



# CREP Practice CP22

Natural Resources Conservation Service - Indiana – March 2016 (ver. 1.0)

## Riparian Forest Buffer Planting Program Job Sheet



### PURPOSE

Riparian forest buffers are used to reduce soil erosion, provide wildlife habitat, reduce water pollution, and increase carbon storage.

### POLICY

To be eligible for the Conservation Reserve Enhancement Program (CREP), the acreage offered must be land that meets eligibility requirements as determined by the Farm Service Agency (FSA). If trees are currently present, the site may be eligible if it is determined they are not functioning as a Riparian Forest Buffer, and additional trees will be planted. Riparian Forest Buffers installed on Cropland are eligible adjacent and parallel to streams, sinkholes and karst areas, wetlands, and permanent bodies of water such as lakes/ponds. On Marginal Pastureland, Riparian Forest Buffers are only eligible along streams, permanent bodies of water, sinkholes and karst areas.

Riparian Forest Buffers will be installed according to the Riparian Forest Buffer (391) in the local Natural Resources Conservation Service (NRCS) Field Office Technical Guide (FOTG) **except the minimum and maximum width will be according to CREP policy.**

#### Buffer Width

The minimum enrolled width shall be 35 feet wide and the maximum average enrolled width shall be 180 feet wide. NOTE: An average maximum width of 300 feet is allowed when the area to be enrolled involves a predominance of alluvial soils.

Riparian forest buffers will consist of at least 2 zones, and may require a 3rd zone if concentrated flow conditions are present.

**Zone 1** will consist of trees/shrubs and extend a minimum of 15 feet from the edge of the body of water; this zone creates a stable ecosystem adjacent to the body of water. **Zone 2** will also consist of trees/shrubs and extend a minimum of 20 feet from the edge of zone 1; this zone is important for sequestering nutrients, pesticides, sediment, etc. **Zone 3** is only eligible for concentrated flow conditions, and will be planted to grasses and forbs and will be a maximum of 20 feet from the edge of zone 2; this zone provides sediment and nutrient filtering, and converts concentrated flow to sheet flow.

The entire width of the riparian forest buffer must be established to trees and/or shrubs, except the outer 20 feet may be planted to grasses and forbs if necessary for concentrated flow conditions. Permanent fencing and water facilities for the purpose of excluding livestock may be eligible for cost share from FSA.

### PLANTING

Site-specific requirements are listed on the attached Specifications Sheet. Any changes to these specifications should be approved by NRCS.

All acreage must be planted within 12 months of contract approval to remain in compliance. If circumstances beyond the landowner's control prohibit the planting within the first 12 months, the local FSA County Committee may approve an extension to the next planting season.

It is very important to plant the vegetation into a weed-free seedbed. Weed control efforts should begin prior to planting, and may require multiple applications in both the fall and spring prior to planting. Use herbicides or tillage (however do not use spring tillage for tree planting) to eliminate competing vegetation. If necessary for erosion control, seed a temporary cover. Eliminate the temporary vegetation at planting time with tillage or herbicides.

Bare rooted stock (seedlings) shall not be planted when the soil is frozen or dry and will be planted with the root collars approximately at or slightly below the ground line.

Bare rooted stock shall be planted in the spring after the ground thaws, but no later than June 1. It is

important that tree species are randomly planted throughout the site and not planted with like species unless otherwise indicated in the planting plan.

**Weed Control During Establishment Period:** For information on herbicide controls, contact a local consultant or Purdue Extension Specialist. Always apply herbicides according to labeled directions.

**Weed Control After Establishment Period:** Weed control is also important to ensure survival and maximum growth of the trees after they are planted. Nine (9) ft<sup>2</sup> around each tree should remain weed-free to maximize tree growth. Mowing is not recommended for weed control for trees.

CREP cost share is authorized for one weed control application within 24 months after planting a riparian forest buffer.

## OPERATION AND MAINTENANCE

Noxious weeds and other undesirable plants, insects, and pests shall be controlled, including such maintenance as necessary to avoid detrimental effects to the surrounding land.

**After** the Final Status Review or 3 years (whichever comes first), maintain the planting according to your CREP conservation plan. Maintenance activities are allowed only on a spot basis and only if necessary to maintain stand health, maintain stand diversity, or control pests that will damage the CREP cover or adjacent lands. MOWING and other maintenance activities are not authorized between April 1 to August 1 to protect ground-nesting wildlife (i.e. - the Primary Nesting and Brood-Rearing season). If maintenance activities are needed during these times, the FSA County Committee **must** approve the maintenance activity **prior to** the activity occurring.

**Mowing for generic weed control or for cosmetic purposes is prohibited.**

Exclude all acres from haying and grazing year round, unless authorized. Fences may need to be constructed and maintained to exclude livestock throughout the entire year.

The contract area cannot be used for field roads or other uses that will damage or destroy the cover.

Check survivability of planted species after 3 years to insure that the desired stocking rate for the site is present, usually 70% survival of the planted rate. Additional planting will be completed if it is determined that additional natural regeneration will not be sufficient to colonize the site within an acceptable time frame (usually 5 years) so that 300 acceptable woody plants per acre are established.

**Table 1. Common Species**

Species	Soil Drainage <sup>1</sup>	Flood Tolerance <sup>2</sup>
<b>Tree Species</b>		
Baldcypress <sup>3</sup>	VPD-WD	Very High
Black Cherry	MWD-WD	Low
Black Gum	PD-WD	Medium
Black Walnut	MWD-WD	Medium
Cottonwood	PD-ED	High
Maple, Red	VPD-WD	High
Maple, Silver	VPD-WD	High
Oak, Bur	PD-ED	High
Oak, Cherrybark <sup>4</sup>	SPD-WD	Medium
Oak, Overcup <sup>4</sup>	VPD-WD	Very High
Oak, Pin	VPD-WD	High
Oak, Red	MWD-WD	Low
Oak, Shumard	SPD-WD	Medium
Oak, Swamp Chestnut	SPD-WD	Medium
Oak, Swamp White	VPD-WD	Medium
Oak, White	MWD-WD	Low
Pecan <sup>3</sup>	SPD-WD	High
Persimmon	MWD-WD	Medium
River Birch	VPD-WD	Medium
Sweetgum <sup>4</sup>	PD-WD	Medium
Shellbark Hickory	VPD-WD	Medium
Sycamore	PD-WD	High
Tulip Tree	MWD-WD	Low
<b>Shrub and Small Tree Species</b>		
America Plum	MWD-ED	Low
Black Chokeberry	SPD-WD	Low
Blackhaw	MWD-WD	Low
Buttonbush	VPD-WD	Very High
Elderberry	VPD-WD	High
Pawpaw	SPD-WD	Low
Dogwood, Red Osier	VPD-WD	High
Dogwood, Silky	VPD-WD	High
Hazelnut	MWD-WD	Low
Highbush Cranberry	VPD-WD	Low
Ninebark	VPD-WD	Low
Smooth Sumac	MWD-ED	Low
Washington Hawthorn	SPD-ED	Low

<sup>1</sup> VPD=very poorly drained, PD=poorly drained, SPD=somewhat poorly drained, MWD=moderately well drained, WD=well drained, ED=excessively drained

<sup>2</sup> Relative flood tolerance from IN FOTG 391

<sup>3</sup> Recommended only in Central and Southern Indiana as documented in eFOTG Sect. II

<sup>4</sup> Recommended only in Southern Indiana as documented in eFOTG Sect. II

**MID-CONTRACT MANAGEMENT**

Mid-Contract Management (MCM) is required on this practice. The entire acreage can be managed in a single year. For maximum habitat value, disturb no more than 1/3 of the contract acreage in any given year.

MCM activities will be avoided on environmentally sensitive areas including:

- a) Concentrated flow areas,
- b) Critical areas,
- c) Within the first 20 feet of a practice that borders a water resource to avoid water quality resource concerns, and
- d) Other areas where gully erosion is likely.

Environmentally sensitive areas will be marked on the plan map to ensure Mid-Contract Management activities are avoided on these areas.

Areas devoted to trees have the following options:

- Inner Seedling Planting (re-enrollments)
- Inter-seeding forbs/legumes/pollinator habitat
- Follow-up Weed Control
- Pruning
- Thinning (re-enrollments)

MCM activities operations will not be performed from April 1 through August 1 for contracts starting in 2008, to protect the primary nesting period for grassland bird species. It is also recommended, but is not required, to delay MCM activities until after August 15 to reduce the chance of harming fledgling birds and other young wildlife.

CREP CP22 SPECIFICATIONS SHEET				
<b>Landowner:</b>		<b>County:</b>		
<b>Farm:</b>	<b>Tract:</b>	<b>Field(s):</b>	<b>Acres:</b>	<b>Date:</b>
<input type="checkbox"/> <b>Standard Planting Plan (Random)</b>				
<b>LAYOUT</b>	<b>Buffer</b>		<b>Buffer</b>	
<b>Soil Type(s)</b>				
<b>Buffer Length</b>				
<b>Buffer Width</b>				
<b>Plant Spacing</b>				
<b>Plants/Acre</b>				
<b>Tree/Shrub Area (ac.)</b>				
<b>Total Plant Needed</b>				
	<b>Species</b>	<b>Number</b>	<b>Species</b>	<b>Number</b>
<b>Planned Species</b> T=Tree Species S= Shrub Species				
	<b>Total</b>		<b>Total</b>	
<input type="checkbox"/> <b>Zone 3 (Grass) is needed for erosion control -</b>				
<input type="checkbox"/> <b>See the attached information for seeding specifications -</b>				

<b>BEFORE PLANTING in Year:</b>	
<input type="checkbox"/> Permanent Fence:	: _____ ft = <b>(see attached design)</b>
<input type="checkbox"/> Water Source:	<input type="checkbox"/> Pipeline: _____ ft = <b>(see design)</b>
<input type="checkbox"/> Water Facilities(s):	<input type="checkbox"/> Livestock Crossing: <b>(see design)</b>
<input type="checkbox"/> Herbicide <sub>1</sub> <b>(per label)</b> :	Dates = _____
<input type="checkbox"/> Herbicide <sub>2</sub> <b>(per label)</b> :	Dates = _____
<input type="checkbox"/> Tillage:	Dates = _____
<input type="checkbox"/> Alsike Clover (if desired): 2 lbs./acre	Dates: _____
<input type="checkbox"/> Structures, Grading, Leveling, Filling - (see attached design)	
<input type="checkbox"/> Other: _____	

<b>Planting Method in Year _____</b>	
<input type="checkbox"/> Tree Planting Method:	Dates: _____
<input type="checkbox"/> Herbicide <sub>1</sub> (per label):	Dates: _____
<input type="checkbox"/> Herbicide <sub>2</sub> (per label):	Dates: _____
<input type="checkbox"/> Other: _____	

<b>Post Planting Maintenance and Weed Control</b>	
<input type="checkbox"/> Maintain a 3-ft. weed & grass-free radius for up to 3 years around each tree for optimal growth	
<input type="checkbox"/> Herbicide <sub>1</sub> (per label):	Dates: _____
<input type="checkbox"/> Herbicide <sub>2</sub> (per label):	Dates: _____
<input type="checkbox"/> Other (corrective pruning, replacement of dead trees etc.): _____	

NOTE: after the Final Status Review has been issued, all maintenance activities (MOWING is not allowed) will not occur between April 1 to August 1, and will occur on a "spot" basis only, unless prior approval is granted by the County Committee.

<b>MID-CONTRACT MANAGEMENT - STARTING IN YEAR:</b>
<input type="checkbox"/> see the attached Mid Contract Management Job Sheet for details
For CRP Mid-contract Management job sheets see: <a href="http://www.in.nrcs.usda.gov/programs/CRP/crphomepage.html">http://www.in.nrcs.usda.gov/programs/CRP/crphomepage.html</a>