# STATE OF MISSOURI

# DEPARTMENT OF NATURAL RESOURCES

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#### MEMORANDUM

#### 2011-021

DATE:

March 11, 2011

TO:

All Soil and Water Conservation Districts

FROM:

Ken Struemph, District Operations Section

Soil and Water Conservation Program

**WQ10 Stream Protection Practice Review SUBJECT:** 

During the Soil and Water Districts Commission meeting on March 09, 2011, the commission directed program staff to open a comment period on the proposed revisions of the WQ10 Stream Protection Practice. During this open comment period, staff will collect comments from districts on the proposed revisions of the WQ10 Stream Protection Practice. This practice review is open for comments through April 18, 2011, so the comments can be included in the packet for the May commission meeting. As requested, the program has attached the proposed revisions as a single document, showing the proposed deleted portions as strikethrough and proposed insertions in bold and italicized font.

Please submit your information (email, fax or mail) to Alan Freeman by the end of business on Monday, April 18, 2011. Thank you for your prompt response. If you should have any questions, please contact Alan Freeman at the Soil and Water Conservation Program, P.O. Box 176, Jefferson City, MO 65102-0176, or by phone at 573-751-1373.

KS:afd

Attachment



# WQ10 Stream Protection

# **Purpose**

Reduce excess amounts of sediment, organic material, nutrients, and pesticides in surface runoff and reduce excess nutrients and other chemicals in shallow ground water flow with a secondary benefit of stream bank stabilization.

# **Applicability**

Practice may be applied on Applies to areas immediately adjacent to permanent or intermittent flowing streams, streams containing perennial pools, or natural wetlands, where livestock have uncontrolled access for watering purposes.

## **Erosion Requirements**

This practice has no erosion requirements.

### **Specifications**

The completed practice must meet the NRCS Standards and Specifications for Critical Area Planting (342), Pond (378), Access Control (472), Pipeline (516), Stream Crossing (578), Watering Facility (614), and Water Well (642) and Fence (382) contained in the Field Office Technical Guide.

The Soil and Water Conservation Program strongly encourages the construction of High-Tensile Electric (HTE) exclusionary fence due to the flood prone nature of this practice's applicable location(s).

#### **Policies**

- 1. The area where the practice will be applied must currently have livestock to qualify.
- 2. The area excluded must have adequate boundary fence prior to installing exclusion fence.
- 3. A one time out of production incentive for livestock exclusion and to is available for land owners who allow the riparian area to regenerate naturally or be maintained in a conservation buffer. The acres will be measured from the high flow bank of the stream to the fence, regardless of the type of the existing vegetative cover within the excluded area.
  - Excluded area on each side of the stream must be a minimum of 25 feet and. The incentive may be paid up to a maximum of a 150 feet foot average from the high bank. Incentive is available for both sides of the stream.
  - b. The maximum width of the stream corridor area the incentive may be paid on can be an not exceed a 150 foot average, with 180 feet as the maximum allowed in the averaging calculation. (See Figure 1)
- 4. Both sides of the stream must be excluded from livestock access.

- 5. The excluded area may be flash grazed beginning one year after contract payment. Note: Livestock access to the excluded area outside of the approved dates is a violation of the maintenance agreement, except for designated stream crossing points.
- 6. Grazing should not occur under wet weather conditions to prevent manure from being carried to the streams by runoff or floodwaters.
  - a. Cool season grasses (CSG) may be grazed for a single three (3) day period between April 15th and May 7th, and again for a single three (3) day period between September 1st and October 1st. The average minimum grazing height is six (6) inches for CSG. Strip grazing of the excluded area using temporary fence may be utilized during the above spring and fall periods as long as livestock graze each strip only one time for 3 days or less, and maintain a 6 inch average minimum grazing height.
  - b. Warm season grasses (WSG) may be grazed for a single three (3) day period between July 15th and August 15th. The average minimum grazing height is eight (8) inches for WSG. Strip grazing as indicated above may also be carried out for WSG.
  - c. Grazing dates may be restricted further due to establishment of a planted buffer. Consideration should be given to wildlife when flash grazing is practiced.
  - d. Livestock stocking rates should be reevaluated based upon the grazing area remaining after exclusion of the riparian area. The upland acres remaining will be under greater grazing pressure. Reducing livestock numbers, and/or implementation of a grazing system is recommended to prevent upland erosion.
- 7. Spraying is allowed to control noxious weeds; along fence lines for maintenance purposes, and for suppression of fescue and/or weeds in a WSG or tree/shrub planting for erosion control or wildlife benefit. Chemicals utilized for maintenance are not eligible for cost-share.
- 8. Mowing within the excluded area is prohibited except for fence maintenance.

# 9. Cost-share is authorized for:

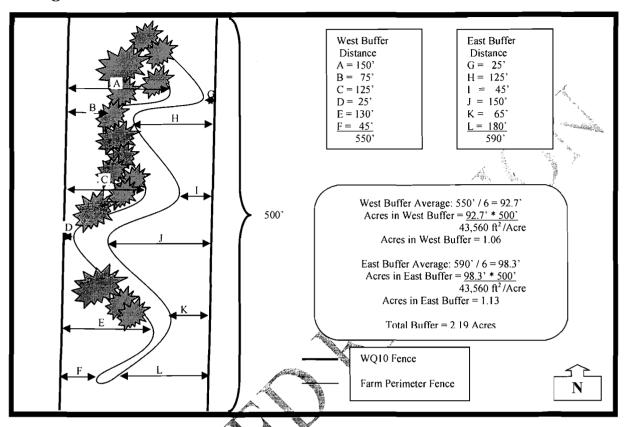
- a. Water Source
  - Development of a watering source(s) for livestock when the stream is fenced to exclude livestock. More than one watering source may be developed on farms where pipeline and frenching costs would exceed \$3,500; or when crossing roads or streams with pipeline is not recommended. Development of watering sources may not exceed \$3,500 each for a pond or a well. Designated stream crossings for livestock are authorized. All water supplies should be a minimum of 25 feet from the exclusion fence and a minimum of 100 feet from the high bank of the stream.
    - 1) Pond(s). This may include placement of a water line through an impoundment dam of an existing pond or reconstruction of ponds that no longer provide adequate livestock water.

- 2) Well(s) (New and Existing) The following are procedures and guidelines that must be followed if a new or existing well(s) is to be constructed used for livestock watering purposes:
  - a) The components that will be allowed under each for the upgrade and use of an existing well or construction are of each new well is limited to \$3,500, which include(s) the well drilling, casing, grout, liner, electrical lines from the pump control box to the pump, or upgrading the pump, and miscellaneous well components. Miscellaneous well components include the well cap, drive shoe, inverted bell, cement, fittings, and seals for the well itself.
  - b) All wells must be constructed *or upgraded* and registered according to state requirements. Any type of state certification fee is not eligible for cost-share.
  - c) Permanent Water Distribution:
    - 1.) Standard Cost-Share reimbursement applies for the pipeline from existing/new well(s) and ponds to tanks.
    - 2.) Tanks are limited to the fields one per field adjacent to the stream, excluded by the WQ10 practice.
- b. Limited access. If it is the least cost alternative, limited access may be authorized to allow controlled access to a stream or pond *per landowner request*.
- c. Stream crossing(s).
- d. Exclusion fence to protect from livestock.
- e. Critical Area Planting component. Fertility must be applied according to a soil test.

## 10. Cost-share is not authorized for:

- a. Spring Development. Cost-share is authorized under N574 Spring Development practice.
- b. Reconstruction: The Soil and Water Conservation Program will not pay for the rebuilding of fence. High Tensile Electric (HTE) is recommended to lower landowner costs if a rebuild is necessary.

Figure 1

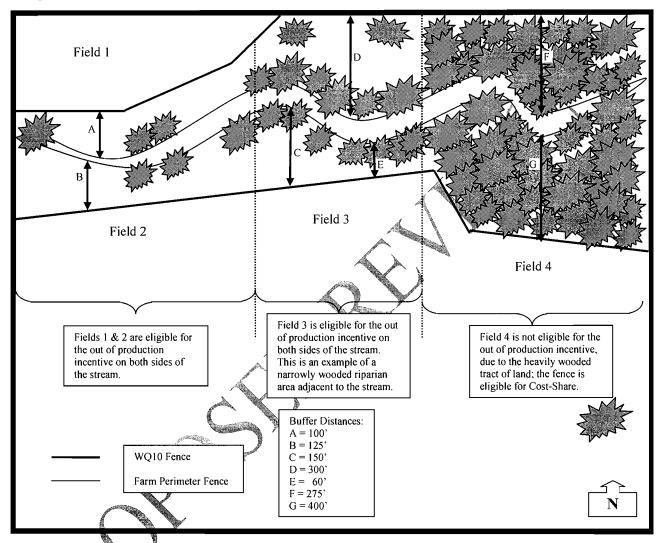


# **Maximum State Cost-Share**

- 1. Assistance for components is limited to 75% of the county average cost, not to exceed the state average cost.
- 2. Incentive The out of production incentive cannot exceed \$500.00 per acre of buffer exclusion as described below.
  - a.) Only grassland areas adjacent to the stream within the buffer are eligible for the out of production incentive. (See Figure 2, Field 1 and 2)
  - Grassland fields adjacent to the stream with a narrowly wooded riparian corridor adjacent to excluded streams are eligible for the incentive. (See Figure 2, Field 3)
  - c.) Incentives are not authorized for stream segments within heavily wooded tracts. (See Figure 2, Field 4)
  - d.) Incentives CANNOT be used in conjunction with other incentive practices for the same fenced area. The least-cost practice should be utilized ONLY. (Ex. N472

fencing of an area that includes a stream may not receive the WQ10 out of production incentive and the N472-livestock exclusion incentive and vice-versa.)

Figure 2



# Map Requirements

- 1. A CMT Map Number must be submitted for *entered prior to* contract approval. The map must show the following information that pertains to the contract:
  - Farm Perimeter
  - Existing Fence, including existing perimeter and cross fences.
  - Existing Water Source
  - Existing Water Supply
  - Planned Fence
  - Planned Water Source

- Planned Water Supply
- Planned Pipeline
- Area Treated with Practice
- Location of Power Source
- Any other feature that may affect the practice.
- 2. A map that displays the completed practice must be scanned and attached as a "Map Document" in MoSWIMS prior to contract payment submission.

# **Technical Responsibilities**

Technical staff has the responsibility for determining the need for the practice, for design of the practice based upon the minimum extent necessary, and to certify that the completed practice meets NRCS standards and specifications within commission policy.

## **Acres Served**

Acreage on which the incentive was paid.

# **Extent Installed**

Linear Feet excluded on each side of the stream.

## **Maintenance Life**

10 years.