



United States Department of Agriculture
Natural Resources Conservation Service

Special Environmental Resource Concerns

Riparian Areas

Clean Air Act
Criteria Pollutants

Clean Air Act
Regional Visibility
Degradation

Clean Water Act

Coastal Zone
Management
Areas

Coral Reefs

Cultural
Resources

Endangered
and Threatened
Species

Environmental
Justice

Essential Fish
Habitat

Floodplain
Management

Invasive
Species

Migratory Birds

Prime and
Unique
Farmlands

Riparian Areas

Wetlands

Wild and Scenic
Rivers

Riparian Areas

NRCS policy (190-GM, Part 411) requires NRCS to integrate riparian area management into all plans and alternatives. Although Federal law does not specifically regulate riparian areas, portions of riparian areas, such as wetlands and other waters of the U.S. may be subject to Federal regulation under provisions of the Food Security Act, Clean Water Act, NEPA, and State, Tribal, and local legislation.

What is it?

Riparian areas are ecotones that occur along streams, rivers, lakes, ponds, and wetlands. They are distinctively different from the surrounding lands because of unique soil and vegetative characteristics that are strongly influenced by free or unbound water in the soil. Riparian ecosystems occupy the transitional area between the terrestrial and aquatic ecosystems. Typical examples include floodplains, stream banks, and lakeshores. Riparian areas may exist within all land uses, such as cropland, hay land, pastureland, rangeland, and forestland.

Why is it important?

Although riparian areas constitute only a fraction of the total land area, they are generally more productive in terms of plant and animal species, diversity, and biomass. Riparian areas are vital components of the ecosystems in which they occur and are extremely important for flood attenuation, hydrologic function (water quantity, quality, and timing), and fish and wildlife diversity. NRCS policy requires conservation plans to maintain or improve water quality/quantity as well as fish and wildlife benefits. It also requires the development of alternatives when the client's objectives conflict with the conservation of these areas.

What can be done about it?

Conservation planning in riparian areas requires special considerations. A resource problem within the riparian area may be the manifestation of upland management decisions. Planners working with riparian areas should consider soils, the present plant community, the site potential, geomorphology of both stream and the watershed, hydrologic regime, fish and wildlife needs, the management of the upland areas of the watershed, and the producer's objectives. For supplemental guidance relating to riparian areas, see *NRCS/RCA Issue Brief 11 (USDA-NRCS, August 1996)*.

Riparian Areas at a Glance

Problems / Indicators - Degraded riparian area	
Causes	Solutions
<ul style="list-style-type: none"> • Improper livestock grazing management • Presence of invasive species • Stream channel modifications • Stream channel aggradation or degradation • Structural modifications (e.g., diversions, ditches, dam, etc.) • Land use/vegetation changes 	<ul style="list-style-type: none"> • Streambank and shoreline protection • Stream crossing • Riparian forest buffers and/or herbaceous cover • Critical area planting • Fence/access control • Prescribed grazing • Integrated pest management

www.nrcs.usda.gov

USDA is an equal opportunity provider and employer.

March 2012