



Conservation Practice Overview

Grassed Waterway (Code 412)

A shaped or graded channel that is established with suitable vegetation to convey surface water at a nonerosive velocity using a broad and shallow cross section to a stable outlet.

Practice Information

Waterways are constructed to convey runoff from concentrated-flow areas, terraces, or diversions where erosion control is needed. Waterways can be used to control gullies and/or improve the water quality of downstream water bodies by reducing the sediment carried by runoff water.



Grassed waterways are usually parabolic or trapezoidal in shape and are designed to allow farm equipment to cross without damaging the waterway or the equipment.

When possible, species of vegetation should be selected that can serve multiple purposes, such as benefiting wildlife, while still meeting the basic criteria needed for providing a stable conveyance for runoff. Tall bunch grasses and perennial forbs may also be planted along waterway margins to improve wildlife habitat. Including diverse legumes or other forbs that provide pollen and nectar will have the added benefit of providing habitat for native bees.

This practice has a minimum expected life of 10 years. Some maintenance will be needed to maintain the waterway capacity, vegetative cover, and outlet stability. This will include mowing (or controlled grazing), fertilizing, and sediment removal. Most of the damage that occurs to grassed waterways is caused by equipment or herbicides and can be avoided by careful management. Vegetation that is damaged by machinery, herbicides, or erosion must be repaired promptly.

Common Associated Practices

NRCS Conservation Practice Standard (CPS) Grassed Waterway (Code 412) is commonly applied with other conservation practices such as NRCS CPSs Terrace (Code 600), Diversion (Code 362), Critical Area Planting (Code 342), Grade Stabilization Structure (Code 410), and other erosion control practices.

For further information, contact your local NRCS field office.