Wetland Restoration–Non-Floodplain

Michigan CONSERVATION RESERVE ENHANCEMENT PROGRAM CREP – CP23A

Natural Resources Conservation Service (NRCS) June 2014

Photo courtesy of USDA NRCS

WHAT IS A WETLAND RESTORATION – NON-FLOODPLAIN?

Wetland Restorations are applicable in areas that used to be wetlands, but have been converted to agricultural uses. Wetlands in Michigan include open water, marsh, meadow, shrub and forested habitats. An important component of wetland restorations is to also restore the upland areas surrounding the wetland to provide a "buffer". Restoring wetlands and the adjacent upland buffers provides soil erosion protection and water quality enhancement, as well as habitat for a variety of wildlife, especially waterfowl, upland game birds and songbirds.

ELIGIBILITY

To be eligible for this practice with the Conservation Reserve Enhancement Program, the land must be located in the Saginaw Bay, River Raisin, Western Lake Erie, or Lake Macatawa Watersheds, and the land must have a cropping history (4 out of 6 years from 2008 - 2014). Further, the site must have hydric (wetland) soils that are **NOT** located in the 100-year floodplain of a permanent river/stream and are technically and economically suitable for wetland restoration.

CREP POLICY

For CREP, the hydrology of the site must be restored. The level of hydrology restoration allowed will be based on the best available evidence of what the **original** hydrology of the site was like **prior to** alteration. Vegetation in the wetland area will either be established or allowed to re-vegetate naturally. Neither Wetland Enhancements nor Wetland Creations are eligible under CREP CP23A.

An upland buffer at least 50 ft. wide, and up to 4 times the wetland acres must also be enrolled and planted to **NATIVE Grasses and Wildflowers** (Big &/or Little Bluestem, Indiangrass, Canada Wild Rye, Switchgrass, etc. – consult the **"Michigan CREP Eligible Wildflowers List"** for eligible wildflowers). Berms, if needed, may be seeded to a CREP Native Grass mix at 2X the rate (without wildflowers). If needed for winter cover, up to **20%** of the buffer area may be planted to switchgrass. Plus, up to **20 ft.** of the perimeter of the buffer may be planted to a CREP-eligible non-native grass/legume mix to serve as a firebreak.

CREP Wetland Restorations will be established according to the Wetland Restoration (657) standard in the local Field Office Technical Guide (FOTG). All construction and seeding must be completed within 12 months of contract effective date of CRP-1 to remain in compliance. If circumstances beyond the landowner's control prohibit completion within the first 12 months, the local FSA County Committee may approve an extension to the next construction and planting season.

RESTORATION OF HYDROLOGY

The hydrology of the site should be completed prior to establishing the vegetation in the buffer.

If surface or sub-surface drainage exists, these must be "plugged" according to the Wetland Restoration (657) standard in the FOTG. Digging, dredging, dug-outs, dikes, etc. are not authorized unless it is documented that the wetland was altered by grading, filling, etc. and these activities are needed to restore the original hydrology. Wetland Enhancements and Wetland Creations are not authorized for CREP CP23A.

CONSTRUCTION

Permits: Federal, State, or Local regulations may apply to private landowners conducting construction in wetland areas. All necessary permits shall be acquired by the landowner before construction begins.

PLANTING

It is very important to plant grasses into a weed-free, firm seedbed. If the field is currently in cropland, weed control efforts should begin prior to planting. Use herbicide or tillage to eliminate competing vegetation. If

necessary for erosion control, seed a temporary cover. Eliminate the temporary vegetation at planting time with tillage or herbicides.

If the field is currently in sod, begin weed control efforts using broad-spectrum herbicides in the fall. Apply herbicides again after the spring green-up prior to planting (if possible, a prescribed burn prior to spring green up to remove the dead litter from the fall treatment will provide best results).

Contact your local Michigan State University (MSU) Extension Agent for specific herbicides to use. **Apply all herbicides according to the label**.

Plant the vegetation according to the attached plan/design sheet. Apply lime and fertilizer according to needs determined by a soil test and MSU recommendations.

Use a drill designed for the seed to be planted, or the seed may be broadcast or aerial seeded. For aerial or broadcast seeding, the seedbed must be worked up and firmed with a cultipacker or similar equipment. A carrier such as potash may also be needed to spread the seed evenly. **After aerial or broadcast seeding, the site must be rolled or cultipacked to ensure proper seed to soil contact.** Regardless of the method, plant the seeds **no deeper than** 1/8" – 1/4".

Mow, burn, or apply herbicides as needed to control unwanted vegetation until a ***Final*** Status Review is issued. Mow when competing weeds are taller than the planted vegetation, and at a height above the planted vegetation. **Native grasses will not be mowed lower than 12", and non-native grasses lower than 4"**.

For additional information on establishment and maintenance of grasses, see the following NRCS – Michigan Conservation Sheets (available at http://www.nrcs.usda.gov/technical/efotg/ in Section IV): "Establishing Cool Season Grasses and Legumes for Conservation Cover", "Establishing Prairie Grass Buffer Strips", "Prescribed Burning", &/or others.

For additional information on herbicide controls, contact your local MSU Extension Agent. **Always apply herbicides according to labeled directions.**

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. Some of the most common pests that need controlled on CRP acreage include Autumn Olive, Multiflora Rose, Spotted Knapweed, Quackgrass, etc.

After the Final Status Review, 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. Burning must be in accordance with a prescribed burn plan. See the Conservation Information Sheet "Prescribed Burning" for further information. **MOWING** is only authorized between Aug 1st and Aug 20th to protect ground-nesting wildlife and to allow re-growth for winter cover. Other maintenance activities are only allowed between August 1 – May 1st (i.e. - outside of the Primary Nesting and Brood-Rearing season). If maintenance activities are needed at times other than these, 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.**

Livestock must be excluded from the Wetland Restoration.

REQUIRED MANAGEMENT

All new CREP contracts must have mid-term contract management activities scheduled that are site specific and will ensure plant diversity, wildlife habitat, and protection of soil and water resources. See the Mid-Contract Management Sheet for the requirements for your contract.

OTHER MANAGEMENT CONSIDERATIONS

For optimum wildlife habitat, plant a diversity of grasses, wildflowers, legumes, &/or trees. This mixture will provide winter and nesting cover, flowers for pollinating insects, as well as a good seed and insect source for food.

Wetland Restoration DESIGN WORKSHEET CREP CP23A

Landowner: **County:**

Farm: Field(s): **Wetland Acres:** **Firebreak Acres:** Date:

Tract: **Berm Acres:** **Switchgrass Acres:**

Buffer Acres:

HYDROLOGY RESTORATION in Year:

ORIGINAL HYDROLOGY &/or WETLAND FUNCTIONS WERE ALTERED BY:	AND WILL BE RESTORED BY: (see the attached map and engineering design for details)
☐ Subsurface Drain Tile	☐ Plugging _____ Feet of Subsurface Drain Tile ☐ And Installing a Berm to retain surface water
☐ Surface Drains	☐ Plugging _____ Feet of Surface Drains ☐ And Installing a Berm to retain surface water
☐ Grading / Leveling / Fill	☐ Removing _____ **Cubic Yards** of Fill
☐ Traditional Agricultural Activities (Farmed Wetlands)	☐ No Longer Farming ☐ And Seeding the Area to Native Vegetation
☐ Other:	☐ Other:

☐ **A Pre-Construction Meeting will occur with NRCS to ensure the Design is understood and followed.**

WETLAND SEEDING (PLS #/ACRE = PURE LIVE SEED POUNDS PER ACRE)

☐ **The wetland will be allowed to re-vegetate naturally**

	WET HERBACEOUS MIX (see map for location)	RATE PLS#/ac	TOTAL = (RATE X Acres)			BERMS (if applicable)	RATE	TOTAL = (RATE X Acres)	
☐			0.0	Lb.	☐			0.0	Lb.
			0.0	Lb.				0.0	Lb.
			0.0	Lb.				0.0	Lb.
			0.0	Lb.				0.0	Lb.
			0.0	Lb.				0.0	Lb.

WETLAND BUFFER SEEDING

	NATIVE GRASS BUFFER (see map for location)	RATE PLS#/ac	TOTAL = (RATE X Acres)			NON-NATIVE GRASS FIREBREAK (see map for location)	RATE PLS#/ac	TOTAL = (RATE X Acres)	
☐			0.0	Lb.	☐			0.0	Lb.
			0.0	Lb.				0.0	Lb.
			0.0	Lb.				0.0	Lb.
			0.0	Lb.				0.0	Lb.
			0.0	Lb.				0.0	Lb.
	WILDFLOWERS+		0.0	Lb.				0.0	Lb.

	WINTER COVER (see map for location)	RATE PLS#/ac	TOTAL = (RATE X Acres)	
☐	SWITCHGRASS	5.0	0.0	Lb.

+Recommended Wildflowers include:

- **(see the "Michigan CREP Eligible Wildflower List" for additional species)**

SITE PREPARATION - BEFORE PLANTING:

☐ Herbicide$_1$ **(per label)**: Dates =

☐ Herbicide$_2$ **(per label)**: Dates =

☐ Tillage: Dates =

☐ Temporary Seeding:

☐ **Apply fertilizer and lime according to an approved soil test and MSU recommendations for "ESTABLISHING native OR non-native grasses".**

☐ Other:

PLANTING METHOD in Year:

☐ **Planting Method:**

Dates	**Natives =**	**Non-Natives =**

(If unforeseen circumstances prohibit the planting of the grass by this date, please contact our office as soon as possible)

POST-PLANTING MAINTENANCE for Pest Control

☐ **Mowing: <u>BEFORE</u> FINAL STATUS REVIEW =** mow high when the weeds are taller than the planted grasses

<u>AFTER</u> FINAL STATUS REVIEW* = MINIMUM Mowing Height*

☐ Herbicide* **(per label)**: ☐ Prescribed Burning*: According to an approved plan

☐ Other:*

***NOTE:** <u>After</u> the Final Status Review has been issued, weeds will be treated on a "spot" basis <u>only</u>, unless prior approval is granted by the County Committee. Spot treatment options include mowing between August 1 & 20 and other activities between August 1 & May 1st

<u>ADDITIONAL INFORMATION</u>:

Reset Form

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