STREAM CROSSING FOR FARM EQUIPMENT

STREAMS & OTHER WATERS BMP #1

Description:
Guidelines for bridge or low water crossings across a stream, river, or wetland for farm equipment or vehicular traffic.

AWQA Minimum Requirements:
1) Crossings must impact < 300 linear feet of surface waters of the Commonwealth (streams) and < ½ acre of wetland/marsh. An Individual Water Quality Certification is required if the crossing impacts ≥ 300 linear feet of surface waters or > ½ acre of wetland/marsh.
2) Crossing cannot impede or obstruct natural water flow.
3) Construct crossing perpendicular to the stream channel avoiding construction within the bend of a stream.
4) Construct during low-flow or no flow conditions (during late summer or fall).
5) Materials are to be placed in a manner that will not be eroded by normal or expected high flows.
6) Place materials to avoid erosion by normal high flows.
7) Minimize the removal of streamside vegetation during construction. Vegetation prevents soil erosion and aids in bank stability.
8) Do not use materials that will adversely affect the biological, chemical, or physical properties of receiving waters. Do not use rip-rap where it will cause bank stress or slump conditions due to weight/size.
9) Erosion pollution and sediment control plans (EPSC) and BMPs must be designed, installed, and maintained in effective operating condition at all times during construction activities so that violations of state water quality standards do not occur (401 KAR 10:03, Section 8 and KRS 224.70-100).
10) Do not place check-dams constructed of any material, silt fencing, hay bales, etc. within surface waters of the Commonwealth without approval by DOW. If sediment and erosion control measures must be placed in surface waters, they cannot cause instability in adjacent, upstream or downstream waters. All sediment and erosion control devices shall be removed and natural grade restored within construction timeline.
11) Seed/re-vegetate the banks and bare soil areas immediately after completion along a minimum fifteen (15) foot wide buffer parallel to stream.
12) Do not use heavy equipment (e.g. bulldozers, backhoes, draglines, etc.) within the stream channel. If needed, heavy equipment use in-stream must minimize turbidity, substrate, and vegetation disturbance, and use rubber tracks/tires.
13) Measures shall be taken to prevent or control spills of fuels, lubricants, or other toxic materials used in construction from entering the watercourse.
14) Do not place excavated material in the stream or floodplain. Projects receiving Farm Bill funding through the NRCS or State Cost Share Program funding must follow NRCS Practice Standard Code 578 Stream Crossing requirements. A DOW floodplain or stream construction permit is required for projects in streams where the watershed > one square mile. Contact DOW to determine drainage size. Project design will require technical assistance and be submitted to the DOW. If the Nationwide Permit #14 conditions, Section II Regulatory Requirements, or AWQA Minimum Requirements cannot be met, an Individual Water Quality Certification may be required from the DOW’s Water Quality Certification Section.

Recommendations:
Use the DOW Stream Maintenance Application to identify the stream name and coordinates of the proposed project. The landowner will then develop plans for the stream crossing construction. When the location and construction information is available, contact the DOW Floodplain Management and Water Quality Certification Sections for guidance.

Key:
- =good, =best: see STEPL Model

Technical References
State Resources
- DOW Stream Maintenance FAQ
- Kentucky Erosion Prevention & Sediment Control Field Guide

USDA/NRCS Publications
- Practice Code 578 Stream Crossing

Funding Assistance Options
State Cost Share
- See your local Conservation District to apply.
- Kentucky Ag. Development Fund (KADB/KAFC)
- Select from available program options here.
- NRCS Environmental Quality Incentives Program (EQIP)
- Select from available program options here.

Important Considerations
Water Quality Benefit ( ):
(KEY: 1-good, 2-best: see STEPL Model)