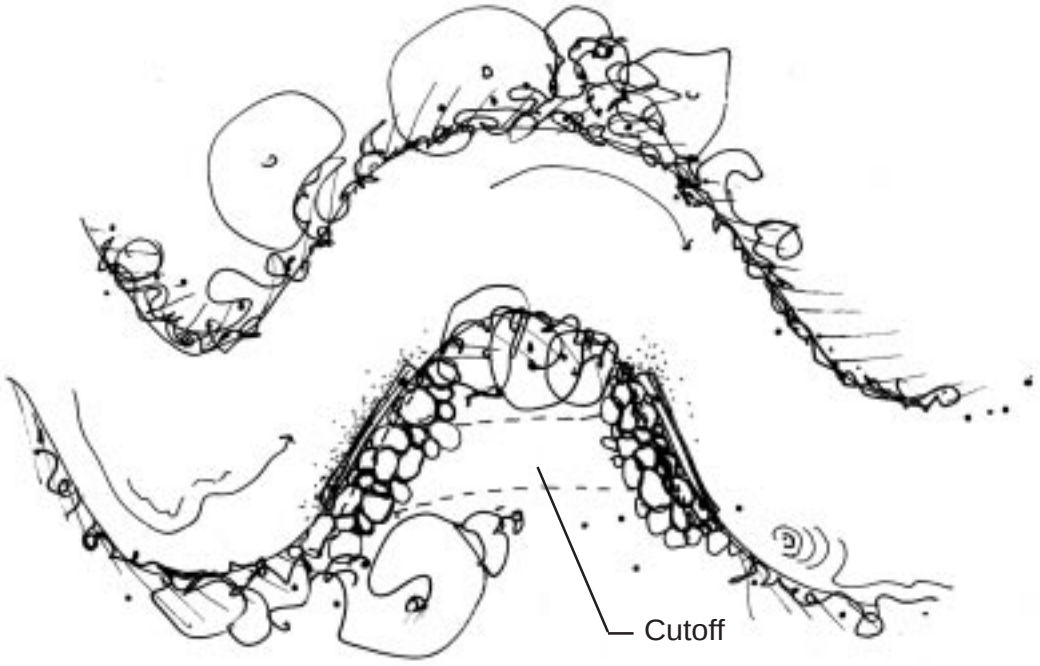
PRIMARY USE: To improve habitat for aquatic plants and animals.
ADDITIONAL USES: To maintain stream meanders where flood flows have eroded a channel through the meander.

CHANNEL BLOCKS

What is it? This is a technique in which braided channels are consolidated into a single, deeper channel; it is also a way to eliminate an unwanted cutoff.

Purpose

Additional fish holding habitat can be created, temperature fluctuations in water are minimized, and migration routes can be restored. This technique may also be used to maintain stream meanders where flood flows have eroded a channel through the meander but which still allow flood waters to overflow into the blocked channel.



Channel Blocks
Plan View

Limitations

Single logs tend to leak more water than triple logs or cribs.

Materials

Logs, boulders, and natural materials on site.

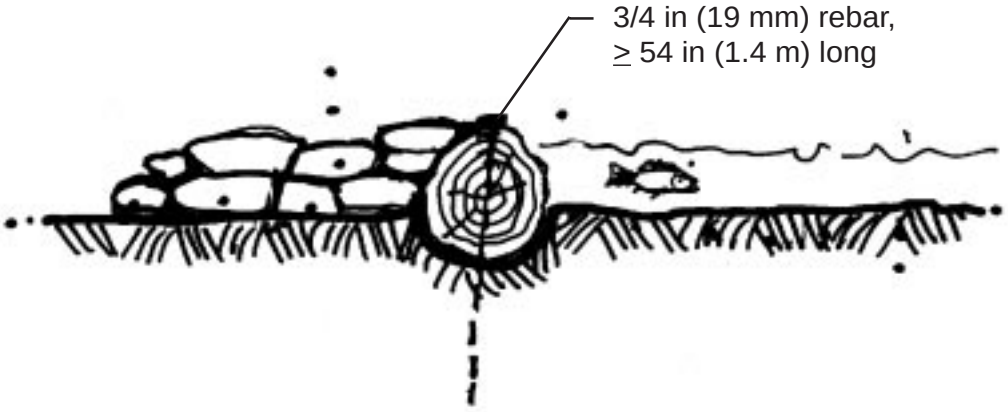
Installation

Since these structures are placed to bear the brunt of flood waters, special care must be taken to ensure stability. Single logs may be successful in small streams, but triple log and crib structures give better results and are less likely to wash out in streams over 15 ft (4.6 m) wide. Triple logs can be used in relatively stable streams 15 to 25 ft (4.6 to 7.5 m) wide. The log crib, filled with gravel and rubble, is generally more suitable for larger, unstable streams. Place blocks at the lower end of the flood channel as well as the upper end to prevent head cutting.

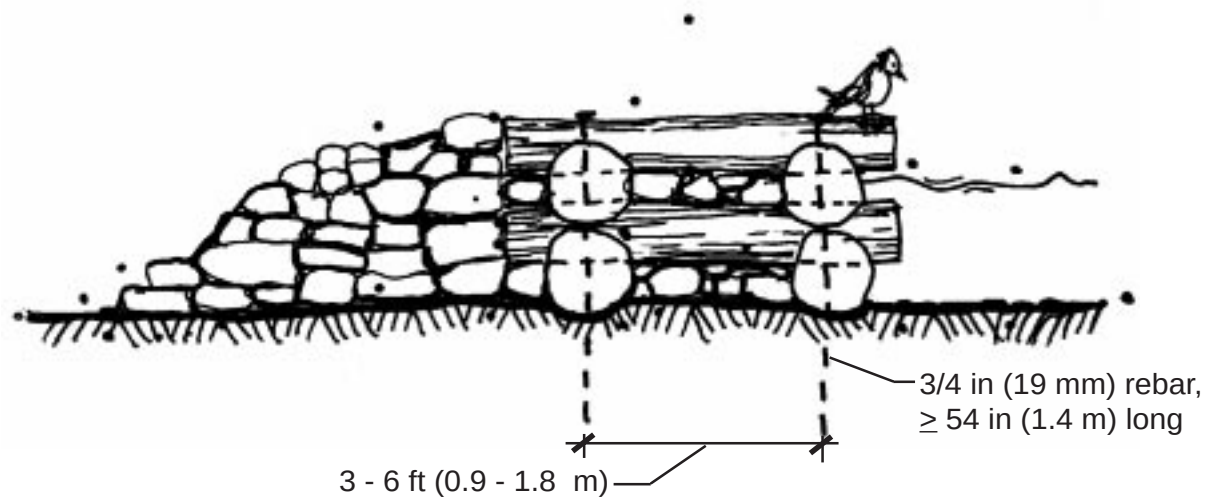
Source: Stream Habitat Improvement Handbook, USFS.

CHANNEL BLOCKS

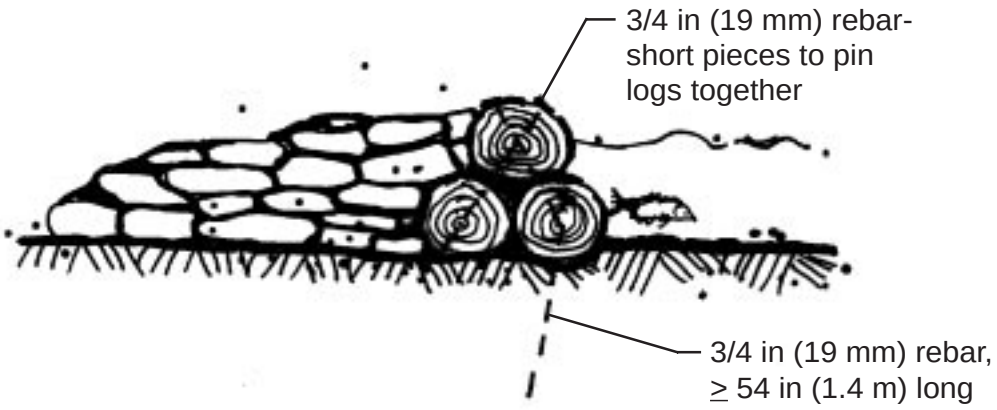
Additional Drawings:



Single Log Channel Block
Section View



Crib Construction Channel Block
Section View



Triple Log Channel Block
Section View

Source: Stream Habitat Improvement Handbook, USFS.