About the Chelan County Natural Resources Department:

The Natural Resource Department administers watershed planning and salmon recovery efforts in Chelan County. Current activities include Wenatchee River Watershed (WRIA45) Planning and Implementation, a countywide salmon recovery grant program through Washington Salmon Recovery Funding Board, and habitat conservation plan development under the Federal Endangered Species Act. The Natural Resources Department also supports a regional salmon recovery effort, the Upper Columbia Salmon Recovery Board, and staffs the Chelan County Water Conservancy Board. The Natural Resources Department manages a variety of state, federal, and local project and planning grants that assist watershed planning and salmon recovery efforts in Chelan County.



Chelan County Natural Resources Department

316 Washington Street, Suite 401 Wenatchee, WA 98801

Phone: 509-667-6324 Fax: 509-667-6527 E-mail: erin.fonville@co.chelan.wa.us



Riparian Habitat Restoration Program

Riparian Plant Guide



Phone: 509-667-6324

Riparian Planting Guide

This planting guide was prepared to assist landowners with photos and descriptions of plants that are available for the enhancement of existing riparian areas through the Riparian Habitat Restoration Program. The descriptions include estimated maximum height, growth rate, sunlight and water needs.

The Riparian Habitat Restoration Program is available from the Chelan County Natural Resource Department. The department is currently working with multiple landowners on riparian planting projects throughout the Wenatchee Valley and we are continuously looking for additional projects for fall and spring plantings. All of the projects are designed by working collaboratively with the landowners to make decisions on planting locations and species selections. In order to qualify for the program you need to own stream adjacent property and have a project that would be of benefit to salmon recovery efforts.

All riparian habitat restoration work is completed at no cost to the landowner. We do all the dirty work for you by using the Washington Conservation Crews, WSU Extension and local high school students to complete the projects.

If you would like more information or are interested in participating in the program you can contact Erin Fonville at Chelan County Natural Resource Department, (509) 667-6324 or e-mail at <u>erin.fonville@co.chelan.wa.us</u>

What is the Riparian Habitat Restoration Program?

The riparian habitat restoration program is an opportunity for private landowners to actively participate in the revegetation of streamsides to promote salmon recovery efforts in Chelan County. Riparian areas include the stream channels and the portion of the landscape from the high water mark toward the uplands where vegetation may be influenced by elevated water tables, flooding, or the ability of soils to hold water.

Through riparian plantings we can enhance existing riparian habitat which is the key to restoring natural stream functions and aquatic habitats. The benefits to salmon recovery efforts are increased riparian habitat, channel stabilization, improved water quality, increased stream shading which reduces water temperatures, improved wildlife and fish populations and improved aesthetics. Planting riparian areas prevent erosion and the undercutting of banks and slows water runoff from the spring melt and seasonal weather events.

Some Examples:



Riparian planting on Icicle River



Willow cuttings planted along stream.



Riparian planting at Leavenworth Golf course with browse guards.



Irrigation and fence project to keep livestock out of riparian area.



Stream bank stabilization with staking willow cuttings.



Browse guard to protect black cottonwood from beaver damage.

Plant Container Size Availability:

	10ci	40ci	1gal	2gal
Red Osier Dogwood	Х	Х	Х	
Mockorange	Х	Х	Х	Х
Choke Cherry	Х	Х	Х	Х
Golden Currant	Х	Х	Х	Х
Woods rose	Х	Х	Х	
Western Water Birch			Х	
Douglas Hawthorne	Х	Х	Х	Х
Common Snowberry	Х	Х	Х	
Quaking Aspen			Х	Х
Black Cottonwood		Х	Х	Х
Vine Maple	Х	Х	Х	Х
Serviceberry	Х	Х	Х	Х
Mountain Alder	Х	Х	Х	Х
Elderberry			Х	Х

ci=cubic inches gal=gallon

Red Osier Dogwood

Cornus sericea



This multi-stemmed shrub grows wild along stream banks at middle elevations. In autumn, the leaves turn a deep wine color and in winter the bright red stems are easily recognizable in a snow-covered landscape. White flower clusters followed by white berries. An open shrub, the vivid colors of Red-Osier Dogwood provide year-round interest.

ANNUAL GROWTH: FAST MAXIMUM HEIGHT: 8-10 FT. MAXIMUM WIDTH: 6-8 FT. FULL TO PART SUN MEDIUM WATER WELL-DRAINED SOIL





Mockorange

Philadelphus lewisii



The sweet fragrance of the Idaho state flower is reminiscent of orange blossoms. This deciduous shrub grows in moist conditions. It can also be found growing on dry cliff faces in middle elevations and it is drought tolerant. Shrub has bright green leaves that turn yellow in the fall. Large showy fragrant white flowers.

ANNUAL GROWTH: MEDIUM MAXIMUM HEIGHT: 6-8 FT. MAXIMUM WIDTH: 4-5 FT. FULL TO PART SUN MEDIUM WATER WELL-DRAINED SOIL



Choke Cherry Prunus virginiana

Golden Currant Ribes aureum



This multi-stemmed large shrub or small tree tends to form root suckers in thick colonies. The drooping clusters of delightfully fragrant white flowers produce bitter, purple almost black cherries beloved by birds. It grows wild in stream bottoms and moist hillsides throughout the Western region.

ANNUAL GROWTH: MEDIUM MAXIMUM HEIGHT: 10-15 FT. MAXIMUM WIDTH: 8-10 FT. FULL SUN MEDIUM WATER ADAPTS TO MOST SOILS









Aside from it's natural beauty, this all-around plant has many uses: it provides year long food for browsers, birds savor the sweet berries. and humans enjoy unusual jellies, pies, and even ice cream made from the marble size, orange to black colored fruit. Golden Currant was named for the spicy-fragrant showy yellow blossoms in the springtime and should be strategically placed to emphasize the beautiful color in the fall.

ANNUAL GROWTH: FAST MAXIMUM HEIGHT: 4-6 FT. MAXIMUM WIDTH: 3-6 FT. FULL SUN LOW WATER AVERAGE SOIL



Mountain Alder

Alnus tenuifolia



Deciduous, thicket forming multistemmed shrub with spreading, slender branches or sometimes a small tree with several trunks and a rounded crown. Found along banks of streams, swamps and mountain canyons in moist soils. Has dark green leaves and attractive light colored bark. Likes moist, cool sites along streams.

ANNUAL GROWTH: MEDIUM MAXIMUM HEIGHT: 20-35 FT. MAXIMUM WIDTH: 20 FT. FULL SUN TO PARTIAL SHADE MEDIUM WATER AVERAGE SOILS





Elderberry Sambucus cerulea



Elderberries are hardy, native shrubs that have great ornamental and fruiting value. The bright-green foliage is rarely bothered by insects or disease and is very easy to grow. They produce beautiful, large, white flower heads in the spring that are followed by large clusters of blue-black berries in late summer. They are an important food source for fruit-eating birds. The berries also make great jelly, jam, pie, juice, syrup or wine.

ANNUAL GROWTH: MED- FAST MAXIMUM HEIGHT: 8-12 FT. FULL TO PART SHADE MEDIUM WATER WELL-DRAINED SOIL





Vine Maple Acer circinatum

A deciduous shrub or small tree has a short, crooked trunk, with twisted, spreading limbs and a low, irregularly shaped crown. The trunk sometimes grows almost horizontally and may root if it touches the ground. Vine maple gets its common name because it will be vine-like when grown in the shade. The foliage turns orange to red in the fall. In the sun, the plant has an upright, shrubby growth habit.

ANNUAL GROWTH: MEDIUM MAXIMUM HEIGHT: 15 FT. MAXIMUM WIDTH: 20 FT. SHADE TO FULL SUN MEDIUM WATER MOIST. HUMUS RICH SOILS





Serviceberry Amelanchier alnifolia



This is a very slow-growing, deciduous shrub that grows to 10 feet tall. This good wildlife plant is an attractive bush with an abundance of white flowers, and the fruits look something like a blueberry. The fruit of this plant was important as a food source for the native American tribes that lived within its range. This shrub is valuable for revegetation of disturbed lands and stabilizes loose, disturbed soils, especially erodable slopes.

ANNUAL GROWTH: MEDIUM MAXIMUM HEIGHT: 8-14 FT. MAXIMUM WIDTH: 5-10 FT. FULL SUN TO PARTIAL SHADE MEDIUM WATER





Woods Rose

Rosa woodsii



This lovely native is filled with delicate pink blossoms in the springtime that change to large red hips that add color to the winter garden. The branches are covered with a dense layer of fine thorns that provide defense from grazing animals. The Woods Rose spreads vigorously from root suckers to form thick hedges that provide sanctuary for birds and small animals. Most drought tolerant rose.

ANNUAL GROWTH: FAST MAXIMUM HEIGHT: 4-5 FT. MAXIMUM WIDTH: 3-5 FT. FULL SUN LOW WATER WELL-DRAINED SOIL







Betula occidentalis



This charming multi-stemmed tree grows in dense thickets. Shiny red cherry tree-like bark and leaves that turn yellow-orange in the fall distinguish this tree common to mountain streams and meadows. It is more pest and disease resistant than European birches making it a better choice for Western landscapes.

ANNUAL GROWTH RATE: FAST MAXIMUM HEIGHT: 30 FT. MAXIMUM WIDTH: 15-20 FT. FULL TO PART SUN MEDIUM WATER **RICH, WELL-DRAINED SOIL**







Douglas Hawthorne

Crataegus douglasii



Douglas Hawthorne is a small, thorny tree that grows in thickets. It blooms in early spring with masses of white flowers that mature into small apple-like fruit. It grows in moist areas along cool stream banks in middle elevations. It is a favorite of birds and wildlife and can be used to attract them in a backyard sanctuary.

ANNUAL GROWTH: MEDIUM MAXIMUM HEIGHT: 20-25 FT. MAXIMUM WIDTH: THICKETS 15-20 FT. FULL SUN MEDIUM WATER AVERAGE SOIL









family can be found growing in open woods, thickets, valley slopes, rocky banks and roadsides in low to mid elevations. This shrub often forms in thickets from suckers. The snowberry is a hollow-stemmed shrub that has small, pink to white, bell-shaped flowers in small, dense, clusters at branch tips appearing June to July. Fruits are white, waxy and berry-like from September through November.

Common Snowberry

Symphoricarpos albus

ANNUAL GROWTH: FAST MAXIMUM HEIGHT: 3-6 FT. MAXIMUM WIDTH: 3-6 FT. FULL SUN TO PARTIAL SHADE MEDIUM WATER WELL-DRAINED SOILS



Quaking Aspen Populus tremuloides



Most extensive native range of any tree in North America. Most aspen trees grow from root suckers and are one of the largest living organisms. Sometimes called Trembling Aspen because their leaves tremble in a light breeze due to their flattened leafstalks. Aspen can be found along ponds or streams, wetlands, and woody draws. Aspen trees grow fairly straight and become clear of lower limbs over time. Spectacular fall foliage.

ANNUAL GROWTH: FAST MAXIMUM HEIGHT: 25-60 FT. MAXIMUM WIDTH: 20-30 FT. FULL SUN MEDIUM WATER WELL-DRAINED SOILS



Black Cottonwood

Populus balsamifera



Black cottonwood is a very fastgrowing and potentially large tree, easy to establish, and useful for shade and ornament. The aggressive root systems are effective soil stabilizers and make the species useful in restoration of riparian areas, where it also provides protection for the aquatic environment, especially in helping to maintain low water temperatures through shading.

ANNUAL GROWTH: RAPID MAXIMUM HEIGHT: 100-160 FT. MAXIMUM WIDTH: 20-35 FT. FULL SUN HIGH WATER AVERAGE SOIL



