

## 2009 WHIP Wetland Enhancement/Creation/Restoration (657) Requirements

**Eligible lands:** Private agricultural land, private nonindustrial forestland, and tribal lands needing wetland enhancement or additional wetland habitat for waterfowl, wading birds, other aquatic based wildlife, and neotropical songbirds.

### **I. WHIP Wetland Enhancement/Creation/Restoration Practice Requirements:**

1. This practice consists of hydrology restoration or enhancement on *prior converted (PC) croplands* or to create wetland conditions on capability classes IIw or IIIw soils that are *non-hyric*.
2. Tree planting is restricted to wetness limited, non-hyric soils in capability classes IIw or IIIw.
3. Trees to be planted must be a mixture of at least three (3) species. Tree species selected must be adapted to the site, and when identified as an oak site, shall consist of at least two oak species.
4. Herbaceous plant materials are only allowed to establish cover on constructed dikes and spillways.
5. Temporary cover is allowed only for constructed dikes.
6. If needed, mulch may be applied as recommended by FOTG conservation practice standard #342.
7. Eligible components include dike construction, tile breaks, and water control structures.
8. A certified wetland determination must be completed prior to approval of the WHIP contract.
9. Prior converted cropland areas may only be managed as moist soil management units. No cropping is allowed. No more than 25 percent of the impoundment area may be planted to an annual grain (at participant's expense) for flooding each year.
10. Impoundment areas may be disked to control woody invasion, but not be disked more than one year out of four.
11. The maximum pool depth of the impoundment area is three feet (3') below the natural ground with the exception of borrow ditches. Borrow ditches may not constitute more than five (5) percent of the impoundment.
12. All water control structures must be closed by October 1 each year, and the project site cannot be drained until after March 1.
13. **All necessary permits shall be obtained by the participant.** Permits needed may include those issued by the Tennessee Department of Environment and Conservation – Water Pollution Control (TDEC – WPC), Tennessee Valley Authority (TVA), and/or US Army Corps of Engineers (USACOE).
14. Soil test required for all *permanent herbaceous plants*. (University of Tennessee Lab or A and L Labs using UT testing methods and recommendations). For NWSG, if pH is 5.5 or higher apply no lime; if lower apply 2 tons per acre, no nitrogen at planting, apply P2O5 and K2O as recommended in soil sample all other requirements must be met.
15. Planted areas shall not be grazed by domestic livestock for the life of the agreement.

Planting recommendations for **Streambank and Shoreline Protection** are given in the table below:

Temporary Cover – Winter		
Species	Amt/Ac	Seeding Dates
Winter Wheat (lbs)	1.5 – 2 bu	Sept 1 – Oct 20
Cereal Rye (lbs)	1.5 – 2 bu	Sept 1 – Oct 20
Crimson Clover	20.0	Aug – Oct 1
Wheat and Crimson Clover	1 bu; 10 lbs	Sept 1 – Oct 20
Rye and Crimson Clover	1 bu; 10 lbs	Sept 1 – Oct 20
Temporary Cover – Summer		
Species	Amt/ac	Seeding Dates
Millet, Browntop (lb)	25.0 – 40.0	May 1 – July 1
Sudangrass (lb)	30.0	Apr 1 – July 1
Warm Season Native Grass		
Species	Amt/ac	Seeding Dates
Switchgrass**	15.0	Apr 1 – July 1
Virginia Wildrye**	20.0	Aug 15 – Oct 15
Eligible Trees		
Species	Amt/ac	Seeding Dates
Yellow Poplar	12 x 12 (302/ac)	Nov 1 – Apr 1
White Ash	12 x 12 (302/ac)	Nov 1 – Apr 1
Green Ash	12 x 12 (302/ac)	Nov 1 – Apr 1
Hickory	12 x 12 (302/ac)	Nov 1 – Apr 1
Pecan	12 x 12 (302/ac)	Nov 1 – Apr 1
Black Walnut	12 x 12 (302/ac)	Nov 1 – Apr 1
Blackgum	12 x 12 (302/ac)	Nov 1 – Apr 1
Persimmon	12 x 12 (302/ac)	Nov 1 – Apr 1
Cherrybark Oak	12 x 12 (302/ac)	Nov 1 – Apr 1
Willow Oak	12 x 12 (302/ac)	Nov 1 – Apr 1
Sawtooth Oak	12 x 12 (302/ac)	Nov 1 – Apr 1
Nutall Oak	12 x 12 (302/ac)	Nov 1 – Apr 1
Shumard Oak	12 x 12 (302/ac)	Nov 1 – Apr 1
Black Oak	12 x 12 (302/ac)	Nov 1 – Apr 1
Pin Oak	12 x 12 (302/ac)	Nov 1 – Apr 1
Water Oak	12 x 12 (302/ac)	Nov 1 – Apr 1
Swamp Chestnut Oak	12 x 12 (302/ac)	Nov 1 – Apr 1
Swamp White Oak	12 x 12 (302/ac)	Nov 1 – Apr 1
Eligible Shrubs		
Species	Amt/ac	Seeding Dates
Bankers Willow	4,840/ac (3'x3" spacing)	Nov 1 – Apr 1
Coastal Plain Willow	4,840/ac (3'x3" spacing)	Nov 1 – Apr 1
Buttonbush	4,840/ac (3'x3" spacing)	Nov 1 – Apr 1
Gray Dogwood	680 plants (8'x8' spacing)	Nov 1 – Apr 1
Silky Dogwood	680 plants (8'x8' spacing)	Nov 1 – Apr 1
Eligible Cuttings (from local sources/collected on site)		
Black Willow	4,840/ac (3'x3" spacing)	Dec 1 – Mar 1
Coastal Plain Willow	4,840/ac (3'x3" spacing)	Dec 1 – Mar 1
Buttonbush	4,840/ac (3'x3" spacing)	Dec 1 – Mar 1
Silky Dogwood	4,840/ac (3'x3" spacing)	Dec 1 – Mar 1
Gray Dogwood	4,840/ac (3'x3" spacing)	Dec 1 – Mar 1
Eastern Cottonwood	4,840/ac (3'x3" spacing)	Dec 1 – Mar 1
American Elder	4,840/ac (3'x3" spacing)	Dec 1 – Mar 1

\*\* PLS = Pure Live Seed