

## RIPARIAN FOREST BUFFERS CONSERVATION PRACTICE 391



### DEFINITION

A riparian forest buffer is an area of trees and/or shrubs located adjacent to and up-gradient from water bodies.

### PURPOSE

Riparian forest buffers create shade which lowers water temperatures and improves habitat for aquatic animals. They also filter sediment, fertilizer, pesticides, and other pollutants that may adversely impact the water body.

### CONSIDERATIONS BEFORE PLANTING A RIPARIAN FOREST BUFFER

- Identify the primary purpose of the practice (shade for lower water temperatures, debris for aquatic habitat, filtering sediment).
- The season of use will determine whether cool season plants, warm season plants, or a mix of both will provide adequate vegetative cover.
- Identify environmental factors affecting installation (soils, topography, precipitation, seasonal temperature, and shade tolerance of species).
- Locate available adapted plant species.
- Cropland and rangeland use affects plant selection and management.
- Select appropriate plants for zones 1,2, and 3 (see Zone Characteristics).

## MANAGEMENT

Trees in the buffer as well as adjacent forested area are periodically maintained and harvested (forest stand improvement and forest harvest trails and landings). As the buffer matures, periodic harvesting of some of the trees becomes

an important activity for maintaining plant health and buffer function.

Specifications should be prepared in accordance with the local NRCS Field Office Technical Guide and the Riparian Forest buffer practice standard 391.

The following table is a partial list of many suitable plants.

COMMON NAME	DECIDUOUS/ EVERGREEN	ZONE	COMMON NAME	DECIDUOUS/ EVERGREEN	ZONE
<b>Trees and Shrubs</b>			<b>Trees and Shrubs</b>		
Buttonbush	D	1,2	Wild Plum	D	2
Cottonwood	D	2	Bur Oak	D	2
Black Willow	D	1,2	Elderberry	D	1,2
Dogwood	D	2	Desert Willow	D	2
Amer. Beautyberry	D	1,2	Sawtooth Oak	D	2
Smooth Sumac	D	2	Purpleosier Willow*	D	1
Sweetbay	D	1,2	Pecan	D	2
<b>Grasses</b>	Growing Season		Dwarf Willow	D	1
Switchgrass	W	3	Cypress	D	1
Eastern gamagrass	W	3	Black gum	D	1
Bermudagrass*	W	3	Persimmon	D	2
Big Bluestem	W	3	Loblolly pine	E	2
Canada Wildrye	C		Yaupon	E	2
Virginia Wildrye	C		Green Ash	D	2
Texas Bluegrass	C		Hackberry	D	2

\* Denotes introduced species    W= warm season    C=cool season    D=deciduous    E=evergreen

**Zone Characteristics:** (See NRCS Riparian Forest Buffer Job Sheet 391 for further explanation of Zone Characteristics)

- 1= little or no tree harvesting; waterloving or water tolerant species
- 2= managed forest of fast growing introduced or native species
- 3= herbaceous or grass filter strip

Forbs adapted for Zone 3 are found in the standards and jobsheets for Filter Strips, Conservation Practice #393.

Additional information about Riparian Forest Buffer practice standard 391 relating to species varieties, adaptability, installation, and management of these plants can be obtained from your local Natural Resources Conservation Service Field Office.



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