

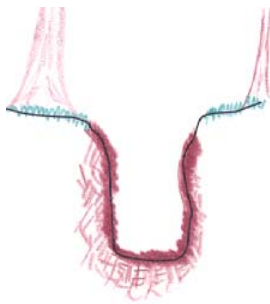
## 1.2.1 CHANNEL CONDITIONS

### Parameter Guidelines

Channels respond to changes in flow regime in a sequential, predictable manner: Initial Downcutting → Over-Widening → Healing → Establishing New Floodplain.

The goal of this category is to determine the current condition of the channel cross-section in regard to its status along this evolutionary process.

Man-made channels, by definition, are sized to convey the 10-yr flows. Since this channelization prohibits flows from frequently accessing the floodplain, naturalized man-made channels are considered to have MARGINAL, or lower, channel conditions for the purpose of these assessments.

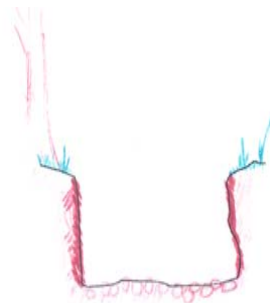


**SEVERE:** This channel is deeply incised with vertical and/or lateral instability and will likely continue to widen or incise. The channel invert is below the average rooting depth within the banks and the majority of both banks are vertical or undercut.

Vegetative surface protection along both banks is non-existent or minimal (less than 20%) insufficient to prevent significant erosion from continuing. There may be evidence of in-channel depositional features (point bars, mid-channel bars, transverse bars, or bankfull benches), but these areas appear to be transient and not stable (i.e. minimal vegetation on most bankfull benches).

- or -

A channel with an excessive sediment supply that has filled with alluvium, impeding its flow. Multiple thread channels and/or subterranean flow may be present.



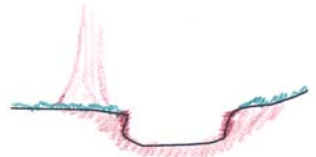
**POOR:** This channel is similarly incised as the 'Severe' Channel Condition with vertical and/or lateral instability, channel invert is below the average rooting depth within the banks and the majority of both banks are vertical or undercut.

*POOR definition continued on the following page.*

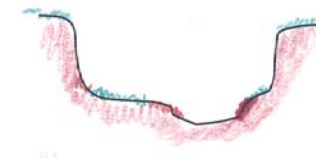
## CHANNEL CONDITIONS (cont)

**POOR (cont.):** Depositional features (point bars, mid-channel bars, and bankfull benches) are present in the channel, indicating the channel is beginning to develop a new floodprone area within the incised channel.

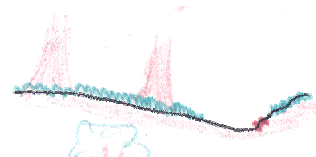
Vegetative surface protection along both banks is minimal to moderate ( 20% to 40%), and is insufficient to prevent significant erosion from continuing.



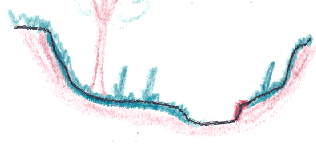
**MARGINAL:** This channel shows frequent signs of erosion, but also contains sections of stable banks. Some areas of the banks may be vertical or undercut. This variability may exist throughout the reach.



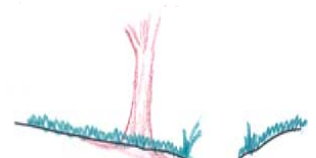
Depositional features (point bars, mid-channel bars, transverse bars) may be present in the channel. Vegetative surface protection is present on one or both banks in patches, but not continuous or dense. These vegetative surface may be the result of recent bank slumping.



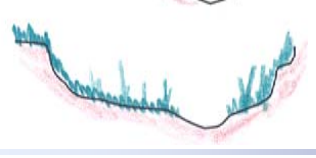
**SUBOPTIMAL:** There are few areas of erosion, but majority of both banks are stable with vegetative surface protection present along the majority of both banks.



Channel has access to its original floodplain or bankfull benches.



**OPTIMAL:** There is little or no evidence of bank erosion and vegetative surface protection is prominent along both banks.



This channel is stable and connected to its original floodplain or bankfull benches.