Managing vegetation along high-voltage power lines is a top priority for Chelan County PUD. Trees and power lines do not mix. Trees contacting power lines are a leading cause of power outages, can start fires and are a public safety hazard.

Chelan County PUD asks its customer-owners to look up and around before they plant. It is best not to plant under power lines, but if necessary, the mature height of the tree or shrub should be a maximum of 25 feet.

If planting next to underground electrical equipment, a minimum open space of 3 feet on the sides and back and 10 feet in front is required. Vegetation blocking transformers or other equipment makes it hard to locate the equipment, usually extending the length of outages.
A tree requires space to grow both above and below the ground. It is important to know the mature size and growth characteristics of what you are planting.

Location of critical items and objectives to consider before planting:
• overhead and underground utilities
• building foundations, sidewalks, driveways and other hardscapes
• drain fields
• maintaining a defensible firewise space around structures
• energy conservation of shading in the summer and windbreaks in the winter

How to plant trees and shrubs:
• State law requires contacting the Dig Council by calling 811 prior to digging to locate underground utilities (this is a free service).
• Dig the planting hole two to three times the width of the root ball, with sloping sides of the hole and the same depth as a root ball or plant container. Loosen the soil on the sloped sides of the planting hole to promote root growth. Install the plant making sure the trunk flare is level or slightly above existing grade. (Trunk flare is the location on the plant where the trunk enters the dirt).
• Before planting, remove all material wrapped around the root ball such as burlap and wire or the planting container.
• Carefully inspect the roots, making sure they are loose and spreading. If circular roots exist, use a knife or shovel to cut and spread the roots apart, creating a healthy root zone.

Evergreen trees on the northwestern sides block winter winds.
Plant deciduous trees on the south and west sides of your home to block intense summer sun, making your house cooler in summer. As deciduous trees lose leaves in the fall, solar radiation can warm your home during winter.

Plant shrubs or small trees that grow to a maximum height of 25 feet when planting near power lines.

Allow at least 25 feet when planting a medium-sized, spreading tree near a walkway, or at least 10 feet if the mature tree shape will be columnar or pyramidal.

TOP SOIL

COMPACTED SUBSOIL

3 TIMES ROOT BALL DIAMETER

POWER LINES
RECOMMENDED
UTILITY-FRIENDLY
TREES AND SHRUBS

These are suggested species for planting under or near power lines. Several cultivars of these species are power line-friendly.

Acer palmatum
JAPANESE MAPLE

Broadleaf deciduous tree or shrub, 15-25 ft tall, multi-trunked, variable forms. Leaves fresh green above but color varies with cultivar; fall color scarlet, orange or yellow.

Sun to part shade, well-drained soil, protect from winds.

Acer ginnala
AMUR MAPLE

Deciduous tree/shrub, 10-20 ft tall, multi-stemmed, rounded but variable. Leaves opposite, 1-3 inches long, 3-lobed, relatively long central lobe.

Sun to part shade, very adaptable, very hardy, performs best in well-drained soil. Relatively free of disease and pest problems.
**Cercis canadensis**

**EASTERN REDBUD**

Deciduous tree, 20-25 ft tall, spreading, flattish top. Leaves are 5-7 inches across, heart-shaped, lustrous dark green color; fall color is usually mixture of pale green and yellow.

Small, showy, rosy-pink flowers in spring before leaves appear.

Sun to part shade. Does well in many soil types, except permanently wet.

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**Carpinus japonica**

**JAPANESE HORNBEAM**

Deciduous tree, 20-25 ft tall, often multi-stemmed, wide spreading branches. Leaves 2-4 inches long, doubly serrate, 20-24 deeply impressed vein pairs, dark green in summer and yellowish in fall.

Sun to shade. Tolerates various soil types, best in moist, well-drained soil.
**Forsythia x intermedia**
**BORDER FORSYTHIA**
Deciduous shrub 8-10 ft tall and wide, upright. Leaves 3-4 inches long, dark green above, lighter below.

Flowers 1-2 inches long, showy, pale to deep yellow, and appear in early spring.

Sun to maximize flower production. Prefers a loose soil, but will perform well in almost any soil. Needs grooming: prune after flowering by removing oldest stems or to the ground.

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**Cornus florida**
**FLOWERING DOGWOOD**

Broadleaf deciduous tree/shrub, 20-25 ft tall, low branching, spreading horizontal.

Leaves opposite, 3-5 inches long, oval or ovate, 6-7 vein pairs.

Flowers are showy, flat 3-5 inches across, white, pink or red.

Sun to part shade. Does best in well drained acid soil with sufficient organic matter. Mulch to maintain a cool, moist soil. Needs summer water. This species is susceptible to a number of pests.
**Philadelphus lewisii**  
**WILD MOCK ORANGE**

Deciduous shrub, 5-10 ft tall and wide, multi-stemmed. Flowers white, 4-5 petals, fragrant.

Sun to part shade, understory plant, thrives in almost any garden soil, prune after flowering.

Very hardy native plant, drought tolerant.

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**Styrax japonicus**  
**JAPANESE SNOWBELL**

Deciduous tree, 15-25 ft tall, similar width, low and horizontal branching.

Leaves medium to dark green, glabrous above. Flowers May - June, flowers are bell-shaped, 1 inch long, white with yellow stamens.

Sun to part shade, best in acid soil supplemented with organic matter.
**Taxus × media**  
**HYBRID YEW**

Conifer, evergreen shrub, variable in height, 3-20 ft tall (depending upon cultivar), spreading, shoots olive green, often reddish on the sunny side.

Sun or shade, moist, well-drained soil.

There are several cultivars; here are two:

- ‘Dark Green Spreader’ - dark green foliage, compact, 4 ft tall, greater width, resistant to “winter burn”
- ‘Hicksii’ - probably the most common, narrowly columnar, 10-12 ft. tall, branches ascending, often narrower at the base than the peak.

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**Pinus mugo**  
**MUGO PINE**

Conifer, evergreen shrub, multi-stemmed, low growing form, wider than tall, less than 8 ft tall x 16 ft wide.

Dark green needles in pairs, 1-2 inches long, cones 1-2 inches long as well.

Sun to partial shade, prefers well-drained soil.
**Syringa vulgaris**
*COMMON LILAC*
Deciduous shrub, 10-15 ft tall, upright, multi-stemmed. Leaves dark green to almost bluish green. Flowers bloom in spring upright clusters, lavender or white, very fragrant.

Sun, very hardy species, moderately drought tolerant. Can aggressively fill in an area producing new shoot growth off roots.

**Chamaecyparis obtusa** (dwarf forms)
*DWARF HINOKI FALSE CYPRESS*
Conifer, evergreen shrub or small tree, 8-20 ft. tall, pyramidal form, there are numerous dwarf and/or slow growing forms.

Leaves are dark green. This is a hardy species that tolerates some drought.
**Amelanchier × grandiflora**

SERVICEBERRY

Deciduous tree/shrub, 25 ft tall and 20-30 ft wide, often grown as a clump. Leaves green, becoming yellow and orange in fall. Flowers small, white and blooms in mid- to late-spring. Fruit blue-black, sweet, juicy.

Sun or part shade.

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**Crataegus phaenopyrum**

WASHINGTON HAWTHORN

Deciduous tree, 15-30 ft tall, twigs thorny. Leaves lustrous dark green, fall color orange to scarlet. Showy white flowers with pink anthers, blooms profusely. Bright red glossy fruit, 3-5 nutlets (seeds) per fruit; persisting all winter.

Sun, moderate root system easy to garden under. Hardy tree, can tolerate some dry soil.
**Rhus typhina**  
**STAGHORN SUMAC**

Deciduous tree/shrub, 15-20 ft tall, open spreading, new growth, stout velvety stems (the “staghorn”). Summer foliage dark green, but yellow-orange and scarlet in fall.

Sun; a hardy plant that tolerates dry soil. Rejuvenate by cutting to the ground.

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**Fraxinus pennsylvanica Leprechaun™**  
**LEPRECHAUN GREEN ASH**

Deciduous tree/shrub, a true genetic dwarf, often sold grafted to a standard trunk at a height of 6 ft from which it develops into a dense, compact, rounded tree about 20 ft tall with slightly less of a spread. Does not produce fruit (seeds).

Direct sun; a good, hardy small tree.
Prunus cerasifera ‘Thundercloud’

THUNDERCLOUD
FLOWERING PLUM,
THUNDERCLOUD PLUM

Deciduous tree, 15-20 ft tall, similar width, shrubby, twiggy and rounded, pale pink to white flowers appear before leaves. Often does not set a crop of fruit.


Spring flowering.

Acer platanoides ‘Globosum’

GLOBE NORWAY MAPLE

Deciduous tree, 15 ft tall, 18 ft spread, very densely branched, compact, formal globe (“lollipop”). Leaves reddish-brown in spring, developing to green in summer, and yellow in fall.
**Sambucus racemosa**

RED ELDERBERRY

Deciduous large shrub or small tree, 6-20 ft tall. Flowers yellowish-white, fruits bright red, not edible when raw, but when cooked make a good jam, pie, and wine.

Sun and part shade; prefers moist soils.

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**Robinia pseudoacacia 'Twisty Baby'™**

TWISTY BABY BLACK LOCUST, LADY LACE BLACK LOCUST

Deciduous multi-stemmed shrub or small tree, zigzag branching, especially on new growth, some spines on branches, height of 8-10 ft with a somewhat greater spread. Leaves dark green, some curling of mature leaflets, turn yellow in fall. Produces few flowers or seed pods.

Sun to part shade.
As customer-owners of Chelan County PUD

If you have concerns about a tree on your property or other properties, contact the Vegetation Management Department at (509) 661-4508. One of our arborists will contact you and schedule a site visit.

The PUD recognizes that people value their trees, but if you have a tree in the power lines and would consider permitting the PUD to cut it down for free, please contact us.

Chelan PUD has been recognized by the National Arbor Day Foundation, achieving the Tree Line USA award for many years.

*Pinus densiflora ‘Umbraculifera’*

DWARF JAPANESE RED PINE

Conifer, evergreen tree/shrub, slow growing to 12 ft tall, mushroom shape, usually multistemmed.

Sun; well-drained, slightly acid soil.