

## GLOSSARY

**Alluvial** – Composed of loose or unconsolidated sediments, which have been eroded, reshaped by water in some form, and re-deposited in a non-marine setting. An **alluvial stream** is a stream in which the bed and banks are made up of mobile sediment and/or soil.

**Active channel** – A feature in an alluvial stream formed by prevailing discharges; its upper limit is defined by a break in the relatively steep bank slope of the channel to a more gently sloping surface beyond the channel edge.

**Armoring** – The formation of an erosion resistant layer of rocks or gravel on the surface of a stream bed.

**Bank** – The sloping margin of a natural, stream-formed, alluvial channel that confines discharge during non-flood flows.

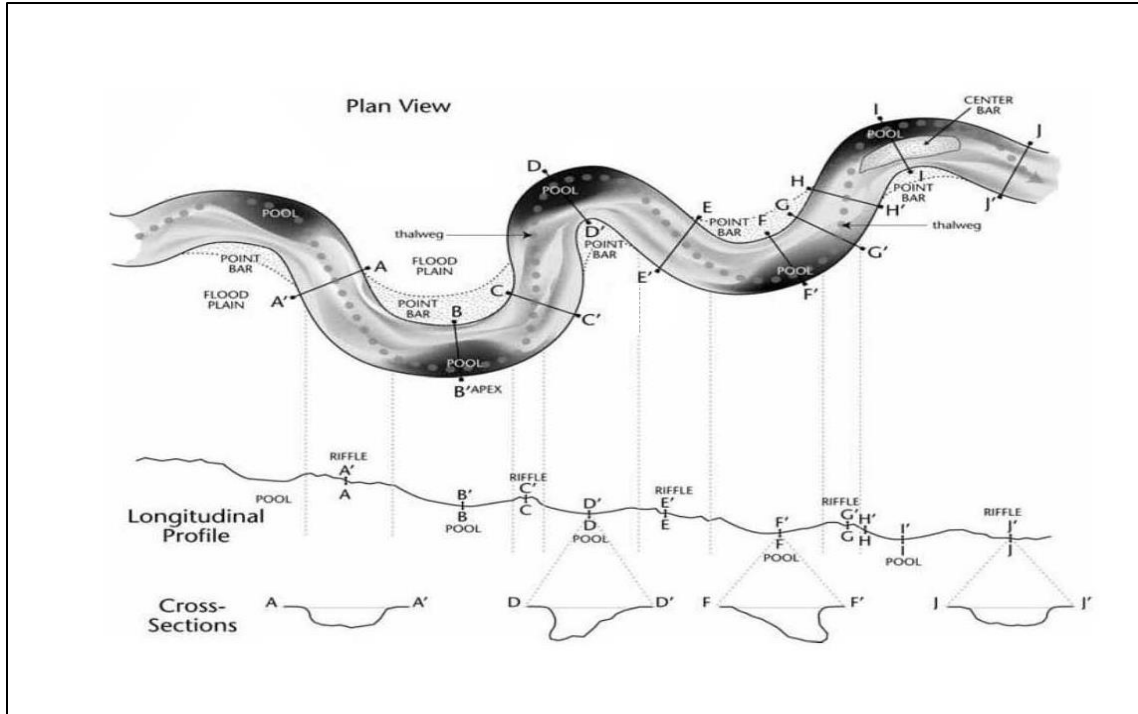
**Bar** – An in-channel depositional feature formed of relatively coarse bed sediments, typically in coarse sand through cobbles sizes, that is generally deposited during the recession of high flow events and is mostly exposed during periods of low flow; the upper surface elevations of bars in perennial streams are typically equivalent to a stage of about 40-percent flow duration.

**Channel** – A natural, or constructed, passageway or depression of perceptible linear extent containing continuously or periodically flowing water and sediment, or connecting two bodies of water.

**Channel Capacity** – The maximum amount of flow that a channel can transport within its banks.

**Channel cross section** – A sectional view of a stream channel, formed by a plane cutting through the stream and its banks, usually at right angles to the main flow direction (see Figure i, below).

**Degradation** – The process of a channel lowering its elevation through increased erosion, channel bed scour, or down-cutting.



**Figure i. Geomorphic Terms – Plan View with Profile and Cross Sections**

W. Barry Southerland, 2003

**Floodplain** – An area of low-lying ground adjacent to a stream or river, formed mainly of alluvial sediments and subject to flooding.

**Fluvial** – Referring to or pertaining to streams; includes stream processes (fluvial processes), fluvial landforms, such as fluvial islands and bars, and biota living in and near stream channels.

**Incised channel** – A stream channel in which the bed has dropped and as a result, the stream is disconnected from its floodplain.

**Glide** – A relatively shallow and low velocity reach that has little or no turbulence.

**Longitudinal profile** – A profile of a stream or valley, drawn along its length between two given points. These profiles are generally drawn to illustrate the gradient of the stream.

**Low flow channel** -- A channel formed by base flows or receding flood flows and may occur as a distinct, incised feature or may be distinguished only by subtle changes in composition of bed material or vegetation. The low flow channel is the portion of a stream in which the water is contained during periods of low flow or base flow, when the stream is not in flood.

**Meander** – One of a series of regular, freely developing, and sinuous curves, bends, loops, turns, or windings in the course of a stream; the process of stream meandering is a means of channel-gradient adjustment through sorting of stored sediment by erosion at the outside of a bend and deposition, as a point bar, at the inside of the bend.

**Nick point, nick zone** -- A location where there is an abrupt change of gradient in the profile of a stream or river, typically due to a change in the rate of erosion. Nick points migrate upstream due to bed erosion, leaving deep channels and abandoned floodplains, which then become terraces.

**Ordinary high water** – The line on the shore of a water body established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

**Planform** – Stream channel pattern as viewed from above (see Figure i, above).

**Pool** –A relatively deep, low velocity reach of quiescent flow between upstream and downstream riffles, or rapids, at which the flows are ordinarily more rapid and turbulent.

**Pool-riffle sequence** – In alluvial stream channels, refers to a succession of one or more combinations of pools and riffles within the channel in the downstream direction; during flood the normally low water velocities in pools and higher water velocities at riffles are reversed, causing scour and removal of accumulated sediment from pooled reaches and deposition of bed sediment on riffles.

**Reach (of a stream)** – An uninterrupted section of a stream channel between two points along its longitudinal course.

**Riffle** – A short, relatively shallow and coarsely bedded length of channel over which the stream ordinarily flows at higher velocities and greater turbulence than it does through upstream and downstream reaches.

**Riparian** – An ecological term referring to the part of the fluvial landscape inundated or saturated by flood flows; it consists of all surfaces of active fluvial landforms up through the floodplain including channel, bars, banks, and related riverine features such as oxbow lakes, oxbow depressions, and natural levees. Particularly in arid and semiarid

(water-deficient) environments, the riparian zone may support plants and other biota not present on adjacent, drier uplands.

**Sinuosity** – The ratio of stream channel length (measured in the thalweg) to the down-valley distance, or is also the ratio of the valley slope to the channel slope.

**Stream** – A body of water confined to a narrow topographic depression, through which it flows and transports rock particles, sediment, and dissolved particles. Rivers, creeks, brooks, and runs are all streams.

**Terrace** – a former floodplain, abandoned due to incision or down cutting.

**Thalweg** – the deepest point in any waterway cross-section.