

**NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD**

STREAM CHANNEL STABILIZATION

CODE 584

DEFINITION

Stabilizing the channel of a stream with suitable structures.

SCOPE

This standard covers the structural work done to control aggradation or degradation in a stream channel. It does not include work done to prevent bank cutting or meander.

CONDITIONS WHERE PRACTICE APPLIES

This practice applies to stream channels undergoing damaging aggradation or degradation that cannot be feasibly controlled by clearing or snagging, by the establishment of vegetative protection, or by the installation of upstream water control facilities, and which require the application of structural measures.

DESIGN CRITERIA

It is recognized that channels may aggrade or degrade during a given storm or over short periods of time. A channel is considered stable if, over long periods of time, the channel bottom remains essentially at the same elevation.

In the design of a channel for stability, consideration shall be given to the following points:

1. The character of the materials comprising the channel bottom.
2. The quantity and character of the sediments entering the reach of channel under consideration. This shall be analyzed on a basis of both present conditions and projected changes caused by changes in

land use or land treatment and upstream improvements or structural measures.

3. Streamflow peaks, velocities, and volumes at various flow frequencies.
4. The effects of changes in velocity of the stream produced by the structural measures.

Structures installed to stabilize stream channels shall be designed and installed to meet Soil Conservation Service standards for the particular structure and type of construction involved.

PLANS AND SPECIFICATIONS

Plans and specifications for installation of Stream Channel Stabilization shall be in keeping with this standard and shall describe the requirements for application of the practice to achieve its intended purpose. See page S-584-1 for items to be considered in development of specifications.

Conservation practice standards are reviewed periodically, and updated if needed. To obtain the current version of this standard, contact the Natural Resource Conservation Service.