

Waterway Debris Eligibility

The waterway is defined as stretching from the left bank across to the right bank of the existing body of water at the bankfull stage. Bankfull Stage is an established gage height at a given location along a river or stream, above which a rise in water surface will cause the river or stream to overflow the lowest natural stream bank somewhere in the corresponding reach. Bankfull stages on streams with natural or manmade high banks can be defined by the predominant vegetation line on the banks..

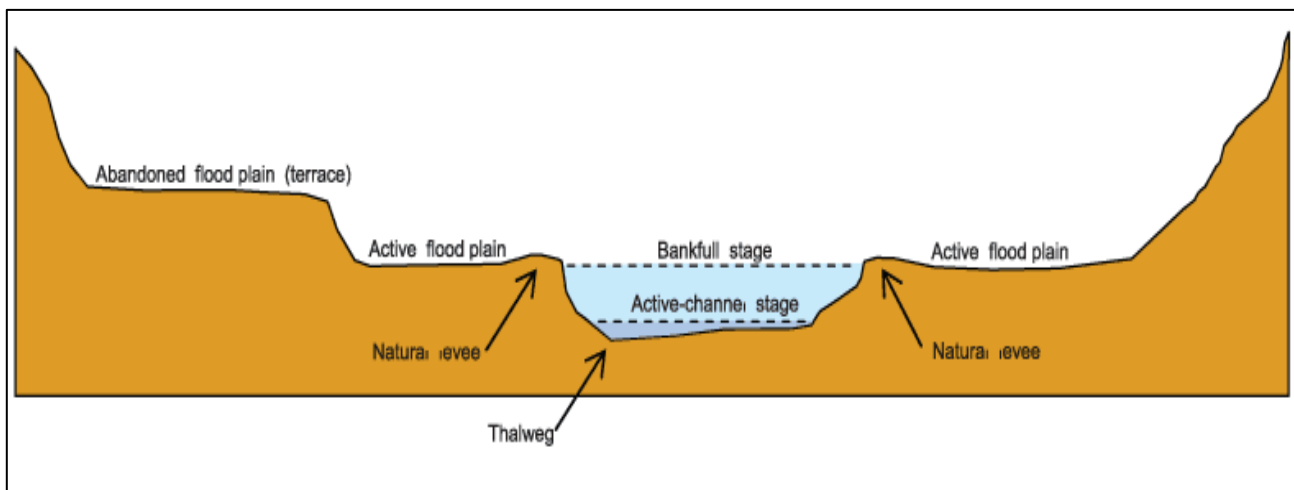


Figure 1: Schematic diagram showing geomorphic features of a stream channel. <https://pubs.usgs.gov/sir/2005/5153/>.

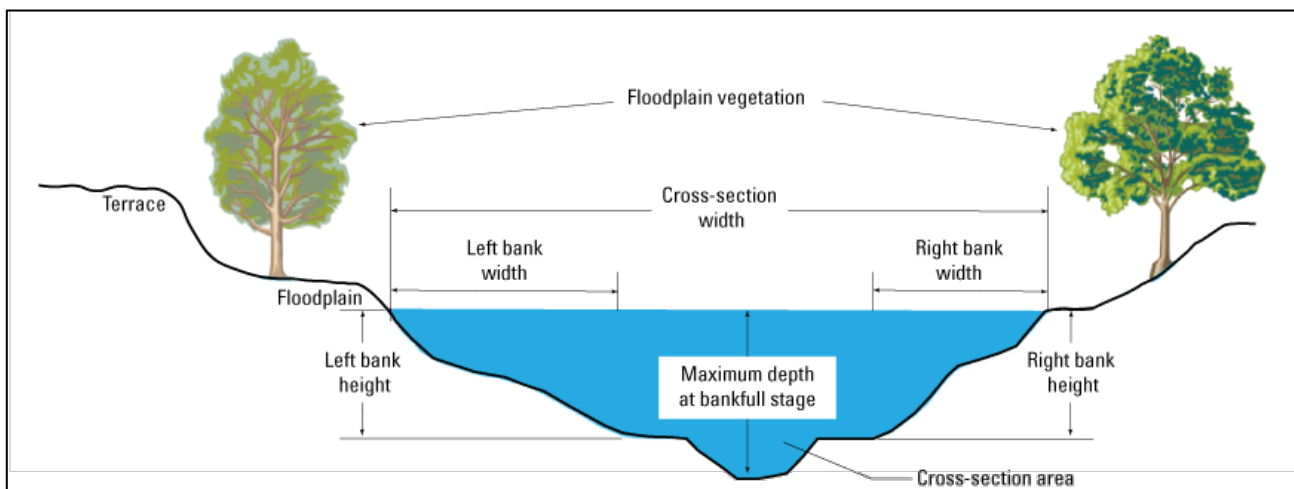


Figure 2: Conceptual diagram of a stream cross-section showing the measurements used to define channel characters. Modified from [Parrett and Johnson \(2004\)](#).

Environmental Planning and Historic Preservation Considerations

Removal of debris from within waterways and the clearing of leaning hazardous trees from the embankments has the potential to impact endangered species such as bats and birds. The use of heavy equipment has the potential to impact archaeological deposits including burial contexts, the potential to dislodge soils and/or sediments in waterways, and the potential to leak fuels. Adherence to all NCDEQ requirements and to the maximum extent their recommendations.

Notify FEMA EHP immediately if the following occurs:

There is any impacts to birds and/or nests,

Notify FEMA EHP immediately if debris is to cross county and state line,

Notify FEMA EHP immediately if there is any community comments on debris operations

RECOMMEND full inadvertent discovery clause which will not fit in this box.

In order to ensure all activities associated with the removal of debris from waterways including the use of heavy equipment, staging areas, access roads and the extraction of rootballs limit the impact on environmental and cultural resources. Refer to FEMA guides FEMA -EHP Debris Removal Field Guide, the FEMA-EHP Debris Removal Quick Guide, and the FEMA-EHP Debris Collection in Culturally Sensitive Areas Guidance for more information.

Eligible Debris

- C&D (typically scattered in the water and accumulated in piles)
- White Goods
- HHW/HTRW
- Electronic waste
- Vegetative (displaced stumps/up rooted trees in waterway)

Note - Vegetation can be cut off flush at the established border or bank line of the waterway. Tree tops in the waterway will not be used to justify removal of entire tree, cut flush these at bank line. Trees leaning over the waterway with 50%+ exposed root ball and hazardous limbs and snags over the waterway may be eligible.

- Concrete: foundations, slabs, and asphalt displaced by the event and deposited in the waterway
- Metal: I-beams, culvert pipes and frames without VIN numbers, fully displaced by the event and deposited in the waterway
- Recoverable (titled property) will be removed from the waterway and placed along the right of way of the nearest public roadway

Ineligible Debris

- Live and standing trees, even in cases where the leaning angle exceeds 15 degrees.
- Demolition of structures displaced or located in the waterway
- Removal of sediment, soil, rocks, gravel, and boulders
- Dredging of waterway
- Relocating of waterway or moving the existing channel
 - i.e. moving the waterway back to it original path
- Rebuilding, regrading or sloping of riverbanks
- Tire walls and/or tire bails placed for erosion and slope stability systems