

# U.S. Department of Agriculture

# Conservation Reserve Enhancement Program CP21 - Establishment of a Filter Strip (Version 1.1 April 2022)

#### WHAT IS A FILTER STRIP?

A filter strip is a narrow band of grasses, legumes, and forbs used to limit sediment, nutrients, pesticides, and other contaminants from entering water bodies. In addition, filter strips can provide valuable winter cover, nest sites, nectar and pollen for pollinating insects, and food for wildlife.

Filter strips are typically located on cropland immediately adjacent and parallel to streams, lakes, ponds, ditches, sinkholes, wetlands, or groundwater recharge areas.

### **CREP POLICY**

CREP Filter Strips will be installed according to the Filter Strip Standard (393) in the local Field Office Technical Guide (FOTG). All construction and seeding must be completed within 12 months of contract effective date of CREP-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.

CREP Filter Strips are only eligible on cropland that is adjacent and parallel to streams, sinkholes and karst areas, wetlands, and permanent bodies of water such as lakes/ponds.

The minimum width of the filter strip depends upon the slope of the field, the soil type, and the pollutants contained in the runoff. However, for the Conservation Reserve Program, Filter Strips will be a minimum of 50 feet wide from the edge of the eligible cropland, and a maximum average width of 150 feet. Filter strip widths may be extended wider than the minimum needed for water quality for other documented resource concerns but must not exceed the program maximum. If the site already contains existing vegetation, these acres will be included in the calculation of maximum width and included in the CREP Plan but will not be eligible for payments.

Vegetation for filter strips will generally have stiff, upright growth characteristics, and will be adapted to the site conditions and meet the standards in the local FOTG. Only viable, high quality seed will be used. Limited use of the filter strip as a turn row or crossing area is authorized if this activity is conducted as part of the planting, cultivating, or harvesting of a crop in an adjoining field. Do not use filter strips as a travel way, cropland headland or a lane for livestock or farm equipment.

Livestock must be excluded from the filter strip unless grazing is incidental to the normal gleaning of the crop residue in the field.

#### CONSTRUCTION

Construction will be authorized only after a design is approved by NRCS.

#### **DESIGN CONSIDERATIONS**

The filter strip will be designed to encourage water to flow in a thin sheet. When water is concentrated, it will be spread across the width of the filter strip.

Filter strips are designed to fill with sediment. To maintain the function and value of filter strips:

- 1. Any channels or rills must be immediately repaired.
- 2. Terraces, dikes, berms, trenches, or vegetative barriers can be used to treat concentrated flow areas.
- 3. Sediment within the filter should be removed before it accumulates to a height higher than 6 inches. Level and re-establish sheet flow. Re-seed if necessary.

#### INSTALLATION

It is important to plant grasses & shrubs 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 cover 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.

Herbicides labeled for warm season grass establishment may also be used alone or mixed with broad-spectrum herbicides to provide residual weed control, which may result in faster establishment of the native grasses. Contact your local Michigan State University (MSU) extension agent for specific herbicide recommendations. Apply all herbicides according to the label.

Plant grasses and shrubs according to the attached plan/design sheet and apply lime and fertilizer according to needs determined by a soil test and MSU recommendations for the grasses. Fertilizer requirements shall be based on the intended crop of conservation cover. The amount of lime to be used shall be based on a buffer pH (lime requirement) test. The soil test for commercial fertilizer shall be from an approved laboratory accredited with <a href="https://doi.org/10.1007/jhtml/j

If available use a specialized no-till drill that is able to handle the grass seeds. Plant the seeds no deeper than 1/8 inch.

If a no-till grass drill is not available, the seed may be broadcast or aerial seeded. In either case, the seedbed must be worked up and firmed with a cultipacker or similar equipment. A carrier such as potash may also be needed in order to spread the seed evenly. After seeding, the site must be rolled or cultipacked to ensure proper seed to soil contact. Plant the seeds no deeper than 1/8 inch.

For grasses, mow, burn, or apply herbicides as needed to control unwanted vegetation until the practice is established. 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 NRCS – Michigan Conservation Sheets (available at http://www.nrcs.usda.gov/technical/efotg/ in Section IV.

## **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. Undesirable plants, insects, and pests shall be controlled, including such maintenance as necessary to avoid detrimental effects to surrounding land. Some of the most common pests that need controlled on CREP acreage include autumn olive, multi-flora rose, spotted knapweed, quackgrass and thistle.

After practice certification, 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 1<sup>st</sup> and Aug 20<sup>th</sup> to protect ground-nesting wildlife and to allow re-growth for winter cover. Other maintenance activities or management will only be allowed outside the designated dates to protect ground-nesting wildlife. Designated dates are from May 1<sup>st</sup> to August 1<sup>st</sup>. If management or maintenance activities are needed within these dates, the FSA County Committee must approve the management activity prior to the activity occurring.

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

#### MANAGEMENT

All CREP contracts must have management activities scheduled that are site specific and will ensure plant diversity, wildlife habitat, and protection of soil and water resources. Management activities that will ensure these benefits in establishment of native grasses include prescribed burning (according to an approved burn plan), disking, grass specific herbicides (strip spraying), haying/grazing and inter-seeding of wildflowers. All management activities must be performed according to NRCS Standards and Specifications, and CREP policy.

| Filterstrip Specification Sheet CP21  |         |           |                      |
|---|---------|-----------|----------------------|
| Landowner:  | County: |           | Date:                |
| Farm:   | Tract:  | Field(s): | Acres:               |
| Species and Seeding Rate  |         |           |                      |
| Species   | Rate    | PLS       | Total (rate x acres) |
|   | lbs/ac  |           | 0.0 lbs              |
|   | lbs/ac  |           | 0.0 lbs              |
|   |         | lbs/ac    | 0.0 lbs              |
|   |         | lbs/ac    | 0.0 lbs              |
| Wildflowers   |         | lbs/ac    | 0.0 lbs              |
| Livestock Exclusion (if needed) See additional design sheets for engineered practices   |         |           |                      |
| Exclusion Fence linear feet   |         |           |                      |
| ☐ Water Well  |         |           |                      |
| ☐ Water tank/trough   |         |           |                      |
| Pipeline linear feet  |         |           |                      |
| Site Prep in Year:  |         |           |                      |
| Grading, Leveling, Filling (See attached design sheets)   |         | Date:     |                      |
| ☐ Grade Stab Structure  |         | Date:     |                      |
| ☐ Herbicide   |         | Date:     |                      |
| ☐ Herbicide   |         | Date:     |                      |
| □ Tillage   |         | Date:     |                      |
| ☐ Temporary cover   |         | Date:     |                      |
| Lime and fertilizer   |         | Date:     |                      |
| Other:  |         | Date:     |                      |
| Planting Method in Year:  |         |           |                      |
| Grass planting method:  |         | Date:     |                      |
| Maintenance   |         |           |                      |
| Mowing: Before practice establishment = mow when weeds are taller than the planted grasses.   |         |           |                      |
| Mowing: After practice establishment = minimum height 12" for native grass, 4-6" for introduced grass.  |         |           |                      |
| NOTE: After practice establishment, mowing will be conducted between August 1 & 20, and weeds will be treated on a "spot" basis only, with prior approval granted by the FSA County Committee                         |         |           |                      |
| Management  |         |           |                      |
| Prescribed burn   |         | Date:     |                      |
| Disking   |         | Date:     |                      |
| Strip spraying (grass specific herbicide)   |         | Date:     |                      |
| ☐ Inter-seeding (legumes or wildflo   | Date:   |           |                      |
| NOTE: After practice establishment, other management activities will be conducted between August 1 & May 1, and weeds will be treated on a "spot" basis only, with prior approval granted by the ESA County Committee |         |           |                      |

## **Additional Information:**

