# Approved Tree List for City of Boulder Properties and Public Street Rights of Way

Trees, when properly selected and cared for, are appreciating assets to the City of Boulder. They provide positive impacts and benefits to our ecosystem, economy, and community through cleaning the air and purifying water, providing habitat, and by enhancing our neighborhoods and commercial districts. This document serves to guide planners, developers, landscape architects, and other professionals in proper tree selection for the City of Boulder.

## The following trees may NOT be planted in the public street right-of-way or other City properties due to poor suitability, structural concerns, or invasive qualities:

* *Acer negundo* (boxelder) with the exception of the ‘Sensation’ cultivar
* *Acer x freemannii* (autumn blaze/freeman maple)
* *Ailanthus altissima* (tree-of-heaven) – **invasive species**
* *Elaeagnus angustifolia* (Russian-olive) – **invasive species**
* *Populus* spp. – hybrid cottonwoods or aspen
* *Pyrus calleryana* ‘Bradford’ (Bradford flowering pear)
* *Salix* spp. (willow)
* *Ulmus pumila* (Siberian elm) – **invasive species**
* Multi-stemmed trees
* Weeping or pendulous trees

## The following trees may NOT be planted in the public Right of Way or City property due to insect and disease concerns:

* *Acer platanoides* (Norway maple) - sunscald susceptibility
* *Fraxinus* spp. (ash) - emerald ash borer
* *Gleditsia triacanthos* var. inermis ‘Sunburst’ - fungal canker susceptibility
* *Juglans* spp. (walnut) - Thousand Cankers Disease
* *Platanus occidentalis* (sycamore) – anthracnose susceptibility
* *Tilia cordata* (littleleaf linden) - Japanese beetle
* *Quercus rubra (northern red oak)*, *Quercus shumardii (Shumard oak)*, *Quercus palustris (pin oak)*, *Quercus ellipsoidales* (northern pin oak) - kermes scale and drippy blight disease
* *Pinus nigra* (Austrian pine), *Pinus sylvestris* (Scotch pine) – pine wilt

## The following trees may NOT be planted in the public Right of Way but are allowed on other City properties:

* Coniferous trees
* *Populus* spp. – native cottonwoods only (Plains, narrowleaf and lanceleaf); no hybrid cottonwoods or aspen allowed
* *Salix* spp. (willow) – native species only

### Spacing Requirements:

* 30-35 feet between medium and large statured shade trees
* 20-25 feet between small statured ornamental trees
* 25 feet from intersections
* 10 feet from streetlights
* 10 feet from alleys, driveways, and fire hydrants
* 10 feet from water meters

Trees not included in this document may not be planted in City parks, City properties, or Public Right of Way without permission from the City Forester. Exceptions may be made on a case by case basis, but not guaranteed. Authorization is needed from Boulder Forestry before planting, pruning, spraying, or removing any tree in the public street right-of-way. This enables Boulder Forestry to keep an up-to-date tree inventory and ensures proper species selection, placement and care of new or existing trees.

## Boulder Forestry Contact

City of Boulder Park Operations

5200 Pearl Pkwy Boulder CO, 80301

Office: 303-441-4406

## Approved Deciduous Trees

| Species Name | Common Name | Acceptable Cultivars | Hardiness Zone | Water Needs | Mature Size Category | Mature Height (ft) | Mature Width (ft) | Mature Canopy Area (sq. ft) | Form | Fall Color | Flowers | Fruit | Additional Notes |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Acer campestre* | hedge maple | Queen Elizabeth | 5 | low to medium | medium | 30 | 30 | 707 | oval  | yellow | insignificant  | samara | Tolerates clay soil, air pollution, susceptible to winter dieback in early freezes |
| *Acer glabrum* | Rocky Mountain maple  |   | 5 | low to medium | small | 20 | 15 | 177 | rounded | orange | insignificant  | samara | Prefers moist soils |
| *Acer grandidentatum* | bigtooth maple | Rocky Mountain Glow | 4 | low to medium | small | 25 | 25 | 491 | rounded | orange, red | insignificant  | samara | Tolerates alkaline soil, drought once established |
| *Acer griseum* | paperbark maple |   | 4 | medium to high | small | 25 | 20 | 314 | oval | orange, red | insignificant  | samara | Tolerates clay soil, intolerant of drought, protect from strong winds |
| *Acer miyabe* | miyabe maple | State Street | 4 | medium | small | 40 | 30 | 707 | oval | yellow  | insignificant  | samara | Tolerates wet sites, alkaline soils, clay soils |
| *Acer negundo* | boxelder | Sensation | 3 | low to medium | large | 40 | 40 | 1257 | rounded | yellow | insignificant  | seedless for cultivar listed | Tolerates clay soil, drought once established, air pollution, alkaline soils |
| *Acer pseudoplatanus* | sycamore maple |   | 4 | medium | medium | 35 | 30 | 707 | rounded | yellow | insignificant  | samara | Tolerates alkaline soils, road salts |
| *Acer saccharum* | sugar maple | Fall Fiesta, Legacy, Caddo | 4 to 5 | medium | large | 60 | 45 | 1590 | rounded | orange | insignificant  | samara | Intolerant of soil compaction, road salts, air pollution, some cultivars may develop chlorosis in alkaline soils |
| *Acer tataricum* | tartarian maple |  Hot Wings, Pattern Perfect | 3 | low to medium | small | 20 | 15 | 177 | rounded  | red, yellow | white clusters | samara | Tolerates soil compaction, clay soil |
| *Aesculus flava* | yellow buckeye |   | 4 | medium | large | 60 | 40 | 1257 | rounded | orange, yellow | yellow cluster | nut | Intolerant of drought, prone to leaf scorch in hot and dry sites |
| *Aesculus hippocastanum* | common horsechestnut |   | 4 | medium | large | 60 | 50 | 1963 | oval | yellow  | pink to white cluster | nut | Intolerant of drought, prone to leaf scorch in hot and dry sites |
| *Aesculus x carnea* | red horsechestnut | Briotti, Fort McNair | 4 | medium | medium | 35 | 30 | 707 | rounded | yellow | pink upright | nut | Intolerant of drought, prone to leaf scorch in hot and dry sites |
| *Carpinus betulus* | European hornbeam | Fastigiata, Frans Fontaine | 5 | medium | medium | 35 | 25 | 491 | rounded | yellow | insignificant  | nutlet | Tolerates air pollution, dry sites, alkaline soils, protect from strong winds |
| *Carpinus caroliniana* | American hornbeam  |   | 3 | medium | medium | 30 | 30 | 707 | rounded | orange, red | insignificant  | nutlet | Tolerates clay soil, alkaline soils, dry sites |
| *Carya illinoensis* | pecan |   | 5 | medium | large | 50 | 30 | 1257 | oval | yellow  | insignificant  | nut, edible | Tolerates wet sites, alkaline soils, choose stock with northern seed source if possible |
| *Carya ovata* | shagbark hickory |   | 5 | medium | large | 50 | 30 | 1963 | oval | bronze, yellow | insignificant  | nut | Tolerates drought once established, alkaline soils, dry sites |
| *Catalpa ovata* | Chinese catalpa |   | 4 | low to medium | medium | 25 | 25 | 491 | oval, irregular | yellow  | white orchid like | seed pod | Tolerates dry sites, alkaline soils, wet sites, clay soils, and road salts |
| *Catalpa speciosa* | western catalpa |   | 5 | low to medium | large | 65 | 30 | 707 | oval, irregular | yellow | white orchid like | seed pod | Tolerates drought once established, clay soil, and air pollution |
| *Catalpa x erubescens* | purple catalpa |   | 5 | low to medium | medium | 40 | 35 | 962 | rounded, irregular | yellow  | purple, yellow | seed pod | Tolerates dry sites, alkaline soils, road salts |
| *Celtis laevigata* | sugar hackberry | All Seasons, Magnifica | 5 | low to medium | large | 45 | 40 | 1257 | oval | yellow | insignificant  | drupe | Tolerates clay soil, wet soil, air pollution  |
| *Celtis occidentalis* | common hackberry |   | 3 | low to medium | large | 50 | 50 | 1963 | rounded | yellow | insignificant  | drupe | Tolerates drought once established, clay soil, wet soil, and air pollution |
| *Celtis reticulata* | netleaf hackberry |   | 3 | low to medium | small | 25 | 25 | 491 | rounded | yellow | insignificant  | drupe | Tolerates alkaline soil, drought. |
| *Cercis canadensis* | eastern redbud |   | 4 | medium to high | small | 25 | 30 | 707 | rounded | yellow | pink to purple  | seed pod | Tolerates clay soil |
| *Cladrastis kentukea* | yellowwood |   | 4 | medium | medium | 40 | 40 | 1257 | rounded | yellow | white clusters | seed pod | Protect from strong winds |
| *Corylus colurna* | Turkish filbert |   | 4 | low  | medium | 45 | 25 | 491 | pyramidal | bronze | insignificant  | nut, edible | Tolerates drought once established and most soils but not heavy clay |
| *Crataegus ambigua* | Russian hawthorn |   | 4 | low | small | 20 | 15 | 177 | rounded | orange  | white | berry | Tolerates drought, clay soils, and dry soils. Has thorns |
| *Crataegus lavellei* | lavalle hawthorn |   | 4 | medium | small | 20 | 15 | 177 | oval | red | white | berry | Has thorns |
| *Crataegus mollis* | downy hawthorn |   | 4 | low to medium | small | 20 | 15 | 177 | rounded | red | white | berry | Tolerates alkaline soils, clay soils. Has thorns.  |
| *Crataegus viridis* | green hawthorn | Winter King   | 4 | low to medium | small | 20 | 25 | 491 | rounded | red | white | berry | Tolerates drought, clay soils, and dry soils. Has thorns |
| *Fagus sylvatica* | European beech  | Purpurea, Tricolor | 4 | high | large | 50 | 40 | 1257 | oval | bronze | insignificant  | nut, edible | Intolerant of wet, poorly drained soils |
| *Gleditsia triacanthos inermis* | thornless honeylocust | Imperial, Shademaster, Skyline | 3b to 4 | low to medium | medium to large – Depends on variety | 60 | 60 | 2827 | rounded, spreading | yellow | insignificant  | seedless for cultivars listed | Tolerates drought once established, clay soil, and air pollution  |
| *Gymnocladus dioicus* | Kentucky coffeetree | Espresso, Stately Manor | 4 | low-medium | large | 60 | 40 | 1257 | rounded, irregular | yellow | insignificant  | seed pod, seedless cultivars available | Tolerates drought once established, air pollution |
| *Koelreuteria paniculata* | goldenrain tree |   | 5 | low | medium | 35 | 35 | 962 | rounded, irregular | yellow | yellow clusters | seed capsule | Tolerates drought, clay soil, air pollution |
| *Liquidambar styraciflua* | sweetgum |   | 5 | medium | large | 50 | 40 | 1257 | oval, irregular | orange, purple, red | insignificant  | seed ball | Tolerates clay soil |
| *Liriodendron tulipifera* | tuliptree |   | 4 | medium | large | 60 | 35 | 962 | oval | yellow | yellow tulip like | seed capsule | Tolerates clay soil, wet soil |
| *Maackia amurensis* | Amur maackia |   | 3 | low to medium | medium | 25 | 25 | 491 | rounded |  yellow | white | seed pod | Adapts to a wide range of soils |
| *Magnolia acuminata* | cucumbertree magnolia |   | 4 | medium to high | large | 55 | 30 | 707 | pyramidal | bronze, yellow | green, yellow | seed cluster | Intolerant of most urban pollutants |
| *Magnolia* Galaxy | galaxy magnolia |   | 4 | medium | small | 25 | 15 | 177 | rounded | bronze | pink to purple | seed cluster | Protect from strong winds |
| *Magnolia x soulangiana* | saucer magnolia |   | 4 | medium | small | 20 | 20 | 314 | rounded | bronze | white to purple | seed cluster | Tolerates clay soil |
| *Malus sylvestris* | crabapple | Golden Raindrops, Indian Magic, Prairiefire, Royal Raindrops, Spring Snow, Thunderchild | 4 | low to medium | Small to Medium – depends on cultivar | varies by cultivar | varies by cultivar | varies by cultivar | rounded | varies on cultivar | varies by cultivar | pome, size varies on cultivar, fruitless cultivars available | Tolerates air pollution, adapts to a wide range of soils. Select cultivar with good to excellent resistance to the following: fireblight, scab, cedar apple rust, and mildew |
| *Morus alba* | white mulberry |   | 4 | medium | large | 40 | 40 | 1257 | rounded | bronze | insignificant  | fruitless cultivars available | Tree permitted in parks but not in the Public Right of Way. Tree attracts wildlife and is not permitted west of Broadway Avenue. tolerates drought once established, air pollution.  |
| *Ostrya virginiana* | American hophornbeam |   | 3 | low to medium | medium | 30 | 25 | 491 | rounded | yellow  | insignificant  | seed capsule | tolerates drought once established, clay soil |
| *Phellodendron amurense* | amur corktree | His Majesty, Macho, Eyestopper | 4 | medium | medium | 30 | 45 | 1590 | rounded | yellow | insignificant  | fruitless cultivar  | Tolerates drought once established |
| *Prunus maackii* | Amur chokecherry  |   | 3 | medium | medium | 25 | 20 | 314 | rounded | yellow | white | berry | Excellent cold hardiness |
| *Prunus virginiana* | chokecherry | Sucker Punch | 3 | low to medium | medium | 25 | 15 | 177 | rounded | yellow  | white | berry | Tolerates drought, dry soil, shallow and rocky soil |
| *Ptelea trifoliata* | common hoptree |   | 3 | low | medium | 20 | 20 | 314 | rounded, irregular | yellow | white | seed cluster | Tolerates drought once established, dry soil |
| *Pyrus calleryana* | flowering pear | Cleveland Select, Chanticleer, Autumn Blaze | 4 | low to medium | medium | 35 | 15 | 177 | oval | red | white | drupe | Tolerates drought, clay soil, air pollution  |
| *Quercus alba* | white oak |   | 3 | low to medium | large | 65 | 65 | 3318 | rounded | red | insignificant  | acorn | Tolerates drought once established, clay soil, dry soil, shallow and rocky soil |
| *Quercus bicolor* | swamp white oak |   | 4 | medium | large | 55 | 55 | 2376 | rounded | bronze, orange | insignificant  | acorn | Tolerates drought once established, wet soil |
| *Quercus gambelii* | gambel oak |   | 5 | low | small | 20 | 20 | 314 | rounded, irregular | bronze | insignificant  | acorn | Best used as multi-stem |
| *Quercus imbricaria* | shingle oak |   | 5 | medium | Large | 50 | 50 | 1963 | oval | bronze, red | insignificant  | acorn | Tolerates drought once established, adapts to a wide variety of soils |
| *Quercus macrocarpa* | bur oak | Bulletproof | 3 to 4 | low to medium | large | 70 | 70 | 3848 | rounded | bronze | insignificant  | acorn | Tolerates drought once established, clay soil, dry soil, choose gall-less tree stock as galls attract yellow jackets |
| *Quercus muehlenbergii* | chinkapin oak |   | 3 | low to medium | large | 50 | 60 | 2827 | rounded | bronze | insignificant  | acorn | Tolerates drought once established |
| *Quercus prinus* | chestnut oak |   | 4 | low to medium | large | 65 | 65 | 3318 | rounded | red | insignificant  | acorn | Tolerates alkaline soils, drought once established |
| *Quercus undulata* | wavy-leaf oak |   | 4 | low to medium | small | 10 | 5 | 20 | rounded | yellow | insignificant  | acorn | Best used as multi-stem |
| *Styphnolobium japonicum* | Japanese pagoda tree |   | 5 | medium | medium | 45 | 40 | 1257 | rounded | yellow | white | seed pod | Tolerates drought once established, air pollution  |
| *Syringa pekinensis* | Chinese tree lilac | China Snow | 5 | low  | small | 20 | 15 | 177 | oval | bronze, yellow | white clusters | seed capsule | Resistant to mildew |
| *Syringa reticulata*  | Japanese tree lilac | Ivory Silk | 3 | low | small | 25 | 15 | 177 | oval | yellow | white clusters | seed capsule | Tolerates clay soil, urban conditions |
| *Tilia americana* | American linden  | \*check with Boulder Forestry for approved cultivars | 3 | medium | large | 60 | 40 | 1257 | oval, rounded | yellow | pale yellow | nutlet | Tolerates drought once established, clay soil |
| *Tilia tomentosa* | silver linden |   | 5 | medium | large | 60 | 40 | 1257 | oval | yellow | pale yellow | nutlet | Tolerates drought one established |
| *Ulmus americana* | American elm | \*check with Boulder Forestry for approved cultivars (only those resistant to Dutch elm disease & European elm scale allowed) | 4 | low to medium | large | 70 | 55 | 2376 | vase | yellow | insignificant  | samara | Tolerates drought once established, air pollution |
| *Ulmus davidiana* | David elm | Discovery | 3 | low to medium | large | 45 | 45 | 1590 | vase | yellow | insignificant  | samara | Tolerates drought once established, air pollution |
| *Ulmus x accolade* | accolade elm |   | 4 | low to medium | large | 55 | 35 | 962 | vase | yellow | insignificant  | samara | Tolerates drought once established, air pollution |
| *Xanthoceras sorbifolium* | golden yellowhorn | Clear Creek | 5 | low to medium | small | 20 | 20 | 314 | rounded | yellow | white | capsule | Tolerates drought one established, adaptable to a wide range of growing conditions  |

## Approved Coniferous Trees

| Species | Common Name | Hardiness Zone | Water Needs | Mature Height (ft) | Mature Width (ft) | Mature Canopy Area (sq. ft)  | Additional Notes |
| --- | --- | --- | --- | --- | --- | --- | --- |
| *Abies concolor* | white fir | 3 | medium | 55 | 25 | 688 | Prefers moist soils |
| *Cedrus atlantica* | atlas blue cedar | 6 | medium | 50 | 25 | 625 | Drought tolerant once established, protect from strong winds |
| *Juniperus scopulorum* | Rocky Mountain juniper | 2 | low | 40 | 25 | 500 | Tolerates drought, air pollution  |
| *Juniperus virginiana* | eastern redcedar | 2 | low | 50 | 20 | 500 | Tolerates drought, air pollution  |
| *Metasequoia glyptostroboides* | dawn redwood  | 4 | medium | 85 | 20 | 850 | Approved for street right-of-way planting; Tolerates clay soil, air pollution, wet soil |
| *Picea glauca* | white spruce | 2 | medium to high | 50 | 15 | 375 | Very cold hardy, sensitive to road salt and air pollution  |
| *Picea pungens* | blue spruce | 2 | medium to high | 50 | 15 | 375 | Tolerates drought, air pollution |
| *Pinus aristata* | bristlecone pine | 4 | low to medium | 15 | 10 | 75 | Tolerates poor, rocky soils, and alkaline soils  |
| *Pinus edulis* | pinyon pine | 3 | low to medium | 35 | 15 | 263 | Tolerates drought |
| *Pinus flexilis* | limber pine | 4 | low to medium | 50 | 30 | 750 | Adaptable to a wide variety of soils |
| *Pinus ponderosa* | Ponderosa pine | 3 | low to medium | 90 | 25 | 1125 | Tolerates drought |
| *Pinus strobiformis* | southwestern white pine | 4 | low to medium | 90 | 30 | 1350 | Prefers moist soils |
| *Pseudotsuga menziesii* | Douglas-fir | 4 | medium | 55 | 25 | 688 | Prefers moist soils |
| *Sequoiadendron giganteum* | giant sequoia  | 6 | medium to high | 100 | 40 | 2000 | Intolerant of clay soils, prefers moist, well drained soils |
| *Taxodium distichum* | baldcypress | 4 | medium to high | 60 | 35 | 1050 | Approved for street right-of-way planting; Tolerates clay soil, air pollution |