

## STREAM CROSSING (CODE 578)

### DESCRIPTION

A stabilized area to provide access for livestock across a stream or ditch.

### PURPOSE

To control bank and streambed erosion, reduce sediment and enhance water quality by controlling livestock intrusion in the waters of the State. To provide a controlled crossing for livestock which may also allow access by farm equipment for pasture maintenance.

### CONDITION

This practice is to be applied to specific problem areas arising from farmland where the movement of livestock across waters of the State is necessary and must be managed to prevent or treat resource concerns and where movement of equipment across the stream may be necessary for pasture maintenance.

### POLICIES

1. Livestock crossings are used to protect stream banks and streambeds from erosion and protect the waters of the State from animal waste pollution. The installation of a stream crossing is limited to small streams with perennial or intermittent flow. Small streams eligible for cost-share will have a base flow depth of less than 2 feet and/or a base flow width of less than 15 feet. Other streams will be considered only upon specific justification.
2. Soil loss considerations should be based only on areas directly affected by livestock intrusion. ***Do not*** evaluate soil loss for the entire watershed.
3. A minimum of ***fifteen (15)*** animal units (AU) must regularly use or occupy the area being addressed, cost-share funds will be based on applicable flat rates and project limits. Operations with ***one (1) to less than fifteen (15)*** animal units (AU) may be eligible based on the animal unit pro-rated cost-eligibility formulas. (SECTION III, *Water Quality Project Application Instructions*, #44B).
4. Cost-sharing eligibility ***is provided*** for a 12-foot maximum width (top width) perpendicular to the water flow. Additional costs for larger (wider) crossings ***must be paid by the applicant***.
5. Cost-sharing ***is authorized*** for establishment of the permanent vegetative cover as buffer strips along banks according to criteria for Filter Strips (Code 393) or Critical Area Planting (Code 342), ***plus*** one or all of the following, if necessary:
  - a. Provision of access to water for livestock (Code 614) as an alternative to stream use according to criteria for grazing land protection.
  - b. The temporary diversion of base flow during construction of the stream crossing.

- c. Permanent Fencing (Code 382) to protect water quality and/or the water body banks and beds from damage by domestic livestock.
6. When applying for cost-sharing under this practice, *all* components and their associated NRCS code numbers will be included under Section II of the MACS Water Quality Project form. For example, if applying for a Filter Strip, a Stream Crossing, and Fencing, NRCS Codes 393, 578, and 382 must be listed on the application.
7. If the applicant is certain to increase her or his animal capacity within the next six months, *and* if the applicant will document that fact in writing to the Department's satisfaction, cost-share may be approved based on the total new animal capacity on the farm. The SCD must document the animal capacity increase on the Certificate of Imminent Start-up or Expansion of a Livestock Operation form (SECTION III, #19) and submit this form with the MACS Water Quality Project form. The department will not process the MACS Claim for Payment until the SCD certifies in writing that the expansion has occurred *and* that the additional or new animals have been placed on the farm.
8. NRCS Standards and Specifications for Stream Crossing (Code 578) will be followed when applying this practice. The NRCS Standards and Specifications for supplemental BMP's such as Filter Strips (Code 393) or Critical Area Planting (Code 342) will also be followed.
9. This practice must be properly maintained for a minimum of ten (10) years following installation. The applicant agrees to provide all equipment, materials and labor to meet this requirement.
10. The applicant and the farm's Nutrient Management Plan must be in compliance with Maryland's Nutrient Management regulations (COMAR 15.20.08) at the time of Application. No Applications will be approved without a Nutrient Management Plan Certification Form submitted with the Application (SECTION III, #30).

## EROSION PROTECTION

If soil and climatic conditions permit, a protective cover of vegetation will be established on all disturbed earth surfaces. In areas where vegetation will not survive, non-vegetative means such as gravel, or lining such as a permanent 3-dimensional inert plastic grid confinement system may be used. Refer to NRCS Standard for Critical Area Planting (Code 342).

## ADDITIONAL POLICIES SPECIFIC TO BRIDGES

1. A minimum of *twenty-five (25)* animal units must regularly use or occupy the primary pasture being addressed, and a density greater than one animal unit per two acres. The primary or secondary pasture must have a minimum size of ten (10) acres.
2. If the primary pasture is less than ten (10) acres in size, the secondary pasture(s) must be at least ten (10) acres or greater. If the primary pasture is ten (10) acres or greater in size, the secondary pasture(s) must be at least five (5) acres in size. The secondary pasture(s)

must have forage value. Special consideration can be made for unique situations. This must be approved by the MACS Program Manager.

3. Design bridges in accordance with industry standards. Designs must be certified by a Maryland Registered Professional engineer or in accordance with NRCS Maryland Guide MD-3, Bridges for Livestock and Agricultural Equipment.
4. This practice must be properly maintained for a minimum of ten (10) years following installation. At a minimum, these measures shall be carried out for the life of the practice:
  - a. Inspect areas in proximity to the crossing and other practices associated with the crossing after each major runoff event, and repair promptly as needed.
  - b. Fill in low areas and regrade, as needed, to maintain area integrity, using like materials as originally installed.
5. The bridge deck and any railing must be properly maintained *without* additional cost-share for a minimum of ten (10) years. The applicant agrees to provide all equipment, labor and materials needed to meet this requirement. Applications for the repair of bridge abutments may be accepted.
6. Cost-sharing is provided for a 12-foot maximum width bridge (top width) perpendicular to the water flow. Wider bridges may be allowed, but additional costs for *wider bridges must be paid by the applicant*.
7. The maximum MACS Program eligible cost for the deck construction of a bridge crossing is \$50.00 per square foot. The total cost of the BMP will be based on the bridge deck ceiling rate plus any additional components, such as the bridge abutments, not to exceed the established flat rates.
8. MACS will only accept Water Quality Project forms based on an itemization of the materials and quantities necessary for the BMP. The materials necessary for the construction of the deck must be identified on the Water Quality Project form.
9. If a ford or culvert type stream crossing is determined to be effective for management of resource concerns on the site or an applicant elects to install a bridge crossing, when a ford or culvert would be effective, any additional costs pertaining to the bridge must be paid by the applicant.
10. Cost-sharing for bridge crossings ***is not authorized*** for the following:
  - a. Any construction or portion thereof that is greater than 12 feet (deck) in width when used as a bridge crossing. Also, the portion used as a bridge crossing (deck) may not exceed 40 feet in length. With justification special consideration may be made for unique situations related to bridge width and length. This must be approved by the MACS Administrator.
  - b. Replacement, repair, relocation or installation of any utilities such as water, sewer, electric, gas or telephone.
  - c. Repair, replacement, modification to the bridge deck and any railings.

- d. Any construction or portion thereof which would be used solely for the purpose of providing access for farm equipment or vehicles, or from public roads and highways to farm headquarters or home sites.
- e. Replacement or reconstruction of other attached, existing BMPs, unless such replacement or reconstruction is essential to the proper functioning of the proposed bridge crossing.

## **COST-SHARE RATE**

The State cost-share payment will not exceed 87.5% of the total eligible cost, not to exceed \$150,000 per project.

## **ATTACHMENTS**

***Applicant(s) with an outstanding Unsatisfactory On-Farm Status Review of BMP Maintenance and Use of previous project(s) may be ineligible for MACS Cost-Share funding. When a previous project expires with outstanding unsatisfactory status, the applicant is ineligible for any future MACS funding.***

*The following items are needed:*

1. A copy of a recorded deed(s) for the parcel(s) where the BMP is located. If the current, appropriate deed is already on file in the MACS Office, then record both the agreement number of the file where the deed is kept and the liber/folio numbers in the General Comments section of the application.
2. A copy of the Real Property Data Search page from the Maryland Department of Assessments and Taxation's website ([www.dat.maryland.gov](http://www.dat.maryland.gov)) indicating the Maryland Property View Account ID Number and owner information.
3. An aerial photograph indicating the property lines as well as all existing and proposed BMPs. For sediment control practices, indicate the drainage area and the direction of flow.
4. A plan view sketch graphically demonstrating the layout and details of the project BMP.
5. A Certificate of Imminent Start-up or Expansion of a Livestock Operation form if applicable (SECTION III, #19).
6. If the stream crossing or bridge design is prepared by someone other than a district employee with proper NRCS job approval, a copy of the construction documents must be provided. These documents must be certified by a Registered Professional Engineer.
7. Nutrient Management Plan Certification Form shall be submitted with the Application (SECTION III, #30).