

## 2012 WHIP Riparian Forest Buffer (391) Requirements

**Eligible lands:** Private agricultural land, private nonindustrial forestland, and tribal lands where there is an insufficient riparian forest buffer to protect streams and/or waterbodies from surface runoff. Additionally, this practice must be applied immediately adjacent to streams having perennial flow, seasonal streams, sinkholes, karst areas, other ground water recharge areas, wetlands, ponds, and lakes.

The practice purpose is to remove nutrients, sediment, and other pollutants from surface runoff by deposition, absorption, plant uptake, denitrification, and other processes, thereby improving water quality for both aquatic and terrestrial wildlife.

### **WHIP Riparian Forest Buffer Practice Requirements:**

1. Soil test required for all permanent herbaceous plants. (University of Tennessee or any certified NAPTP Lab). Areas of contrasting soils, problem spots or field portions significantly different should be sampled separately, provided the area can be fertilized separately. Examples: bottomland and upland. See University of Tennessee guidance ([UT PB1061](#)) for soil sampling information. For NWSG mixtures, if pH is 5.0 or higher apply no lime; if lower apply 2 tons per acre. Do not apply N at planting.
2. **Lime and fertilizer not required for trees, shrubs, or temporary cover unless legumes are used.**
3. Planted areas shall not be grazed by domestic livestock for the life of the practice.
4. Herbicides are to be used in accordance with the label for tame grass eradication or weeds or when the no-till planting method is used. If tame grass is present, chemical eradication of these grasses in entire buffer area shall be required as part of site preparation for tree planting. Tame grasses are any sod forming grasses including tall fescue and bermudagrass.
5. For fields with existing wooded buffer between the water body and field, the following applies:
  - If the existing wooded stream buffer is 30 percent or more of the geomorphic floodplain, or a minimum of 150 feet (average width), cost share is **NOT AUTHORIZED**.
  - If the existing wooded stream buffer is less than 30 percent of the geomorphic floodplain, cost share **IS AUTHORIZED** to extend the existing wooded buffer up to 30 percent of the geomorphic floodplain, or a maximum of 150 feet (average width), whichever is less.
  - If the water body or sensitive area has an existing wooded buffer of 150 feet or wider, cost share is **NOT AUTHORIZED**. Extending an existing buffer to 150 feet **IS AUTHORIZED**.
6. Riparian forest buffers on streams must be a minimum of 30 percent of the geomorphic flood plain or 100 feet, whichever is less. It cannot be less than 35 feet, or wider than a maximum of 150 feet (average width). These stated widths refer to only one side of a stream. For water bodies or sensitive areas, the minimum average width is 35 feet, up to a maximum 150 feet.
7. The riparian forest buffer may consist of all three zones. Zones 1 and 2 are required, and combined must be established to trees and/or shrubs. Zone 3 is optional and must be between 15 and 30 feet wide. **Zone three must be established to a native warm season grass/forb mix.**
8. **At least three (3) species of trees and/or shrubs shall be established, with at least one species a hard mast producer.**
9. Natural regeneration of herbaceous vegetation in Zone three is an acceptable cover on capability classes I and II soils, and only tame grass or weed eradication and temporary cover, if needed, may be cost shared.
10. Prescribed Burning may be used as a component for site preparation.

Planting recommendations for **Riparian Forest Buffers** are given in the table below. NRCS area biologist may approve alternative species and seeding mixtures.

Temporary Cover – Winter		
Species	Amt/Ac	Seeding Dates
Crimson Clover	20.0 lbs	Aug 1 – Oct 1
Winter Wheat	1.5 – 2 bu	Sept 1 – Oct 20
Cereal Rye	1.5 – 2 bu	Sept 1 – Oct 20
Wheat & Crimson Clover	1 bu; 10 lbs	Sept 1 – Oct 20
Rye & Crimson Clover	1 bu; 10 lbs	Sept 1 – Oct 20
Temporary Cover – Summer		
Species	Amt/ac	Seeding Dates
Millet, White Proso	20.0 lbs	May 1 – July 1
Millet, Foxtail	20.0 lbs	May 1 – July 1

Buckwheat	30.0 lbs	May 1 – Aug 1
<b>Zone 3 Warm Season Native Mix - Tall Mix for Deer/Turkey</b>		
Species	Amt/ac	Seeding Dates
Big Bluestem (PLS)*	1.5 lbs	Dec 1 – July 1
Indiangrass(PLS)*	1.0 lb	
Little Bluestem(PLS)*	1.5 lbs	
and either: Kobe/Korean Lespedeza	5.0 lbs	
or a single or mix of: 1) Illinois Bundleflower 2) Partridge Pea 3) Blackeyed susan 4) Purple coneflower	2.0 lbs	
<b>Zone 3 Warm Season Native Mix - Short Grass Mix for Quail/Rabbit</b>		
Species	Amt/ac	Seeding Dates
Little Bluestem(PLS)*	3.0 lbs	Dec 1 – July 1
Indiangrass (PLS)*	0.5 lb	
Sideoats Grama (PLS)*	1.0 lb	
and either: Kobe/Korean Lespedeza	5.0 lbs	
or a single or mix of: 1) Illinois Bundleflower 2) Partridge Pea 3) Blackeyed susan 4) Purple coneflower	2.0 lbs	
<b>Broadcast Planting Mix</b>		
Species	Amt/ac	Seeding Dates
Switchgrass (PLS)*	8.0 lbs	Apr 1 – July 1
Kobe/Korean Lespedeza	5.0 lbs	
<b>Single Species Planting</b>		
Species	Amt/ac	Seeding Dates
Eastern Gamagrass (PLS)*	10.0 lbs	Dec 1 – July 1
<b>Eligible Trees (1 yr. old bare root seedlings)</b>		
Species	Amt/ac	Seeding Dates
Yellow Poplar	302 (12'x12' spacing)	Nov 1 – Apr 1
Hickory		
Pecan, native sweet		
Blackgum		
Persimmon		
Cherrybark Oak		
Willow Oak		
Overcup Oak		
Nutall Oak		
Shumard Oak		
Black Oak		
Pin Oak		
Water Oak		
Swamp Chestnut Oak		
Swamp White Oak		
Washington Hawthorne		
Flowering Dogwood		
Crabapple, southern		
Bald cypress		

<b>Eligible Shrubs (1 yr. old bare root seedlings)</b>		
Species	Amt/ac	Seeding Dates
Spicebush	680 plants (8'x8' spacing)	Nov 1 - Apr 1
Indigobush		
Wild Plum		
Chickasaw Plum		
Buttonbush		
Sweet Shrub		
Elderberry		
Rhododendron (East TN only)		
Laurel (East TN only)		
Virginia Sweetspire		
Wild Hydrangea		
Hazel Alder		
Silky Dogwood		

\* PLS = Pure Live Seed