GLOSSARY

Abutment – A concrete, steel, wood, or masonry structure receiving the arch, beam, truss, stringers, etc. at each end of a bridge.

Aggradation – Filling in, deposition; a reach where sediment accumulates in the channel is said to be aggrading.

Armoring – A layer of stone or other suitable material placed in the stream to protect the banks from erosion.

Avulsion – Creation of a new channel, usually during flood conditions.

Backfill – Adding dirt or gravel to replace material removed during construction or used in a void area such as behind a retaining wall.

Backwater – A rise in the water level upstream of an obstruction or constriction in the channel.

Bankfull discharge – The flow rate that moves sediment and forms or removes bars and meanders to maintain the average characteristics of a stream. The streamflow volume and depth that is normally 1.5-2 year frequency (may be 1-3 year on some streams).

Bar – A submerged or partly submerged deposit of sediment and gravel within a stream channel.

Barb – A low-profile, sloping stone sill angled upstream.

Bedload – Sediment or gravel that is not suspended in the stream but is rolled or dragged along the stream bottom.

Bendway weir – A low-profile, upstream-angled stone sill keyed into the outer bank of a stream or riverbed.

Berm – A strip of earth, usually level, built up to control surface water flows.

Best Management Practices (BMPs) – Guidelines for managing the use of a resource in a manner that protects the resource and promotes ecological and economic sustainability.

Bioengineering – Use of live, woody vegetation independently or in combination with engineering structures, for erosion control.

Bole – Trunk or stem of tree.

Channel migration – The movement or shifting of a stream channel across the width of its floodplain as banks erode and point bars expand.

Channel pattern – The winding of a stream channel as seen from above (in plan view).

GLOSSARY (*continued*)

Channel profile – The shape of a stream channel along its length or longitudinal axis. A stream's profile shows the nature and amount of elevation change over a given reach.

Channel slope – The gradient of a stream's bed; the downhill angle over which a stream flows.

Channelization – Straightening of a reach, or confinement within constructed earthfill (or other object).

Check dam – A small dam constructed in a gully or small watercourse to decrease streamflow velocity, minimize scour, and promote sediment deposition.

Crib – A hollow, structural wall formed out of perpendicular and interlocking wood beams.

Cutting – A branch or stem pruned from a living plant.

Deadman – A buried log or other large object serving as an anchor.

Debris – Materials which accumulate along and within a body of water, including logs, branches, etc., transported by water or ice.

Degradation – Scouring; a reach where sediment is removed is said to be degrading; often downcutting the bed.

Deposition – Settling out of sediment loads, which results in shallows, bars, and lateral channel movement.

Dike – A structure placed in the channel for the purpose of redirecting flow in the channel (see *Levee*).

Diversion – A structure constructed across a stream or river for the purpose of intercepting and diverting water.

Dynamic equilibrium – Changes in streambed load and bed material size are balanced by changes in streamflow or channel gradient.

Fascine – A long bundle of branches or other material placed to prevent erosion and soil movement.

Fish ladder – Angle iron or other baffles placed in a culvert to improve fish passage upstream.

Flume – A calibrated structure for measuring open channel flows. A conduit for conveying water across obstructions.

GLOSSARY (*continued*)

Footer log – A log placed below scour depth of a stream. Foundation for a rootwad and boulders.

Ford – A drive-through crossing of a stream or river.

Gabion – A wire mesh basket filled with rock that can be used in multiple layers as a structural unit.

Geotextiles – Fabric or matting made from natural fibers such as coconut or jute, sometimes woven into a plastic mesh.

Gradient – The amount a stream drops in elevation over a given distance; also referred to as "slope".

Head cutting – The upstream migration of the stream bottom due to erosion. A steep break in channel slope or bed, often unstable and migrates upstream.

Headgate – Water control structure at the entrance to a conduit or canal, such as an irrigation ditch.

Incised – A stream that has downcut (vertical erosion) is said to be incised when the bankfull flows (1.5- to 2-year) cannot reach the floodplain.

Infiltration gallery – A perforated conduit in or adjacent to the stream channel to divert water into a ditch, canal, water tank, etc.

J-Hook – A rock curved sill installed on the end of a barb or vane to direct the flow of the thalweg.

Key (in riprap) – Angular rock trenched into the streambed at the toe of the slope and trenched into each end of the stream bank to prevent scour under or behind the riprap.

Lateral instability – A condition where a stream channel is prone to migrating side-to-side across its floodplain.

Levee – A structure placed on the stream bank or floodplain and above the channel to prevent flood water from affecting dry land. A long linear dam that keeps a low area from flooding (see Dike).

Perennial stream – A stream or reach of stream that flows continuously. Conservation district administrative rules define a natural perennial flowing stream as a stream which in the absence of diversion, impoundment, appropriation, or extreme drought flows continously at all seasons of the year and during dry as well as wet years.

Pier – A support for the ends of adjacent spans in a bridge.

GLOSSARY (*continued*)

Point bar – The silt, gravel, or cobble that extends into the water from the inside of a bend or meander.

Revetment – A facing of trees, stones, or other material to reinforce a stream bank.

Resting pool - A deep pool downstream of the outlet of a culvert that allows fish to rest before swimming through the culvert.

Riprap – An assemblage of angular rock placed on the stream/river bank to protect it from the erosive forces of moving water or wave action.

Riparian – Areas adjacent to or influenced by water from streams and rivers, often referred to as the "green zone".

Rootwad – A 10-20 ft. length of tree trunk and root mass placed in the stream with the trunk buried into the bank and the root mass extending out into the water.

Scour - The removal of underwater material by waves or current, especially at the base of a stream bank or shoreline.

Sediment – Solid material, both mineral and organic, that has moved from its site of origin by wind or water.

Spillway – A structure or channel used to convey water from a reservoir, to regulate the discharge of water.

Stringer – A long, horizontal timber, steel, "I-beam", etc. spanning the abutments of a bridge, providing the foundation for the bridge decking.

Thalweg - The deepest part of a stream channel, where the fastest current usually occurs.

Toe - the base of a slope or stream bank.

Turbidity – Murkiness, cloudiness, caused by stirred-up sediment.

Vane – A low-profile, sloping stone sill angled upstream.

Wattle – Dormant branch cuttings bound into long, cylindrical bundles, placed in shallow trenches for erosion control.

Weir – A small dam in a river or stream.

Wingwall – A wall constructed at an angle to each side of the bridge abutment to prevent road fill material from entering the stream/river.