susceptible to pine wilt nematodeuse with caution
Pinus thunbergii	Japanese Black Pine	L-M	AI, P/D	can be injured by severe winters; susceptible to pine wilt nematode
Platycladus orientalis cultivars	Oriental Arborvitae selections	L-M	P/D	beloved of birds; gold forms have strongly different winter color
Quercus fusiformis	Escarpment Live Oak	L-M	Ехр	zone 6 hardy; has been planted a bit in Santa Fe. Irregular form
Yucca faxoniana	Palm Yucca	VL-L	Ехр	zone 6 hardy but seems to work in town; gets large in time

Deciduous Shrubs

Latin Name	Common Name	Water needs	Cautions	Comments
Amelanchier alnifolia cultivars	Saskatoon Serviceberry selections	Μ	P/D, Sh	need regular irrigation for good fruit production
Amelanchier utahensis	Utah Serviceberry	L-M ?	Exp, P/D	uncommon western native
Amorpha canescens	Leadplant	VL-L	P/D	
Amorpha fruiticosa	False Indigo	L-M	P/D	
Aronia melanocarpa cultivars	Black Chokeberry selections	Μ	AI, P/D	sucker to form clumps
Artemisia filifolia	Sand/Threadleaf Sage	VL-L		needs good drainage; can spread by seed
Atriplex canescens	Four Wing Saltbush	VL-L		extremely adaptable; female forms have showy fruit; can spread by seed
Atriplex confertifolia	Shadscale	VL-L	P/D	watch for bird predation
Berberis koreana	Korean Barberry	L-M	Ехр	suckers to form clumps; water frequently first year many forms, from rounded dwarf to tall upright; water
Berberis thunbergii cultivars	Japanese Barberry selections	L-M		frequently first year
Berberis x Emerald Carousel	Emerald Carousel Barberry	L-M	Ехр	showy spring bloom and fall color; water frequently first year
Buddleia alternifolia	Fountain Butterfly Bush	L-M		spring blooming; can get quite large
Buddleia davidii cultivars	Butterfly Bush selections	L-M	P/D	not strongly drought tolerantprone to spider mites if stressed
Buddleia davidii Lo & Behold, Buzz, and Pugster series	Dwarf Butterfly Bush selections	L-M ?	Exp, P/D	new dwarf varieties of butterfly bush
Buddleia d. nanhoensis cultivars	Compact Butterfly Bush selections	L-M	P/D	usually get larger than expected; <u>not a dwarf strain</u>
Caragana arborescens	Siberian Peashrub	VL-L		

Caragana pygmaea	Pygmy Peashrub	L-M		
Caryopteris x clandonensis cultivars	Blue Mist selections	L-M	P/D	very adaptable; can spread by seed; don't overwater in clay soils
Cercis occidentalis	Western Redbud	L-M ?	Ехр	rated hardy to zone 6; best in well-drained soils
Cercocarpus breviflorus	Hairy Mountain Mahogany	L-M ?	Exp	semi-evergreen to deciduous depending on conditions and location
Cercocarpus montanus	Mountain Mahogany	VL-L	P/D	can spread by seed
Chaenomeles speciosa	Flowering Quince	L-M	AI, P/D	good in partial shade
Chamaebatiaria millefolium	Fernbush	VL-L	·	can be semi-evergreen in mild winters
Chrysothamnus nauseosus <aka Ericameria nauseosa> cultivars</aka 	Chamisa selections	VL-L	Ι	reseed readily
Cotinus coggygria cultivars	Purple Smokebush selections	L-M	AI	large shrub/small tree in age
Cotoneaster adpressus	Early Cotoneaster	L-M	AI, P/D	fireblight can be a problem
Cotoneaster apiculatus	Cranberry Cotoneaster	L-M	AI, P/D	fireblight can be a problem
Cotoneaster divaricatus	Spreading Cotoneaster	L-M	AI, P/D	fireblight can be a problem
Cotoneaster horizontalis cultivars	Rock Cotoneaster selections	L-M	AI, P/D	fireblight can be a problem; tend to get wider than expected
Cotoneaster lucidus	Peking Cotoneaster	L-M	P/D	
Crataegus coccinoides	Kansas Hawthorn	L-M	Ехр	large shrub/small tree with big thorns
Cytisus purgans Spanish Gold	Spanish Gold Broom	L-M ?	Ехр	hardier than Cytisus scoparius forms
Cytisus scoparius cultivars	Scotch Broom selections	L-M	Ехр	absolute hardiness of most uncertain
Cytisus scoparius Moonlight	Moonlight Broom	L-M		seems hardy in Santa Fe; very fragrant bloom (stinks, to some)

				rated hardy to zone 6; needs
Dalea formosa	Feather Dalea	VL-L	Ехр	good drainage
				suckers to form clumps;
Elaeagnus commutata	Silverberry	L-M	Exp, P/D	may spread by seed
				suckers to form clumps;
Elaeagnus multiflora	Cherry Elaeagnus	L-M	Exp, P/D	may spread by seed
Elaeagnus umbellata	Autumn Olive	L-M	Exp, P/D	suckers to form clumps; may spread by seed
				may spread by seed
Euonymus alata cultivars	Burning Bush selections	L-M		
Euonymus europaea	European Spindle Bush	L-M	Exp/P/D	large shrub/small tree in age
Fallugia paradoxa	Apache Plume	VL-L		can spread by seed
Fendlera rupicola	Cliff Fendlerbush	VL-L	Ехр	needs good drainage
Forestiera pubescens pubescens (aka Forestiera neomexicana)	New Mexico Privet	VL-L	P/D	highly adaptable large shrub/small tree; can be pest-prone when stressed; has male and female forms plant both for fruit production
			FIU	production
Forsythia cultivars	Fosythia selections	L-M		
Genista lydia cultivars	Lydia Broom selections	L-M ?	Ехр	
Genista pilosa cultivars	Silkyleaf Woadwaxen	L-M ?	Ехр	
Genista tinctoria cultivars	Dyer's Greenweed selections	L-M ?	Ехр	best with good drainage
Hibiscus syriacus cultivars	Rose of Sharon selections	L-M		can get quite large in time
Hippophae rhamnoides	Sea Buckthorn	VL-L	Ехр	large shrub/small tree; suckers to form clumps; edible/medicinal fruit on females
		L-M		
Holodiscus dumosus	Rock Spirea		Ехр	suckers to form clumps
Hypericum frondusum cultivars	St. John's Wort selections	L-M ?		
Jamesia americana	Waxflower	L-M	Sh	montane native; needs good drainage
				prone to spider mites if

Kolkwitzia amabilis cultivars	Beautybush selections	L-M		can get quite large in time
			P/D	also listed as Ceratoides or
Kraschininikovia lanata	Winterfat	VL-L	(rabbits)	Eurotia lanata
Ligustrum amurense	Amur Privet	L-M		
Ligustrum vulgare cultivars	Common Privet selections	L-M		
Ligustrum x vicaryi	Golden Vicary Privet	L-M		
Lonicera korolkowii cultivars	Blue Honeysuckle selections	L-M	P/D	some forms get quite large; tolerate part shade
Lonicera tatarica cultivars	Tatarian Honeysuckle selections	L-M	P/D	can tolerate part shade
Lonicera x cultivars	Honeysuckle-new hybrids	L-M	Ехр	look for pest and disease- resistant selections
Malus cultivars	Crabapple-dwarf forms	L-M	P/D	look for fireblight-resistant selections
Peraphyllum ramosissimum	Squaw Apple	VL-L	Ехр	hard to find native
Perovskia atriplicifolia cultivars	Russian Sage selections	L-M	1	well adapted non-native, spreads aggressively by suckers
Philadelphus species and cultivars	Mockorange selections	L-M	Sh	native forms best for sunny, dry spots
Physocarpus monogynus	Mountain Ninebark	L-M	Sh	montane native
Physocarpus opulifolius cultivars	Eastern Ninebark selections	L-M	P/D	more drought tolerant in part shade
Potentilla fruticosa (aka Dasiphora fruiticosa) cultivars	Potentilla selections	L-M	P/D	montane native; best with ample sun; need frequent irrigation first year
Prunus andersonii	Desert Peach	VL-L	Ехр	very drought tolerant, hard to find
Prunus besseyi cultivars	Western Sand Cherry selections	L-M	P/D	best with good drainage
Prunus glandulosa Rosea	Pink Flowering Almond	L-M	AI, P/D	
Prunus tomentosa	Nanking Cherry	L-M	P/D	plant two or more for fruit set
Prunus x cistena	Bush Purple Plum	L-M	P/D	best with ample sun; also known as purple-leaf sand

				cherry
Ptelea trifoliata	Hop Tree, Wafer Ash	VL-L	Ехр	slow; large shrub/small tree
Purshia tridentata	Antelope Bitterbrush	VL-L	Ехр	very fragrant in bloom; hard to find; may be evergreen in warm winters
Rhamnus frangula <aka frangula<br="">alnus> cultivars</aka>	Alder Buckthorn selections	L-M	Ехр	don't tend to reseed here
Rhamnus smithii	Smith Buckthorn	L-M ?		hard to find
Rhus aromatica cultivars	Fragrant Sumac selections	L-M		may sucker somewhat
Rhus glabra cultivars	Smooth Sumac selections	L-M	I.	sucker aggressively
Rhus microphylla	Littleleaf Sumac	VL-L	Ехр	rated hardy to zone 6; semi- evergreen or deciduous; gets large in time species form can get quite
Rhus trilobata cultivars	Three-Leaf Sumac selections	VL-L	<u> </u>	large
Rhus typhina cultivars	Staghorn Sumac selections	L-M	I	sucker aggressively male forms more rust-
Ribes alpinum	Alpine Currant	L-M	P/D, Sh	resistant
Ribes aureum	Golden Currant	L-M	P/D	suckers; may spread by seed
Ribes cereum	Wax Currant	VL-L	P/D	many edible parts, good for wildlife
Ribes grossularia/hirtellum cultivars	Gooseberry selections	L-M	P/D, Sh	look for rust-resistant forms
Ribes odoratum Crandall	Crandall Currant	L-M	P/D, Sh	rust-resistant; edible fruit; suckers some
Ribes nigrum/silvestre cultivars	Edible Currant selections	L-M	P/D, Sh	look for rust-resistant forms
Rosa alba cultivars	Alba Rose selections	L-M	AI, P/D	
Rosa centifolia cultivars	Cabbage Rose selections	L-M	P/D	
Rosa damascena cultivars	Damask Rose selections	L-M	P/D	
Rosa foetida cultivars	Persian Rose selections	L-M	P/D	may sucker somewhat; Austrian Copper is unstable color sportcan revert

Rosa gallica cultivars	French Rose selections	L-M	AI, P/D	may sucker somewhat
Rosa glauca	Redleaf Rose	L-M	P/D	tolerates light shade
Rosa hugonis	Father Hugo's Rose	L-M	P/D	can get quite large
Rosa rubiginosa	Sweetbriar Rose	L-M	P/D	can get quite large; fragrant foliage, excellent hip display
Rosa spinosissima cultivars	Scotch Rose selections	L-M	P/D	sucker to form clumps
Rosa woodsii	Woods Rose	VL-L	I, P/D	suckers aggressively; grows well in partial shade or sun
Rosa xanthina	Manchu Rose	L-M	P/D	some produce a good thorn and hip display in fall
Rosa x cultivars	Hybrid Roses	L-H	AI, P/D	look for hardy, disease and pest-resistant cultivars; water needs vary widely
Rosa x harisonii	Harison's Yellow Rose	L-M		hybrid from 1800's, brought west with pioneers; suckers some
Rubus deliciosus	Boulder Raspberry	L-M	Sh	
Shepherdia argentea	Silver Buffaloberry	L-M		good in run-off areas; may spread by seed; large shrub/small tree in age; male and female forms
Spartium junceum	Spanish Broom	L-M	Ехр	rated hardy to zone 6; very fragrant flowers
Spiraea cultivars	Spiraea selections	L-M	AI, P/D	many species and cultivars to choose from; some are chlorosis-prone
Symphoricarpos cultivars	Coralberry, Snowberry selections	L-M	P/D	some sucker aggressively
Syringa cultivars	Lilac selections	L-M	P/D	many species and cultivars to choose from; some sucker heavily
Viburnum cultivars	Viburnum selections	L-M	Exp (some)	many species and cultivars to choose from; most adapt well to part shade

				large shrub/small tree; rated hardy to zone 6 but starting
Vitex agnus-castus	Chaste Tree, Vitex	L-M	Ехр	to appear around Santa Fe

Evergreen Shrubs and Succulents

Latin Name	Common Name	Water needs	Cautions	Comments
Agave havardiana	Havard's Agave	VL-L	Ехр	zone 6 hardy; needs good drainage and a warm site
Agave neomexicana (A. parryi neomexicana)	New Mexico Agave	VL-L	Ехр	zone 6 hardy; needs good drainage and a warm site
Agave parryi	Parry's Agave	VL-L	Ехр	zone 6 hardy; needs good drainage and a warm site; avoid non-hardy cultivars
Agave utahensis selections	Utah Agave forms	VL-L	Ехр	need good drainage and a warm site
Arctostaphylos nevadensis	Pinemat Manazanita	L-M	Ехр	can tolerate part shade; hard to find
Arctostaphylos patula	Greenleaf Manzanita	L-M	Exp, Sh	hard to transplant
Arctostaphylos pungens	Pointleaf Manzanita	L-M	Ехр	needs good drainage; hard to transplant
Arctostaphylos uva-ursi	Kinnickinnick	L-M	Sh	best with good drainage in part shade
Arctostaphylos x coloradoensis cultivars	Colorado Manzanita forms	VL-L ?	Exp	slow to fill out; best with good drainage; tolerate part shade well
Artemisia cana	Silver Sage	L-M ?	Exp	can spread by seed; may be deciduous in cold winters
Artemesia nova	Black Sage	VL-L	Exp	best with good drainage; tends to be smaller than A. tridentata
Artemesia tridentata	Big Sage	VL-L		also listed as Seriphidium tridentatum; best with good drainage
Berberis x gladwynensis William Penn	William Penn Barberry	L-M		zone 6 hardy; very thorny
Buxus microphylla Winter Gem	Winter Gem Boxwood	L-M	Sh	tends to develop yellow/bronze winter color

Buxus sempervirens Vardar				slow growing; reportedly one of hardiest
Valley	Vardar Valley Boxwood	L-M	Exp, Sh	forms
Buxus x Sheridan hybrids	Sheridan hybrid Boxwoods	L-M	Exp, Sh	hardy Canadian hybrids
Ceanothus greggii	Desert Ceanothus	VL-L?	Ехр	evergreen in warm winters; hard to find
Cedrus atlantica Horstmann	Horstmann's Blue Atlas Cedar	L-M ?	Ехр	semidwarf form, rated hardy to zone 6
Cercocarpus intricatus	Littleleaf Mountain Mahogany	VL-L		
Cercocarpus ledifolius	Curlleaf Mountain Mahogany	VL-L		large shrub/small tree; tolerates part shade well
Cotoneaster dammeri cultivars	Bearberry Cotoneaster selections	L-M	P/D	most cultivars rated hardy to zone 6
Cowania mexicana <aka Purshia stansburiana></aka 	Cliffrose	VL-L		needs good drainage; hard to transplant
Dasylirion texanum	Texas Sotol	VL-L	Ехр	hardy to Zone 6
Echinocerus species	Hedgehog Cactus selections	VL-L		use hardy forms; hard to clean around
Ephedra equisetina	Blue Ephedra	VL-L		spreads to form a broad clump; good for erosion control
Ephedra viridis	Green Ephedra, Mormon Tea	VL-L		
Ericameria Iaricifolia Aguirre	Aguirre Turnpentine Bush	VL-L?	Ехр	rated hardy to zone 6
Euonymus fortunei cultivars	Wintercreeper selections	L-M	P/D	tolerate part shade well
Euonymus kiautschovicus Manhattan	Manhattan Euonymus	L-M	P/D	prone to mildew in shade
Grusonia clavata	Club Cholla	VL-L		forms spiny low mats over a large area
Grusonia pulchella	Sagebrush Cholla	VL-L		aka Micropuntia pulchella
Hesperaloe parviflora cultivars	Texas Red Yucca selections	L-M		seems to be a gopher favorite in some areas
Juniperus chinensis cultivars	Chinese Juniper selections	L-M	P/D	
Juniperus communis cultivars	Common Juniper selections	L-M	P/D	tolerate part shade well

Juniperus horizontalis Creeping Juniper selections L-M P/D prone to spider mites if stressed Juniperus sabina cultivars Savin Juniper selections VL-L P/D tolerate part shade well Juniperus scopulorum Rocky Mountain Juniper P/D tolerate part shade well Juniperus scopulorum Rocky Mountain Juniper P/D tolerate part shade well Juniperus virginiana cultivars Eastern Red Cedar selections L-M P/D Juniperus x media cultivars Eastern Red Cedar selections L-M P/D Juniperus x media cultivars Eastern Red Cedar selections VL-L P/D can get quite large in time Leucophyllum langmaniae Lynn's Legacy Texas Ranger L-M ? Exp warmest locations Mahonia aquifolium cultivars Oregon Grape Holly selections L-M ? P/D, Sh can be spread by seed (bird dispersed) Mahonia fremontii Fremont Mahonia VL-L Exp very spiny, slow, hard to clean around Mahonia repens Creeping Mahonia VL-L Exp clean around native woodland understory plant; prone to winter desication in exposed areas Microbiota decussata Russian Cypress L-					
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Nolina texana Texas Sacahuista VL-L not a grassdo not cut back Opuntia species & cultivars Cholla/Prickly Pear Cactus selections use hardy forms; cholla types also listed as "Cylindropuntia"; hard to clean around Picea omorika cultivars Serbian Spruce-dwarf forms M? Exp Picea pungens cultivars Colorado Spruce-dwarf forms M P/D some get much larger than expected Pinus cembra cultivars Swiss Stone Pine-dwarf forms M ? Al, Exp best with good drainage, neutral soil Japanese Red Pine-dwarf Japanese Red Pine-dwarf Japanese Red Pine-dwarf Japanese Red Pine-dwarf	Microbiota decussata	Russian Cypress	L-M	Exp, Sh	turns brown in winter
Cholla/Prickly Pear Cactus use hardy forms; cholla types also listed as Opuntia species & cultivars selections VL-L "Cylindropuntia"; hard to clean around Picea omorika cultivars Serbian Spruce-dwarf forms M? Exp Picea pungens cultivars Colorado Spruce-dwarf forms M P/D some get much larger than expected Pinus cembra cultivars Swiss Stone Pine-dwarf forms M ? Al, Exp best with good drainage, neutral soil Japanese Red Pine-dwarf Japanese Red Pine-dwarf Japanese Red Pine-dwarf Japanese Red Pine-dwarf	Nolina microcarpa	Bear Grass	VL-L		not a grassdo not cut back
Opuntia species & cultivarsselectionsVL-L"Cylindropuntia"; hard to clean aroundPicea omorika cultivarsSerbian Spruce-dwarf formsM?ExpPicea pungens cultivarsColorado Spruce-dwarf formsMP/Dsome get much larger than expectedPinus cembra cultivarsSwiss Stone Pine-dwarf formsM ?Al, Expbest with good drainage, neutral soilJapanese Red Pine-dwarf </td <td>Nolina texana</td> <td>Texas Sacahuista</td> <td>VL-L</td> <td></td> <td>not a grassdo not cut back</td>	Nolina texana	Texas Sacahuista	VL-L		not a grassdo not cut back
Picea pungens cultivars Colorado Spruce-dwarf forms M P/D some get much larger than expected Pinus cembra cultivars Swiss Stone Pine-dwarf forms M ? AI, Exp best with good drainage, neutral soil Japanese Red Pine-dwarf Japanese Red Pine-dwarf Japanese Red Pine-dwarf Japanese Red Pine-dwarf	Opuntia species & cultivars	•	VL-L		
Pinus cembra cultivars Swiss Stone Pine-dwarf forms M ? AI, Exp best with good drainage, neutral soil Japanese Red Pine-dwarf Japanese Red Pine-dwarf Japanese Red Pine-dwarf Japanese Red Pine-dwarf	Picea omorika cultivars	Serbian Spruce-dwarf forms	M?	Ехр	
Japanese Red Pine-dwarf	Picea pungens cultivars	Colorado Spruce-dwarf forms	М	P/D	some get much larger than expected
	Pinus cembra cultivars	Swiss Stone Pine-dwarf forms	Μ?	Al, Exp	best with good drainage, neutral soil
	Pinus densiflora cultivars	Japanese Red Pine-dwarf forms	L-M ?	Al, Exp	watch for chlorosis in alkaline soils
Pinus edulis cultivars Pinon-dwarf forms L-M? Exp well adapted on Pinus edulis rootstock	Pinus edulis cultivars	Pinon-dwarf forms	L-M ?	Ехр	well adapted on Pinus edulis rootstock

Pinus heldreichii			_	
(leucodermis) cultivars	Bosnian Pine-dwarf forms	L-M ?	Ехр	ultimate sizes in our area unknown
_			_	
Pinus monophylla cultivars	One-needle Pinon-dwarf forms		Exp	Blue Jazz is cultivar most available in trade
Pinus mugo cultivars	Mugo Pine-dwarf forms	L-M	P/D	some get much larger than expected
Pinus nigra cultivars	Austrian Pine-dwarf forms	L-M		can get larger than expected in age
Pinus resinosa Morel	Morel Red Pine	L-M ?	Al, Exp	watch for chlorosis in alkaline soils
Pinus sylvestris cultivars	Scotch Pine-dwarf and spreading forms	L-M	P/D	some get much larger than expected; some turn yellow-green in winter
Platycladus orientalis cultivars	Oriental Arborvitae-dwarf forms	L-M		golden forms have strongly different winter color
Pyracantha angustifolia and coccinea cultivars	Hardy Pyracantha selections	L-M	AI, P/D	can get quite large in time; very thorny
Quercus turbinella	Shrub Live Oak	VL-L		can be semi-evergreen in cold areas
Shepherdia rotundifolia	Roundleaf Buffaloberry	VL-L	Ехр	needs very good drainage; slow; hard to find
Taxus x media cultivars	Anglojap Yew-dwarf forms	L-M	Sh	best with good drainage, wind protection
Thuja occidentalis cultivars	American Arborvitae selections	М		easiest, most drought tolerant with afternoon or filtered shade
Vauquelinia californica	Arizona Rosewood	L-M ?	Ехр	rated hardy to zone 6
Vauquelinia corymbosa angustifolia	Chisos Rosewood	VL-L?	Exp	rated hardy to zone 6; wind tolerant, hard to find; large shrub/small tree
Yucca baccata	Broadleaf Yucca	VL-L		also called Banana or Datil Yucca; forms a large clump in age; tolerates part shade
Yucca elata	Soaptree Yucca	VL-L		Rated Zone 6 hardy; develops a trunk in age
Yucca filamentosa	Adam's Needle	L-M	Ехр	southeastern nativenot as drought- tolerant as local forms
Yucca flaccida	Weak-leaf Yucca	L-M	Ехр	southeastern nativenot as drought- tolerant as local forms
Yucca glauca	Small Soapweed	VL-L		

Yucca harrimaniae	Dollhouse Yucca	VL-L		hard to find dwarf form
Yucca nana	Dwarf Yucca	VL-L		hard to find dwarf form
Yucca rostrata	Beaked Yucca	VL-L	Ехр	Zone 6 hardy; develops a trunk in age
Yucca schottii	Mountain Yucca	VL-L	Ехр	hardy to at least zone 6; tolerates part shade; gets large in time

Vines (caution: Many vines are aggressive in growth habit and can "strangle" trees and shrubs growing near them)

Latin Name	Common Name	Water needs	Cautions	Comments
Akebia quinata	Fiveleaf Akebia	L-M (?)	Ехр	tolerates part shade well
Ampelopsis brevipedunculata	Porcelain Vine	L-M (?)	Exp, P/D	
Campsis radicans cultivars	Trumpet Vine selections	VL-L		can sucker aggressively; need very sturdy support
Campsis x tagliabuana Mme. Galen	Madame Galen Trumpetvine	VL-L		not as hardy as C. radicans forms; needs very sturdy support; suckers
Celastrus orbiculatus	Oriental Bittersweet	L-M	Exp, Sh	need male & female forms for fruit production; can spread aggressively
Celastrus scandens	American Bittersweet	L-M	Sh	need male & female forms for fruit production; can spread aggressively
Clematis ligusticifolia	Western Virgin's Bower	L-M	Sh	
Clematis montana cultivars	Anemone Clematis selections	L-M	Exp	need good drainage; rated hardy to zone 6
Clematis tangutica	Golden Bell Clematis	L-M	I	can spread by seed; can get quite large
Clematis terniflora	Sweet Autumn Clematis	L-M		formerly C. panniculata
Clematis viticella cultivars	Viticella Clematis selections	L-M		need good drainage
Clematis x cultivars	Clematis-Large flowered hybrids	M-H		many cultivars; critical cultural conditions
Euonymus f. colorata	Purple Wintercreeper	L-M	P/D	can serve as ground cover and wall cover; tolerates part shade; evergreen

Hedera helix	English Ivy	L-M	Sh	can serve as ground cover and wall cover; needs some shade; evergreen
Humulus lupulus	Hop Vine	L-M		sold as a vine, though actually a perennial plant that dies to the ground in winter; native form is H. I. neomexicana; fruits used in brewing
Lonicera japonica Halliana	Halls Honeysuckle	L-M		not invasive in New Mexico
Lonicera sempervirens cultivars	Trumpet Honeysuckle selections	L-M	P/D, Sh	more drought tolerant in part shade; some forms are aphid-prone
Lonicera x Dropmore Scarlet	Dropmore Scarlet Honeysuckle	L-M	P/D	
Parthenocissus inserta	Thicket Creeper, Woodbine	L-M		native similar to Virginia creeper but unable to climb smooth surfaces
Parthenocissus quinquefolia	Virginia Creeper	VL-L	P/D	pest-prone when stressed; great fall color; can be aggressive
Parthenocissus tricuspidata	Boston Ivy	L-M	P/D, Sh	good fall color; will cling to walls on east or north side
Polygonum aubertii (aka Fallopia baldschuanica)	Silver Lace Vine	VL-L	I	very adaptable/extremely aggressive use with caution
Vitis arizonica	Canyon Grape	L-M		native grape with edible fruit; can be aggressive in growth
Vitis cultivars and hybrids	Grape	L-M	Al-some, P/D	American hybrids best in northern NM
Wisteria floribunda cultivars	Japanese Wisteria selections	L-M	AI	need a very sturdy permanent support structure; aggressive growth
Wisteria macrostachya Blue Moon	Blue Moon Wisteria	М?	Exp, Al	southeastern U.S.A. cultivar that reblooms in summer; needs a sturdy permanent support structure
Wisteria sinensis cultivars	Chinese Wisteria selections	L-M	AI	need a very sturdy permanent support structure; aggressive growth

Some possible substitutes for ash (Fraxinus) & honeylocust (Gleditsia) cultivars as shade trees in Santa Fe

Catalpa speciosa	Catalpa
Celtis occidentalis cultivars & hybrids	Hackberry
Cladrastis kentuckea	American Yellowwood
Eucommia ulmoides	Hardy Rubber Tree
Gymnocladus dioicus cultivars	Kentucky Coffeetree
Koelreuteria paniculata	Goldenrain Tree
Maclura pomifera Whiteshield	Whiteshield Osage Orange
Malus Spring Snow	Spring Snow Crabapple
Platanus x acerifolia cultivars	Planetree, Sycamore
Prunus armeniaca cultivars	Apricot
Pyrus calleryana Bradford/New Bradford	Bradford Pear
Pyrus ussuriensis Prairie Gem	Prairie Gem Flowering Pear
Quercus buckleyi	Texas Red Oak
Quercus macrocarpa	Bur Oak
Quercus meuhlenbergii	Chinkapin Oak
Quercus shumardii	Shumard Oak
Quercus x cultivars	Hybrid Oak
Tilia cordata cultivars	Littleleaf Linden
Ulmus parvifolia cultivars	Lacebark Elm
Ulmus x cultivars	Hybrid Elm
Zelkova serrata cultivars	Japanese Zelkova

compiled by Tracy Neal revised August 2016

<u>Narrow and Upright Trees Recommended for Medians and Other Restricted Spaces</u> <u>Santa Fe, New Mexico</u> revised January 2021

Deciduous

Acer campestre Streetside Celtis o. Prairie Sentinel Koelreuteria paniculata Fastigiata Malus Adriondack Malus Madonna Malus Marilee Malus Pink Spires Malus Red Barron Malus Velvet Pillar Prunus cerasifera Crimson Pointe Pyrus calleryana Javelin Quercus macrocarpa Urban Pinnacle Quercus robur Fastigiata Quercus robur Skyrocket Quercus x Crimson Spire Quercus x Kindred Spirit Quercus x Regal Prince Quercus x Skinny Genes Quercus x Street Spire Ulmus parvifolia Everclear Ulmus propingua Emerald Sunshine Zelkova serrata Green Vase Zelkova serrata Musashino

Evergreen

Juniperus chinensis Hetzi Columnaris Juniperus chinensis Spartan Juniperus chinensis Spearmint Juniperus scopulorum Blue Arrow Juniperus scopulorum Blue Haven Juniperus scopulorum Grey Gleam Juniperus scopulorum Medora Juniperus scopulorum Sky High Juniperus scopulorum Skyrocket Juneiprus scopulorum Welchii Juniperus scopulorum Woodward Juniperus virginiana Emerald Sentinel Juniperus virginiana Glauca Juniperus virginiana Hillspire Juniperus virginiana Idyllwild Juniperus virginiana Taylor Pinus heldreichii (leucodermis) Fastigiata Pinus heldreichii (leucodermis) Satellite Pinus mugo Fastigiata Pinus mugo Tannenbaum

Streetside Maple Prairie Sentinel Hackberry Fastigiate Golden Rain Tree Adirondack Crabapple Madonna Crabapple Marilee Crabapple Pink Spires Crabapple Red Barron Crabapple Velvet Pillar Crabapple Crimson Pointe Purpleleaf Plum Javelin Flowering Pear Urban Pinnacle Bur Oak Fastigiate English Oak Skyrocket English Oak Crimson Spire Oak Kindred Spirit Oak Regal Prince Oak Skinny Genes Oak Street Spire Oak Everclear Elm **Emerald Sunshine Elm** Green Vase Zelkova Musashino Zelkova

Hetzi Columnar Juniper Spartan Juniper Spearmint Juniper Blue Arrow Juniper Blue Haven Juniper Grey Gleam Juniper Medora Juniper Sky High Juniper Skyrocket Juniper Welch Juniper Woodward Juniper **Emerald Sentinel Juniper** Silver Eastern Red Cedar Hillspire Juniper Idyllwild Juniper **Taylor Juniper** Fatigiate Bosnian Pine Satellite Bosnian Pine Fastigiate Mugo Pine Tannenbaum Mugo Pine

Recommended Trees for Santa Fe Housing Developments

Deciduous	Potential Mature Size
Hackberry (Celtis species)	
Western (Celtis occidentalis)	large
Netleaf (Celtis reticulata)	medium
*Desert Willow (Chilopsis linearis varieties)	small
Hawthorn: (Crataegus species)	small
Russian (Crataegus ambigua)	
Cockspur (Crataegus crusgalli)	
Washington (Crataegus phaenopyrum)	
Kentucky Coffee Tree (Gymnocladus dioicus varieties)	large
Golden Raintree (Koelreuteria paniculata)	medium
Whiteshield Osage Orange (Maclura pomifera Whiteshield)	medium
Crabapple varieties (Malus varieties)	small
*Chinese pistache (Pistacia chinensis)	medium
Purpleleaf Plum (Prunus cerasifera varieties)	small
Chanticleer Flowering Pear (Pyrus calleryana Chanticleer)	medium
Oak: (Quercus species)	
Texas Red (Quercus buckleyi)	large
Bur (Quercus macrocarpa)	large
Chinkapin (Quercus muehlenbergii)	large
Elm: (Ulmus varieties)	
Allee (Ulmus parvifolia Allee)	large
Accolade (Ulmus x Accolade)	large
Triumph (Ulmus x Triumph)	large
Zelkova: (Zelkova serrata varieties)	
Green Vase	large
Village Green	large

(Trees marked with an asterisk are rated hardy only to zone 6, best used in town in warmer areas)

Evergreen

Arizona cypress (Cupressus glabra varieties)	medium
Juniper species and varieties: (Juniperus)	
Chinese (Juniperus chinensis varieties)	small
Alligator (Juniperus deppeana)	medium
One-seed (Juniperus monosperma)	small
Rocky Mountain (Juniperus scopulorum varieties)	small
Eastern Red Cedar (Juniperus virginiana varieties)	small
Pine: (Pinus species)	
Pinon (Pinus edulis)	small
Vanderwolf (Pinus flexilis Vanderwolf)	medium
Bosnian (Pinus heldreichii/leucodermis)	medium
Single-leaf Pinon (Pinus monophylla)	small
Austrian (Pinus nigra varieties)	large

Potential Mature Size key (height at maturity) Small: 25' or less Medium: 26-35' Large: more than 35' Attention must be paid also to mature width and form for correct siting.