United States Department of Agriculture

Minnesota

Conservation Practice Overview

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Grade Stabilization Structure (Code 410)

A grade stabilization structure is used to control the grade and head cutting in natural or artificial channels.

Practice Information

Grade stabilization structures are installed to stabilize the channel grade and control erosion to prevent the formation or advance of gullies and headcuts. The practice is used in areas where structures are necessary to stabilize the site. Grade stabilization structures are not designed to regulate flow or water levels in a channel area.

Special attention is given to enhancing fish and wildlife habitat where enhancement is practical. The practice is also helpful in reducing pollution from sedimentation.

Grade stabilization structures are located so that the elevation of the inlet of the spillway is

set at an elevation that will control upstream head cutting.

A wide range of alternative types of structures are available for this practice, and an intensive site investigation is required to plan and design an appropriate grade stabilization structure for a specific site. Structures can consist of rock, concrete, or metal. Some alternative methods involve the use of cattle panel structures, treated wood, geotextiles, or large precast concrete blocks.

Common Associated Practices

Grade Stabilization Structure (410) is commonly applied with practices such as Grassed Waterway (412) and Critical Area Planting (342).

For further information, contact your local NRCS field office.