Riparian Restoration

Why Restore Your Riparian Zone?

There are many reasons to consider restoring creeks and streams on your property and many ways to get started. The simplest ways is to plant trees and shrubs that will have immediate and long lasting effects on the health of the stream and the wildlife that lives there.

Riparian Zone- Riparian zones are the areas along bodies of water (streams, rivers, wetlands, and lakes) that interact with the body of water. These zones provide benefits to the aquatic and terrestrial organisms that live in the water and in the riparian zone. Riparian zones may also be called buffers, corridors, or setbacks.

Restoration- Restoration is the process of repairing an area to a natural state. Restoring riparian zones may include removing non-native vegetation, amending the soils, and planting native trees and shrubs.

Fish, Wildlife, and Water Quality Benefits

Minimize Erosion

The roots, trunks, and branches of trees and shrubs growing in the riparian zone hold the soil along riverbanks in place and slow water down, reducing the potential for erosion. Erosion is a problem for fish and other aquatic organisms. It impairs water quality by adding silt and small particles to the water column, clogging fish gills and smothering their eggs.

Erosion is part of the natural processes that occur in undisturbed streams. In many cases, erosion is exacerbated by human disturbances such as rip rapping (rocking) streambanks, mowing the edge of the bank and animal grazing. Be aware that upstream disturbances can affect downstream areas.

Get the advice of a fisheries biologist or habitat specialist to determine whether the erosion on your property deserves special attention. Always proceed cautiously when trying to address erosion concerns. Planting vegetation is the simplest and least invasive way to prevent erosion. Remember that the stream will eventually decide its own path, based on the topography and soils on the site. Giving the stream a sufficient buffer to hold high water flows and alter its' channel will lessen the degree to which it affects you land use goals.

Create Diverse Fish and Wildlife Habitat

A diverse assortment of trees and shrubs including evergreen trees, deciduous trees and berry-producing shrubs will provide habitat for a variety of birds, mammals, amphibians, and insects. Riparian zones provide corridors and refuges for these animals in human dominated landscapes. Snags provide habitat for woodpeckers and cavity nesting birds. Downed wood provides valuable habitat for amphibians and insects. Leaves and twigs that fall into the water are the base of the food chain for aquatic organisms. They are eaten by aquatic insects that in turn feed fish, birds and a host of other creatures.

conditions. Cuttings are an inexpensive way to get plants established. Native plants are available at yearly plant sales held by conservation districts and at many local nurseries.

Livestock concerns

Livestock with unrestricted access to a waterway increase erosion, prevent the establishment of trees and shrubs, and impair water quality. If your livestock have access to a stream or wetland, you should fence them out. Alternate watering sources are easy to install. Please ask CCD staff about water options and cost share availability.

Are there any regulations to be aware of?

There are no regulations concerning the planting of trees or shrubs next to a stream or waterway, but permits are required for in-stream work or for moving large amounts of soil.

Common Name	Botanical Name	Soil					Light		
		Saturated	Wet	Moist	Well Drained	Dry	Full Sun	Partial Sun	Full Shade
Big leaf Maple	Acer macrophyllum			X	X		X	X	
Black Cottonwood	Populus trichocarpa		X	X			X		
Cascara	Rhamnus purshiana			X	X		X	X	X
Douglas Fir	Pseudotsuga menziesii			X		X	X		
Red Alder	Alnus rubra		X	X		X	X	X	
Vine Maple	Acer circinatum			X		X	X	X	X
Western Hemlock	Tsuga heterophylla		X	X	X			X	X
Western Red Cedar	Thuja plicata	X	X	X			X	X	X
Sitka Spruce	Picea sitchensis		X	X					
Willow	Salix spp.	X	X	X			X		
Black Twinberry	Lonicera involucrata	X	X	X				X	X
Douglas Spirea	Spiraea douglasii	X	X	X			X	X	
Serviceberry	Amelanchier alnifolia			X	X	X	X	X	
Hazelnut	Corylus cornuta			X	X	X	X	X	X
Indian Plum	Oemleria cerasiformis			X		X	X	X	X
Mock Orange	Philadelphus lewisii			X	X	X	X	X	
Oceanspray	Holodiscus discolor				X	X	X	X	
Pacific Ninebark	Physocarpus capitatus		X	X			X	X	
Red Elderberry	Sambucus racemosa		X	X		X	X	X	
Red Osier Dogwood	Cornus stolonifera	X	X	X	X		X	X	
Salmonberry	Rubus spectabilis		X	X			X	X	X
Snowberry	Symphorcarpos albus		X	X		X	X	X	
Tall Oregon Grape	Mahonia aquifolium			X	X		X	X	X
Wild Rose	Rosa nutkana		X	X		X	X	X	