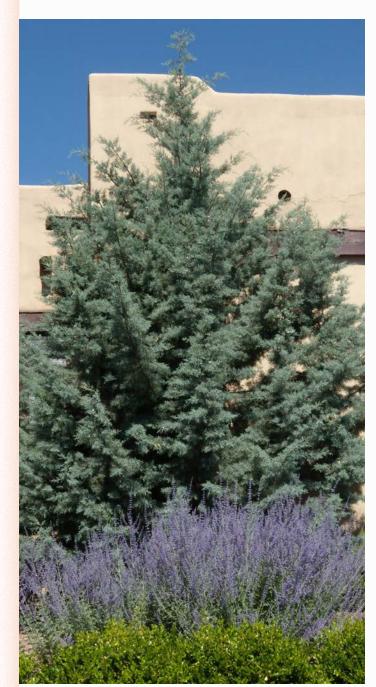


RECOMMENDED TREES for Santa Fe



Smooth Arizona Cypress "Blue Pyramid" (Cupressa arizonica glabra)

This is a list of trees compiled by the Santa Fe Municipal Tree Board that can be expected to grow acceptably in the Santa Fe area, given proper siting and care. Originally compiled in 2001, the list has been updated in light of climate change research, appearance of new pests, and expectations for future changes. The situation regarding climate change impacts on plant adaptation is in a state of great unpredictability at this point; these recommendations will be reviewed annually 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. Trees that now need almost no supplemental irrigation (rated VL-L in the list) may need low-moderate watering, and trees 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 trees not listed here, find out all that you can about the plants' expected hardiness, cultural requirements (especially heat and drought tolerance), and potential problems.

The trees are listed in columns by botanical name, common name, water needs, cautions, and comments. The terms "cultivars," "selections" and "forms" indicate that there is more than one variety of that type of tree sold.

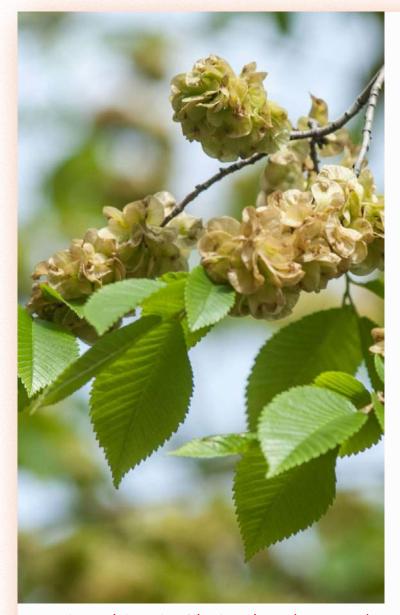
Water needs are mostly given as ranges, since soil type, site-related microclimates, seasonal weather patterns, and many other variables affect water needs of plants on a specific site. Trees that are healthy and growing under conditions that produce moderate annual growth tend to be more drought tolerant;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

VL (Very Low) is for trees that require little or no supplemental irrigation to grow acceptably once they are established. During prolonged droughts they may need a thorough watering every four to six weeks to stay healthy.

L (Low) is for trees 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.

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

H (High) is for trees 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.



Caution categories are listed to help alert buyers to potential problems that certain trees 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 trees with cautions applied to them, investigate what is meant by the caution and what that means in regard to using the plants on your site.

A few trees are considered invasive here under certain conditions. Though some trees naturally spread to form clumps, these trees can easily get out of hand in certain locations and crowd out or overrun other plants near them, as well as spreading by seed. There are currently four trees that New Mexico State University considers invasive in the state: Elaeagnus angustifolia (Russian olive), Tamarix spp. (Saltcedar species), Ulmus pumila (Siberian Elm), and Ailanthus altissima (Tree of heaven). NONE OF THESE TREES SHOULD BE INTENTIONALLY PLANTED.

Pictured: invasive Siberian Elm (*Ulmus pumila*).

The **comments section** includes other information useful in helping to decide whether or not to use certain trees. 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.



Background image: Texas Red Oak (Quercus buckleyi)

Latin Name	Common Name	Water Needs	P/D	Al	Sh	Exp	Street-tree potential	Comments
DECIDUOUS TREES								
Acer ginnala	Amur Maple	L/M	x	X				Needs good drainage; prone to iron chlorosis in strongly alkaline soils
Acer grandidentatum	Bigtooth Maple	М				X		Uncommon native; Mesa Glow is new form developed in Las Cruces. Fall color unreliable in SF
Acer negundo Sensation	Sensation Boxelder	L/M	x					Male selection is less attractive to seed-eating bugs
Acer tataricum cultivars	Tatarian Maple selections	L/M		x		X		Showy seeds; may develop chlorosis in highly alkaline soils
Acer truncatum	Shantung Maple	L/M				x		Reputedly tougher than Japanese maple; cultivars Fire Dragon, Main Street said to have good fall color
Acer (platanoides x truncatum hybrids)	Hybrid Norway Maple selections	L/M				x	x	Some new forms have good fall color; Urban Sunset is best for street tree use
Amelanchier laevis Spring Flurry	Spring Flurry Serviceberry	м/н			х	x		New form that may work well in sites suited to aspens
Amelanchier x grandiflora Autumn Brilliance	Autumn Brilliance Serviceberry	м/н			X			Grows well in part shade
Catalpa speciosa	Catalpa	L/M						Surprisingly adaptable, with somewhat messy seed pods
Celtis occidentalis	Hackberry	L/M	х				X	Strongly prone to nipple galls; Prairie Pride is resistant to witches' broom
Celtis reticulata	Netleaf Hackberry	L/M	x			x		Native; absolute hardiness uncertain; prune for best shape
Celtis x Magnifica	Magnifica Hackberry	L/M				x		New hybrid reportedly resistant to nipple galls and witches' broom
Cercis canadensis	Eastern Redbud	L/M			х			Best with good drainage and wind protection; tolerates part shade
Cercis c. texensis Oklahoma	Oklahoma Redbud	L/M				х		Rated zone 6 hardy; more heat & drought tolerant than Eastern redbud
Chilopsis linearis	Desert Willow	VL/L				x		Zone 6 hardy; best in well-drained soils; many varieties available
Cladrastis kentukea	Yellowwood	L/M				X		Rare, summer blooming
Corylus colurna	Turkish Filbert	L/M				x		
Cotinus coggygria cultivars	Smoke Tree	L/M						Large shrub/small tree; purple-leaf forms most popular

Latin Name	Common Name	Water Needs	P/D	AI	Sh	Ехр	Street-t potenti	
Cotinus obovatus	American Smoke Tree	L/M				х		Shrubby, variable fall color
Crataegus ambigua	Russian Hawthorn	L/M						Showy flowers, fruit and bark
Crataegus crusgalli	Cockspur Hawthorn	L/M	x					Showy big thorns, messy fruit; broad spreading form
Crataegus crusgalli inermis	Thornless Cockspur Hawthorn	L/M	X					Thornless form of above; both subject to hawthorn scale
Crataegus phaenopyrum	Washington Hawthorn	L/M		x				Dense, thorny, nice fall foliage, good fruit show in fall
Crataegus v. Winter King	Winter King Hawthorn	L/M		x		x		Very showy fall & winter accent
Eucommia ulmoides	Hardy Rubber Tree	L/M				x	Х	Very adaptable; pest/disease resistant
Forestiera pubescens (aka F. neomexicana)	New Mexico Privet	L/M						Large shrub/small tree; male and female forms; good in run-off areas
Gymnocladus dioicus	Kentucky Coffeetree	L/M				x	х	Slow to fill out; female forms messyEspresso and Prairie Titan are male (seedless) forms
Koelreuteria panniculata	Golden Raintree	L/M	х					Summer bloom; can attract boxelder-like bugs; can reseed
Maclura pomifera	Osage Orange	L/M					х	Very adaptable species; look for thornless male form Whiteshield
Malus cultivars and species	Apple, Crabapple selections	L/M	х					Large selection of well-adapted cultivars; look for fireblight-resistant forms
Pistacia chinensis	Chinese Pistache	L/M				х	х	Rated hardy to zone 6; late to colorfall color unreliable in Santa Fe
Platanus x acerifolia Bloodgood	Bloodgood London Plane	L/M	х	х				Sunscald/frost cracking sometimes a problem; messy
Platanus x acerifolia Exclamation!	Exclamation London Plane	L/M				x		New selection with dense pyramidal form; reportedly more disease resistant
Populus deltoides wislizeni	Rio Grande Cottonwood	м/н	X	х				Riparian native; not for dry sites, though seems to be more adaptable than most cottonwoods
Prunus americana	American Plum	L/M		х				Shrubby; suckers to form clumps
Prunus armeniaca cultivars	Apricot selections	VL/L		X				Very adaptable; fruit drop can be very messy
Prunus avium cultivars	Sweet Cherry selections	М		X				Best with good drainage

Latin Name	Common Name	Water Needs	P/D	AI	Sh	Exp	Street-tree potential	Comments
Prunus cerasifera cultivars	Purpleleaf Plum selections	L/M	х					
Prunus cerasus cultivars	Sour Cherry selections	L/M	x					Generally more reliable for fruit set than sweet cherries
Prunus domestica cultivars	European Plum selections	L/M	x					Much more reliable fruit set than Japanese plums
Prunus persica cultivars	Nectarine/Peach selections	М	х	х				Produce well at young age, but tend to be short-lived; look for late-blooming cultivars
Prunus virginiana cultivar	Chokecherry selections	L/M	х					Spread aggressively to form clumps; purple-leaf forms may sprout green-leaf suckers; Sucker Punch is non-suckering form
Pyrus calleryana cultivars	Flowering Pears	L/M	х	х			х	Use fireblight-resistant forms (Bradford and Chanticleer well-proven, Javelin is new form)
Pyrus communis cultivars	European Fruiting Pear selections	L/M	х	х				Use fireblight-resistant forms
Pyrus ussurieniensis Prairie Gem	Prairie Gem Ussurien Pear	L/M		x		x		Fireblight resistant form; can set fruit if pollinated by other pears
Quercus buckleyi	Texas Red Oak	L/M				X	х	Tolerates drought and alkaline soils well; good fall color late
Quercus frainetto Forest Green	Forest Green Oak	L/M				x		Drought tolerant once established
Quercus gambelii	Gambel Oak	VL/L					х	Gila Monster is single-trunk tree form
Quercus macrocarpa	Bur Oak	L/M				х	х	Urban Pinnacle is best street-tree form
Quercus meuhlenbergii	Chinkapin Oak	L/M				x	x	Faster with regular irrigation
Quercus shumardii	Shumard Oak	L/M		х		x		
Quercus x cultivars	Oaknew hybrids	L/M				x		Look for hardy forms tolerant to drought and alkaline soils
Sophora japonica <aka Styphnolobium japonicum> cultivars</aka 	Japanese Pagoda Tree selections	L/M	X			x		Showy summer bloom; messy; can be disease-prone
Ulmus parvifolia cultivars	Lacebark Elm selections	L/M	х				X	Disease resistant; use hardy cultivars
Ulmus x hybrids	Hybrid Elm selections	L/M				х		Look for new disease/pest resistant forms
Zelkova serrata cultivars	Japanese Zelkova selections	L/M				x	X	Green Vase, Musashino & Village Green best for street trees

Latin Name	Common Name	Water Needs	P/D	AI	Sh	Ехр	Street-tree potential	Comments
EVERGREEN TREES								
Calocedrus decurrens	Incense Cedar	L/M				x		Absolute hardiness uncertain (to -15F, possibly)
Cedrus atlantica Glauca	Blue Atlas Cedar	L/M	x					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	X					Zone 6 hardy cultivars; may be hard to find
Cupressus arizonica	Arizona Cypress	VL/L	X					Various selections with different foliage color and form; best with good drainage
Cupressus (arizonica) glabra cultivars	Smooth Arizona Cypress	VL/L	X					Beautiful smooth reddish bark; some forms not reliably hardy
Juniperus chinensis cultivars	Chinese Juniper selections	L/M	X					
Juniperus deppeana	Alligator Juniper	L/M	X					Showy bark in age; hard to find
Juniperus monosperma	One-seed Juniper	VL/L	x					Common juniper around Santa Fe; male forms cause allergy problems for many
Juniperus scopulorum cultivars	Rocky Mountain Juniper selections	L/M	X					
Juniperus virginiana cultivars	Eastern Red Cedar selections	L/M	X					
Pinus bungeana	Lacebark Pine	L/M	X			x		Showy bark in age; susceptible to pine wilt nematode
Pinus edulis	Piñon Pine	L/M	x					NM state tree, more pest-resistant with regular irrigation
Pinus heldreichii (leucodermis)	Bosnian Pine	L/M	X					Dwarf and fastigiate forms available; susceptible to pine wilt nematode
Pinus flexilis Vanderwolf	Vanderwolf Pine	L/M	x	X				Best in good soils with regular irrigation
Pinus monophylla	Single-leaf Piñon	L/M	X			x		Southwestern native with grey foliage, single needles
Pinus mugo	Mugo Pine	L/M	X					P.m. Tannenbaum is a compact tree form; species is susceptible to pine wilt nematode
Pinus nigra	Austrian Pine	L/M	X					Tends to get larger than expected; susceptible to pine wilt nematode

Latin Name	Common Name	Water Needs	P/D	AI	Sh	Ехр	Street-tree potential	Comments
Pinus nigra Oregon Green	Oregon Green Austrian Pine	L/M	X			X		Newer form with distinctive needles, may get 20-25' in age
Pinus ponderosa	Ponderosa Pine	L/M	X					More pest resistant with regular irrigation
Pinus thunbergii	Japanese Black Pine	L/M	X	X				Can be injured by severe winters; susceptible to pine wilt nematode
Platycladus orientalis cultivars	Oriental Arborvitae selections	L/M	X					Beloved of birds; gold forms have strongly different winter color

Local Resources for Trees in Santa Fe

AGUA FRIA NURSERY

1409 Agua Fria St. (505) 983-4831 aguafrianurserynm.com

NEWMAN'S NURSERY

7501 Cerrillos Rd. (505) 471-8642 newmansnursery.com

PAYNE'S NURSERIES & GREENHOUSES

304 Camino Alire – (505) 988-8011 715 St. Michael's Drive – (505) 988-9626 paynes.com

PLANTS OF THE SOUTHWEST

3095 Agua Fria St. (505) 438-8888 plantsofthesouthwest.com

SANTA FE TREE FARM

1749 San Ysidro Crossing (505) 984-2888



Pictured: Crabapple "Radiant" (Malus "radiant").







A project of The Santa Fe Municipal Tree Board

To learn more about the city's Bees Trees & Water program please visit **savewatersantafe.com/urban-forest**