

# **Stream Habitat Improvement and Management**...to maintain, improve, or restore physical, chemical, and biological functions of a stream



Well-buffered stream, photo courtesy USDA – Natural Resources Conservation Service

## **Purposes**

- To provide a suitable habitat for desired aquatic species and diverse aquatic communities
- To provide channel morphology and associated riparian characteristics important to desired aquatic species
- To provide aesthetic values and recreation opportunities associated with stream habitats such as angling and fish viewing

## Benefits

Stream habitat improvement and management can provide several benefits. Riparian buffers trap sediment and filter nutrients, reducing nutrient and sediment loads to waterways. In addition, stabilizing the streambank or shoreline improves fish habitat, and the vegetation provides habitat for birds and small animals.

## Applications

This practice applies to streams where habitat deficiencies limit survival, growth, reproduction, and/or diversity of aquatic species in relation to the potential of the stream.

## Design and Installation

Design of stream habitat can include the development of riparian corridors, or the planting of herbaceous or woody vegetation along streambanks, or other engineered improvements for streams, streambanks, or shorelines.

For any stream used to water livestock, the livestock shall be managed to prevent streambank erosion, trampling, overgrazing, and bacterial contamination. Consult the NRCS Field Office Technical Guide (FOTG) standard 528 Prescribed Grazing to develop a grazing plan.

If this practice includes the development of riparian corridors, the species planted should be suitable for the purpose, soils, climate, and site conditions. Any tree and/or shrub plantings shall follow the site preparation, planting dates,

planting and storage guidelines detailed in the FOTG Standard (612) Tree/Shrub Establishment.

Any engineered practices or structures should be developed and installed in accordance with an NRCS-approved source such as the National Engineering Handbook (NEH) 653 Stream Corridor Restoration: Principles, Processes and Practices.

## Maintenance

A maintenance plan for this practice should include periodic inspection and evaluation of all applications at least annually. In addition, prompt repairs should be made if any applications cause streambank or streambed instability.

## Relative Cost

**Installation**      low ●●●○○ high

**Maintenance**      low ●●●○○ high

## For Additional Information...

Visit the Indiana NRCS office online at <http://www.in.nrcs.usda.gov/>, see the Indiana Field Office Technical Guide (FOTG) standard for (395) Stream Habitat Improvement and Management, or contact your local USDA-NRCS office.

*Local USDA-NRCS office information*