United States Department of Agriculture

CRP/CREP Practice CP31

Natural Resources Conservation Service - Indiana – March 2016 (ver. 1.1)

BOTTOMLAND TIMBER ESTABLISHMENT ON WETLANDS

PURPOSE

Bottomland Timber Establishment on Wetlands is used to establish hardwood trees that will control erosion, reduce nutrient and pesticide losses, promote carbon sequestration, and restore and enhance wetlands to provide wildlife habitat.

CRP POLICY

To be eligible for the Conservation Reserve Program (CRP) or Conservation Reserve Enhancement Program (CREP), the acreage offered must be land that meets eligibility requirements as determined by the Farm Service Agency (FSA).

Bottomland Timber Established on Wetlands is eligible on cropland areas that are located within the 100 year floodplain of a river or stream. Technical responsibility for this practice is assigned to the Indiana Department of Natural Resources (IDNR), Division of Forestry or Technical Service Provider (TSP).

This practice will be installed according to Tree/Shrub Establishment (612) Standard in the local Natural Resources Conservation Service (NRCS) Field Office Technical Guide (FOTG)**.** No more than 25% of site may be planted to appropriate softwood species.

A minimum of three (3) different species of mast producing hardwood trees will be planted and the entire area must be established to trees.

Site-specific requirements will be provided on a site specific plan developed by an IDNR, Division of Forestry, District Forester or TSP. Any changes to these specifications should be approved by the IDNR, Division of Forestry, District Forester.

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.

WEED CONTROL

It is important to plant tree seedlings into a weed free area to help ensure survival and maximum growth of the trees. Use herbicides or tillage to eliminate competing vegetation as recommended in a site specific plan. Weed control efforts should begin prior to planting and may require multiple applications in both the fall and the spring prior to planting and during tree planting. Cost share for weed control is available as part of the tree establishment expenses. Mowing is usually not recommended for weed control because it encourages grass competition and mowing equipment can damage tree seedlings. However in some specific instances it may be recommended in a site specific plan.

For information on herbicide controls, contact a local consultant or Purdue Extension Specialist. Always apply herbicides according to labeled directions.

If necessary for weed suppression or erosion control, seed a temporary cover of native *Elymus* species (Wildrye) adapted to the site.

Cost share is authorized for an additional weed control application within 24 months after planting bottomland timber on wetlands.

PLANTING

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

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

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 CRP 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 CRP 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.

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.

Table 1. Species Site Tolerance Factors

Species	Soil Drainage[1]	Flood Tolerance[2]
Tree Species		
Baldcypress[3]	VPD-WD	Tolerant
Black Gum	PD-WD	Somewhat
Black Walnut	MWD-WD	Intolerant
Maple, Red	VPD-WD	Somewhat
Maple, Silver	VPD-WD	Tolerant
Oak, Bur	PD-ED	Somewhat
Oak, Cherrybark [4]	SPD-WD	Somewhat
Oak, Overcup [4]	VPD-WD	Tolerant
Oak, Pin	VPD-WD	Somewhat
Oak, Shumard	SPD-WD	Somewhat
Oak, Swamp Chestnut	SPD-WD	Somewhat
Oak, Swamp White	VPD-WD	Somewhat
Pecan[3]	SPD-WD	Tolerant
Persimmon	MWD-WD	Somewhat
River Birch	VPD-WD	Somewhat
Sweetgum[4]	PD-WD	Tolerant
Shellbark Hickory	VPD-WD	Somewhat
Sycamore	PD-WD	Tolerant
Shrub and Small Tree Species		
Black Chokeberry	SPD-WD	Somewhat
Buttonbush	VPD-WD	Tolerant
Elderberry	VPD-WD	Tolerant
Dogwood, Gray	VPD-WD	Tolerant
Dogwood, Silky	VPD-WD	Tolerant
Highbush Cranberry	VPD-WD	Tolerant
Ninebark	VPD-WD	Somewhat

[1] VPD=very poorly drained, PD=poorly drained, SPD=somewhat poorly drained, MWD=moderately well drained, WD=well drained, ED=excessively drained

[2] Flooding tolerance during the growing season for established trees: Tolerant (T)-can withstand inundation for more than30 days, Somewhat Tolerant (ST)-can survive saturated soils and inundation for up to 30 days, Intolerant (I)-able to survive only 1 to 5 days of inundation Flood tolerance from IN NRCS, Forestry Technical Note, "Tree Planting in Flood plains"

[3] Recommended only in Central and Southern Indiana as documented in eFOTG Sect. II

[4] Recommended only in Southern Indiana as documented in eFOTG Sect. II