
Glossary

Armoring

A covering – such as rocks, vegetation or engineering materials – that protects stream banks, fill- and cut-slopes, and drainage structure outflows from flowing water.

Best Management Practices

Practices which – after assessing problems, examining alternatives and involving the public – have been found to be the most effective and practical ways to prevent or reduce the amount of pollution to a level compatible with water quality goals.

Buffer strips

Vegetated areas around water bodies, either purposely left intact or planted, to gain the benefits of riparian systems.

Bulk density

The ratio of the mass of a sample of bed material or soil, to its volume, in units of kg/m^3 .

Catch basin

An area at the inlet of a culvert used to direct water and trap sediment, or the area in front of a silt fence used for collecting sediment and preventing erosion and soil movement.

Channel reach

A defined length of stream channel.

Channel scour

Localized removal of channel bed material by flowing water.

Cross drain/ditch

A man-made ditch or channel constructed to intercept surface water runoff, and divert it before the runoff concentrates to erosive volumes and velocities.

Culvert overflow

Sections of roadway designed to handle overflow from relief or cross-drain culverts, without compromising the integrity of the road surface.

Ditch-relief culvert

A culvert that directs water out of a ditch.

Diversion potential

The likelihood that a stream will wash out or establish a new channel during high water.

Energy dissipater

Any material that slows down and reduces the impact of falling water. Grass can dissipate water's energy, as can rocks.

Ephemeral

Drainage-way that carries surface water and flows only after storms or snowmelt.

Excessive watershed response

A term hydrologists use to describe flooding, which occurs despite the measures people have taken to prevent flooding.

Fire intensity

Indicators of a *medium intensity fire*: a) Very little or no vegetative cover left on the ground; b) Some needles remain on branches or ground, but leaves and other types of cover have burned; and c) Small branches on limbs withstood the burn.

Indicators of a *high intensity fire*: a) No needles left on branches, very few or no needles left on the ground; b) No ground or canopy cover left; c) Small branches on limbs have been burned; and d) Lack of duff layer remaining shows how hot the fire burned.

Fluvial

Pertaining to streams or rivers, or produced by stream action; also, migrating between main rivers and tributaries.

Gabion

A woven galvanized wire basket sometimes lined with geotextiles and filled with rock, stacked or placed to form an erosion-resistant structure.

Geotextile

Fabric, mesh, net, etc., made of woven synthetic or natural materials, and used to separate soil from rock and to add strength.

Ground cover density

Amount of surface area – especially soil – protected from direct exposure to the erosive forces of wind, rain and flowing water. Includes existing protective material, such as rock fragments, organic litter, plant basal area and mat-forming vegetation.

Gully

Any erosion channel larger than 8 inches deep x 12 inches wide.

Gully erosion

Running water can remove soil or soft rock and form distinct, narrow channels that are larger and deeper than rills, and usually carry water only immediately after heavy rains, or when ice or snow melt.

Infiltration

The process by which water enters the soil surface, resulting from the combined forces of capillary action and gravity.

Interception

Vegetation that influences the pattern and amount of precipitation reaching the soil surface.

Land Systems Inventory (LSI) classes

A comprehensive inventory of soil and vegetation patterns and resources.

Monitoring

Collecting information to discover the effects of resource management or treatments, used to identify effectiveness, changing conditions and needs.

Mulch

Organic material applied to the soil surface to protect mineral soil from raindrop impact and overland flow.

100-year flood

A flood, whose size should be equaled or exceeded, on average, only once every 100 years.

Out sloping

Shaping a road surface to make water drain toward the outside shoulder (generally the fillslope) rather than the inside (generally the cutslope).

Overland flow

Water that flows over the surface, occurring when the rainfall rate exceeds the infiltration capacity of the soil.

Peak flow

Maximum flow a given channel can hold without flooding.

Productivity

The capability of a site to produce plant and animal biomass in a given amount of time.

Relief culvert

A conduit buried beneath a road surface, used to direct water to drain into a longitudinal ditch at the toe of a cutslope.

Rill

One of the first and smallest channels formed by surface runoff, especially in soil.

Rill erosion

The development of numerous, minute, closely spaced channels that result from the uneven removal of surface soil by running water concentrated in streamlets of enough volume and velocity to generate cutting power. In burned areas with little or no vegetative cover, rill erosion is catalyzed by a layer of water-repellent soil that forms a few millimeters below the soil surface during fire.

Riparian area

Area along a stream that is influenced by the presence of shallow groundwater.

Ripping/tilling

Turning the soil with a plow or ripping device, often done to promote infiltration by breaking up water-repellent soil layers.

Runoff

Movement of water across surface areas of a watershed during rainfall or snowmelt.

Sedimentation

Sediment carried by water and deposited in surface depressions, side slopes, channel bottoms, channel bank, alluvial flats, terraces, fans, lake bottoms and the like.

Sediment budget

An accounting of sediment input, output and change in storage, for a particular stream or channel reach.

Sediment storage

Sediment accumulated and retained on hill slopes and in dry stream channels behind barriers such as vegetation, downed logs or rocks, and held in place by root masses or stabilized at angle of repose.

Sediment yield

Amount of sediment lost off an area over time, usually expressed as $\text{tons/ac}^1/\text{yr}^1$ or $\text{Mg ha}^1 \text{yr}^1$.

Sensitive soil

Soil that has a delicate structure or consists of a very thin layer, and is easily eroded away if exposed, or when wet, compacted beyond the point of productivity.

Silt fence

Finely woven fabric used to detain water and sediment.

Slash

Trees, limbs, branches, twigs and root-wads that are left over after logging.

Slash-filter windrow

Logging slash piled and compacted along the base of a fill slope, effective at slowing surface runoff and keeping sediment from entering streams.

Snags

Standing dead trees.

Straw wattle

A tube of woven mesh netting (usually 1 foot around x 6 to 20 feet long), filled with straw or hay and sometimes seed mixes, used to trap sediment or promote infiltration.

Stream channel

A natural watercourse of perceptible extent that has a generally sandy or rocky bottom or definite banks and that continues and conducts continuously or intermittently flowing water.

Streamflow

Movement of water in a drainage channel.

Substrate

Mineral or organic material that forms the bed of a stream.

Watershed

An area or region bounded by ridges or divides, such that all precipitation falling in the area contributes to its watercourse.

Water yield

Total runoff from a drainage basin, depending largely upon the soil and climatic conditions.