

PRIMARY USE: Improve habitat for aquatic plants and animals.
ADDITIONAL USES: To slow further channel bed deterioration.

COBBLE OR GRAVEL LINERS

What is it? In this technique, gravel or cobble size materials are placed in the wetted perimeter of the channel in reaches which are deficient in material of this size.

Purpose

To provide spawning material for some fish species and to protect the channel bed from further degradation.



**Cobble Liner in Channel Bed
Perspective View**

Limitations

Since the purchase and transport of gravels to a site can be expensive and time consuming, careful attention should be given to select sites which are easily accessible and have suitable quantities of natural gravels available. Only certain species may benefit from this habitat. Gravel and cobble liners may not be appropriate in unstable streams because they may be covered by sediments or washed out by swift currents. Maintenance may be required to remove fine sediment from spawning gravels or to replace eroded material.

Materials

Only clean rock should be placed in the stream. Select gravel-cobble size mixture appropriate for the target species.

Installation

Minimize disturbance to the stream and adjoining areas by scheduling the work when it will interrupt aquatic plants and animals the least. Consult local fisheries biologist for windows of time appropriate for this in-stream activity. Schedule work well in advance of spawning runs.

Source: Stream Corridor Restoration Handbook, USDA; The Restoration of Rivers and Streams, Gore, James A.