

Riparian Restoration Guidelines

Riparian Restoration Plans should be prepared and supervised by an appropriately qualified professional. The riparian restoration plan should be sufficiently detailed to allow for monitoring for conformity to the plan as well as plant survival rates.

Planting Guidelines:

A list of recommended tree and shrub species is provided on page 2.

¹ d = dry, m = moist, w = wet

♦ denotes fruit-bearing species

- All riparian plantings should be based on 1 tree or shrub per 1 square metre density.
- All tree/shrub species should be of guaranteed nursery stock.
- The botanical name should be used when ordering stock to ensure that the desired native species is being purchased. Each specimen should be tagged with the botanical name and the tag should be left attached after planting.
- Stock planted during the fall (Sept. - Oct.) and spring (March - April) has the greatest likelihood of surviving. Regular watering may be required until the plants are established. Additional advice on proper planting procedures should be obtained from the nursery supplying the stock.
- Coniferous trees should comprise not less than 10% nor more than 25% of the tree stock planted.
- Tree stock should be a minimum of 1.2 m (4 ft) in height when purchased and planted 1.5 to 2 m apart.
- Planting on a given area being enhanced must be successful to an 80% take. If more than 20% die over one year, replanting is required.
- A minimum of 50% of trees and shrubs planted should be fruit-bearing species.

Structural Guidelines

Wherever a development site will result in land clearing activities, the opportunity exists to salvage and translocate structural materials (i.e. downed wood, stumps, mossy rocks, vascular plants, non vascular plants) into the remaining environmentally sensitive areas. These key forest floor features provide a diversity of habitats for both invertebrates and vertebrate species.

- Salvaged large woody debris and stumps from the development site should be placed in previously damaged riparian areas to provide structural habitat features for small wildlife and amphibians.
- Mossy rocks and herbs can be salvaged from the development site to help 'seed' the restored area with native groundcover species.
- Large projects are well suited to the creation or translocation of wildlife trees within the area undergoing restoration/enhancement.

Recommended Native Plant Species for Riparian Fish and Wildlife Habitat

Deciduous Trees

Botanical Name	Common Name	Mature Height (m)	Best Growth Conditions¹
<i>Acer circinatum</i>	vine maple	to 7	m-w
<i>Acer glabrum var. douglasii</i>	Douglas maple	to 10	d-m
<i>Acer macrophyllum</i>	broadleaf maple	to 35	d-m
<i>Alnus rubra</i>	red alder	to 25	m
<i>Betula papyrifera var. commutata</i>	western white birch	to 30	m-w
◆ <i>Crataegus douglasii</i>	black hawthorn	to 10	m
<i>Populus balsamifera or P. trichocarpa</i>	black cottonwood	to 50	m-w
◆ <i>Prunus emarginata</i>	bitter cherry	2-15	m
<i>Rhamnus purshiana</i>	casca	to 10	d-w
<i>Salix lucida ssp. lasiandra</i>	Pacific willow	to 12	w

Coniferous Trees

Botanical Name	Common Name	Mature Height (m)	Best Growth Conditions¹
<i>Picea sitchensis</i>	Sitka spruce	up to 70	m
<i>Pinus monticola</i>	western white pine	to 40	m-d
<i>Pseudotsuga menziesii</i>	Douglas-fir	to 70	d
<i>Thuja plicata</i>	western red cedar	to 60	m-w
<i>Tsuga heterophylla</i>	western hemlock	to 60	d-w

Shrubs

Botanical Name	Common Name	Mature Height (m)	Best Growth Conditions¹
<i>Alnus crispa ssp. sinuata</i>	Sitka alder	1-5	m
◆ <i>Amelanchier alnifolia</i>	saskatoon	1-5	d-m
◆ <i>Cornus sericea or C. stolonifera</i>	red-osier dogwood	1-6	m
◆ <i>Corylus cornuta var. californica</i>	beaked hazelnut	1-4	m
<i>Holodiscus discolor</i>	oceanspray	to 4	d-m
<i>Physocarpus capitatus</i>	Pacific ninebark	to 4	w
◆ <i>Prunus virginiana</i>	choke cherry	1-4	d
◆ <i>Rosa nutkana</i>	Nootka rose	to 3	d-m
◆ <i>Rosa gymnocarpa</i>	baldhip or dwarf rose	to 1.5	d-m
◆ <i>Rubus parviflorus</i>	thimbleberry	0.5-3	m
◆ <i>Rubus spectabilis</i>	salmonberry	to 4	m-w
<i>Salix hookeriana</i>	Hooker's willow	to 6	w
<i>Salix lucida spp. lasiandra</i>	Pacific willow	to 12	w
<i>Salix scouleriana</i>	Scouler's willow	2-12	m
<i>Salix sitchensis</i>	Sitka willow	1-8	m-w
◆ <i>Sambucus caerulea or S. glauca</i>	blue elderberry	-	d-m
◆ <i>Sambucus racemosa var. arborescens</i>	red elderberry	to 6	m
◆ <i>Sorbus sitchensis</i>	Sitka mountain ash	1-4	m
◆ <i>Symphoricarpos albus</i>	snowberry	0.5-2	d-m
◆ <i>Vaccinium parvifolium</i>	red huckleberry	to 4	m