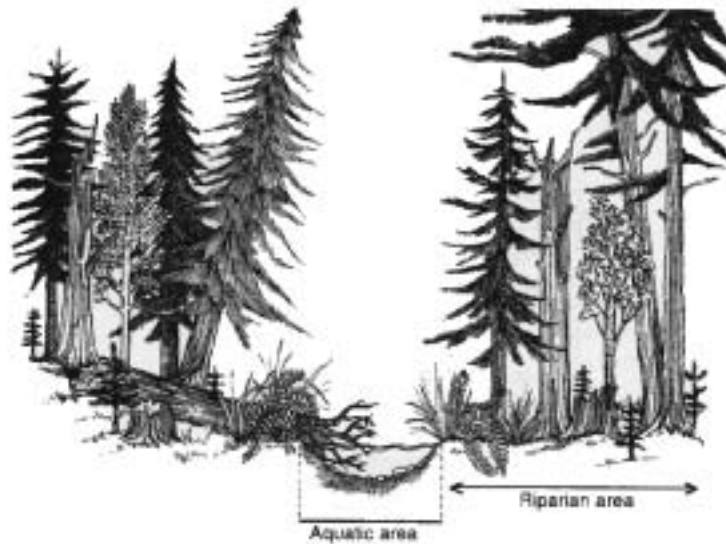


Riparian Management

Fact Sheet



Riparian and aquatic zones typical of western Oregon

Riparian areas are the edges of a river bank or other body of water.

Riparian areas are important as they serve to:

- ◆ Stabilize banks.
- ◆ Capture and filter excess sediment, nutrients, and chemicals from runoff.
- ◆ Recharge the groundwater and aquifers.
- ◆ Provide shade for keeping water cool.
- ◆ Dissipate energy from flooding.
- ◆ Provide food and habitat for fish and other wildlife.

Vegetation normally functions to build and/or protect stream and river banks by catching sediment (eroding soil) and holding soil in place.

Barren riparian areas are prone to erosion, adding sediment to the stream and causing unstable banks.



This brochure was produced by the Coos Soil & Water Conservation District in conjunction with the Coos & Coquille Agricultural Water Quality Management Area Plan and in partnership with the Oregon Department of Agriculture and the Natural Resources Conservation Service.

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Riparian areas are highly variable throughout the Coos and Coquille watersheds. The lower elevation coastal streams have different climates, soils, and natural vegetation than the higher upland areas. Upland management should deter excess soil and nutrients moving into the riparian area and these areas should have adequate vegetation to retain precipitation and facilitate infiltration. Otherwise, excessive run off can overwhelm the riparian area and negate good riparian management.

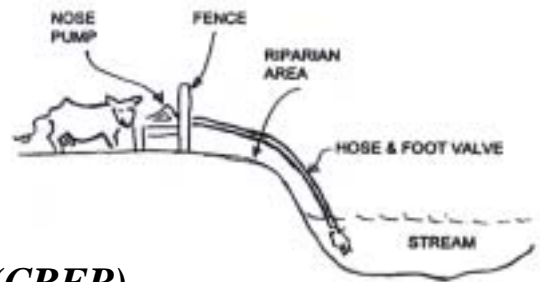
Good management in surrounding areas will provide the opportunity for riparian areas to function properly.

Every water body has riparian areas that have their own needs and potential. Individual riparian site characteristics and potential must be considered when trying to determine how the vegetation should function. Each riparian area may require a different mixture or amount of vegetation to provide the desired condition or function.

Once riparian areas are degraded, it may be very difficult to restore them. It is important to insure that existing riparian vegetation does not deteriorate.

Off stream watering alternatives:

- Nose pumps (Coos SWCD has two available for trial)
- Pipe line and pump
- Spring development
- Water gap



The Conservation Reserve Enhancement Program (CREP)...

is a USDA program that pays participants to remove cropland or marginal pastureland from agricultural production and then plant to trees, shrubs and grass. Contact the FSA or NRCS for more information.

Riparian planting:

The following native trees do well in riparian areas and should be weeded and given supplemental summer watering until they are able to outgrow competitors such as grass and blackberries.

Species	Best planted as	Shade tolerance*	Flood tolerance*
Douglas-fir	seedling	2	1
Western Redcedar	seedling	5	4
Sitka spruce	seedling	5	4
Shore pine	seedling	1	4
Western hemlock	seedling	5	2
Grand fir (white fir)	seedling	4	3
Red alder	seedling	1	3
Oregon ash	seedling	3	5
Bigleaf maple	seedling	4	3
Black cottonwood	cutting	1	4
Willows	cutting	1	5
Red osier dogwood	cutting	2	4



*1 is very intolerant, 5 is very tolerant
(Dr. David Hibbs, OSU Forestry)

A part of managing riparian areas is to understand that several agencies have regulations that may impact the management practices used. It is advisable to seek technical advice, assistance, or education pertaining to riparian management. See back page for a list of contacts.

The following management practices have been recommended by the Coos and Coquille Local Advisory Committee and the Oregon Department of Agriculture as a means to avoid water quality problems.

Positive Management Practices

- ◆ Provide off-channel watering devices as an alternative to in-stream watering.
- ◆ Establish and maintain livestock crossings and watering paths.
- ◆ Encourage riparian vegetation where there is the capability to produce shade.
- ◆ Encourage stream shading on perennial streams in riparian areas. (These goals may change once the TMDLs for the area are completed and shade curves are provided for certain areas by the Department of Environmental Quality.)
- ◆ Manage intermittent stream riparian areas to protect water quality.
- ◆ Control noxious weeds in riparian areas where appropriate.
- ◆ Management of the riparian area should allow for establishment, growth and maintenance of riparian vegetation (trees, shrubs, sedges, and grasses) consistent with the site capability.

Conditions That May Lead To A Water Quality Problem

- ◆ A riparian area which has no riparian or stream side vegetation as a filter for sediment, nutrients, a shade provider, or bank stabilization.
- ◆ More than 50% of the current year's shrub and tree growth removed from established areas and regeneration is not evident, indicated by lack of young plant species consistent with the site capability.

Unacceptable Condition

- ◆ Riparian vegetation conditions that will not function, i.e., provide a filter for nutrients, sediment, protect stream banks, and/or provide shade, as consistent with the site capability.

The following OAR concerning riparian management was developed from the Coos and Coquille Agricultural Water Quality Management Area Plan which was adopted in March 2002.

Oregon Administrative Rule (OAR) 603-095-1540

(5) Riparian Management

(a) Effective three years after rule adoption, management activities in the riparian area will be conducted in a manner that allows the establishment, growth, and maintenance of riparian vegetation consistent with vegetative site capability so as to provide some combination of filtering capacity, sediment trapping, stream bank stability, and shade.

(A) Exemptions shall include stream crossings, access for irrigation equipment and other accepted water dependent agricultural uses when conducted in a manner that minimizes impacts on streambank stability.

Conservation practices addressed here, such as the Positive Management Practices, may be eligible for USDA's Natural Resources Programs, such as the Environmental Quality Incentives Program (EQIP) and the Conservation Reserve Enhancement Program (CREP). These programs provide producers with financial, technical, and educational assistance for implementing conservation practices. Contact NRCS or FSA (below) for more information.

Development of an individual conservation plan for your operation may help you comply with the SB 1010 Coos & Coquille Agricultural Water Quality Management Area Plan. Contact the Coos SWCD Watershed Technical Specialist for assistance.

For More Help Contact...

Coos Soil and Water
Conservation District (SWCD)
382 N. Central Blvd.
Coquille, OR 97423
(541) 396-6879
www: <http://or.nacdnet.org/coosswcd/>

Oregon Dept. of Agriculture
Natural Resources Division
635 Capitol Street NE
Salem, OR 97301
(503) 986-4700

Natural Resources Conservation
Service (NRCS)
382 N Central Blvd
Coquille, OR 97423
(541) 396-2841

Farm Services Agency (FSA)
380 N Central Blvd
Coquille OR 97423
(541) 396-4323

Oregon Dept. of Environmental Quality
340 N Front Street
Coos Bay OR 97420
(541) 269-2721 ext 27

OSU Extension Service
Coos County Office
290 N Central Blvd
Coquille OR 97423
(541) 396-3121 ext 240

Information in this fact sheet was gathered from the Coos and Coquille Agricultural Water Quality Management Plan, the Natural Resources Conservation Service, and the Washington County Soil and Water Conservation District.

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Produced by Bessie Joyce, 2001.

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