

AG. WATER QUALITY ACT



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TECHNICAL ASSISTANCE

FUNDING ASSISTANCE

IMPORTANT CONSIDERATIONS

STREAMBANK & SHORELINE PROTECTION

STREAMS & OTHER WATERS BMP #3



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Description:

Structural and/or vegetative guidelines to control or prevent streambanks from scouring, caving, or sloughing.

AWQA Minimum Requirements:

1) Bank stabilization/ protection must impact < 500 linear feet of streams and < ½ acre of wetland/marsh. If opposite banks stabilized, impacts to both banks are summed together for cumulative impact. Individual [§401 Water Quality Certification](#) (WQC) is required for project impacts ≥500 linear feet to surface waters or > ½ acre of wetland/marsh. **2)** Material shall not be creek bed material (e.g., creek rock or gravel), grouted rip-rap, poured/ unformed concrete, poured asphalt or asphalt pieces. **3)** Maintain the cross-sectional area of stream. Do not widen or straighten the stream. **4)** Materials must not impede or obstruct natural water flow. **5)** Place materials to avoid erosion by normal high flows. **6)** Do not pile materials along the streambank to raise the

streambank. **7)** Minimize removal of streamside vegetation. **8)** Construction activities shall take place during low-flow or no flow conditions (during late summer or fall). **9)** 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. **10)** Erosion pollution & sediment control plans (EPSC) and BMPs must be designed, installed, and maintained so that violations of state water quality standards do not occur ([401 KAR 10:031](#) Section 2 and [KRS 224.70-100](#)). **11)** 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 **12)** Seed/re-vegetate the banks and bare soil areas immediately after completion along a minimum fifteen (15) foot wide buffer parallel to stream. **13)** 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. **14)** Prevent or control spills of fuels, lubricants, or other toxic materials from entering the watercourse. **15)** Do not place excavated material in the stream or floodplain. Projects receiving Farm Bill funding through NRCS or Kentucky State Cost Share Program must follow NRCS [Practice Standard Code 580](#). 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 #13 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:

1) Use the DOW [Stream Maintenance Application](#) to identify the stream name and coordinates of the proposed stream crossing locations. 2) The landowner will develop general design and construction plans for the bank stabilization project. 3) When the location and construction information is available, contact the DOW [Floodplain Management](#) and [Water Quality Certification](#) Sections for guidance. Stream banks often need sloping for more favorable vegetative establishment and growth. Select [adapted plant species](#) that withstand design flow velocities for the streambank areas that are occasionally under water. Stumps and roots of trees and/or shrubs should be left undisturbed to protect banks against erosion. Streambank stabilization projects should minimize negative effects on adjacent streambank areas.

Technical References

State Resources

- DOW [Stream Maintenance FAQ](#)
- [Kentucky EPSC Field Guide](#)

USDA/NRCS Publications

- [Practice Code 580, Streambank and Shoreline Protection](#)
- [USDA/NRCS Engineers Field Handbook, Chapter 18](#)

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 (EOIP)

- Select from available program options [here](#).

Important Considerations

Water Quality Benefit (•••••): •••••
(KEY: •=good, •••••=best: see [STEPL Model](#))

Wildlife Benefits

- Contact the Kentucky Department of Fish and Wildlife's [Habitat Improvement Program](#) on how to improve wildlife habitat with select BMPs (1-800-858-1549).