

GLOSSARY

Alkaline – basic or high pH conditions (opposite of acidic); base-rich (high concentrations of calcium and magnesium chemical compounds)

Adsorb – to attach one substance onto another

Bars – coarse-grained deposit of sediment from a stream or ocean currents

Bay – a body of sheltered water found in a crescent-shaped coastal configuration of land

Bedrock – rock substrate that underlies all soil, sand, clay, gravel, and glacial material on the Earth's surface

Berm – an elongated mound in a naturally level land area or one made artificially by a landscaper to gain privacy or interest in a private or public area. 2) a narrow embankment, shelf or mound that breaks the continuity of a slope often used as dike or dam. 3) an earth mound positioned across a natural draw or gully to intercept surface runoff of water

Best management practice (BMP) – proven, practical and affordable method, measure or practice to prevent or reduce water pollution, including but not limited to, structural and nonstructural controls, operation and maintenance procedures, other requirements and scheduling and distribution of activities

Bio-engineering – an applied science that combines structural, biological and ecological concepts to construct living structures for erosion, sediment, and flood control

Bluffs – an escarpment or cliff formed from bedrock or unconsolidated geological materials in a riparian area

Bog – a peatland that is isolated from ground or surface water (only significant water inputs are directly from rain) and dominated by mosses (*Sphagnum* spp.), shrubs, sedges, and evergreen trees such as black spruce and tamarack

Brush layering – bio-engineered erosion control structures created by placing live branch cuttings across slope contours

Brush mattress – bio-engineered bank stabilization structure where live and dead brushes are placed along banks and covered in soil

Buffer strip – a strip of vegetation – usually a mix of trees, shrubs and grasses – planted alongside natural areas, e.g., watercourses, to protect them from surrounding land uses

Bulkheads – soil-filled retaining walls (timber, steel or concrete) designed to resist wave action along shores

Carbon sequestration – the capture of carbon gas, making it unavailable for biological processes (as part of plants or soil organic matter); a means of lowering greenhouse gas emissions

Clear-cutting – technique used in even-aged timber management that involves one cut, and which may remove an entire stand

CO₂ – carbon dioxide gas (naturally occurring) generated by the respiration of all living organisms

Coffer dam – temporary dams, often constructed of wood, used as an interim measure to allow construction of other riparian structures

Concentrated flow – the convergent flow of surface runoff from farmland that can carry pollutants to outlets, and if unmanaged can lead to large rill and gully erosion

Cool-season grass – grass that develops most rapidly during spring and fall when cool nights follow warm days

Corridor – a tract of land forming a passageway; an ecological connection between two areas

Delayed grazing – the restriction of grazing livestock to a paddock, e.g., adjacent to riparian area, until conditions are suitable

Deleterious substance – as applicable to livestock operations, means any substance that, if added to water, would degrade or alter the quality of that water, making it harmful or “deleterious” to fish or fish habitat

Delta – large deposit of sediment located at the mouth of a stream where it enters a body of standing water

Denitrification – process by which nitrate-nitrogen is converted to nitrogen gas by soil organisms under anaerobic conditions.

Deposit – any discharging, spraying, releasing, spilling, leaking, seeping, pouring, emitting, emptying, throwing, dumping or placing

Drop structure – spillway or pipe inlet intended to drop concentrated flow or ponded water to a sub-surface pipe system

Embankments – see **Berm**

Erosion – process in which a material is worn away by water or wind, often worsened by the presence of abrasive particles in the stream or air respectively

Erosion control structure – in-field, built structure designed to reduce soil loss and safely convey surface water to a proper outlet

Extensive grazing – less than 1 nutrient unit (see below) per acre per year

Fen – a type of peatland that receives mineral-rich inputs of ground or surface water and is dominated by sedges and other grass-like vegetation

Fish habitat – spawning grounds and nursery, rearing, food supply and migration areas on which fish depend directly or indirectly to carry out their life processes

Floodplain – that portion of a stream valley adjacent to the channel that is built by sediments of the stream and covered with water when the stream overflows its banks at flood stage. 2) also the nearly level land situated on either side of a channel that is subject to overflow flooding

Forb – herbaceous plant other than grass, trees, or shrubs – i.e., wildflowers

Forward grazing – a form of rotational grazing where a small number of livestock are channelled forward within the confines of narrow, row-shaped paddocks

Gabion basket – terraced rock riprap systems where the rock materials are held in place with wire cages

Grassed waterway – a natural or constructed vegetated channel that is shaped and graded to carry surface water at non-erosive velocity to a stable outlet, or that spreads the flow of water before it enters a proper outlet

Grazing management plan (GMP) – for pastures in or near riparian areas, a plan completed by graziers to assess the environmental risks of grazing and to set a plan of management actions to reduce the impact on the riparian area and water quality

Greenhouse gas – gases responsible for the greenhouse effect, including carbon dioxide (CO₂); methane (CH₄); nitrous oxide (N₂O)

Groynes – are stone-filled or concrete protective barriers constructed at right angles from shorelines to reduce the impact of shoreline erosion

Groundwater – water that flows or seeps downward and saturates soil or rock, supplying springs and wells. 2) water stored underground in rock crevices and in the pores of geologic materials that make up the Earth's crust

Gully – an erosion feature where the concentrated flow of water and surface runoff have created a ravine-like depression in the landscape – wide and deep enough to prevent crossing by farm equipment

Infiltration – the downward movement of water from the atmosphere into soil and rock formations

Intensive grazing – more than 1 nutrient unit (see below) per acre per year

Intermittent stream – a defined channel in which surface water is absent during a portion of the year

Invasive – plants (often non-native) that spread into natural ecosystems and crowd out the natural vegetation

Live cribwall – a retaining wall for lakeshore stabilization consisting of interlocked timber, back-filled with soil and brush materials

Marsh – shallow-water area that sustains water-loving plants such as cattail, sedge, arrowhead, bulrush, water lily and pond weeds

Meadow – a tract of grassland, either natural or used as pasture or for growing hay

Meander – a circuitous winding or bend in the river

Nitrate – one of the plant-available nitrogen compounds (NO₃⁻) found in soil and can be a pollutant at high concentrations in ground and surface water

Nutrient unit (NU) – in Ontario, a means of describing manure volume and livestock density; as defined in the *Nutrient Management Act*, the amount of nutrients that give a fertilizer replacement value of the lower of 43 kg of nitrogen or 55 kg of phosphate as nutrients (roughly equivalent to the impact of 1 beef cow, including unweaned calf and replacement; 8 ewes; 8 goats; 2 ponies; or 2 dairy heifers)

Point – a shoreline that juts into the body of water like a peninsula

Ravine – the landform – usually steeply sloping – formed by a river valley as it cuts a channel through the underlying bed materials over many years

Revetment – stone retaining wall

Riffle – shallow section of a stream or river with rapid current and a surface broken by gravel

Rill – a very small steep-sided channel carrying runoff water – this landscape feature is intermittent, and can be easily crossed with farm equipment.

Riparian – near surface water

Riparian zone – the area adjacent to streams, rivers, and other bodies of water that serves as a transition between aquatic and terrestrial environments, and directly affects and is affected by that body of water

Rock riprap – stones of varying size used to dissipate energy or stabilize a soil surface

Rotational grazing – where pastures are grazed and rested in sequence to allow for regrowth

Runoff – water that is not absorbed by the contributing area, but rather drains off by surface flow onto the area of other land and waterbodies

Sediment – fragmented material that originated from weathering rocks and decomposing organic material that is transported by, suspended in, and eventually deposited in the streambed

Shade tolerant – plant's ability to thrive in shady conditions; important feature to match species to local site conditions

Soil conservation/Soil management BMPs – BMPs that range from reduced tillage practices (e.g., no-till, residue management) to slope management (e.g., strip cropping) to soil management practices that improve soil quality and reduce runoff

Stream – perennial or intermittent watercourse having a defined channel and banks (excluding manmade ditches), which contains flow from surface and groundwater sources during at least 50 percent of the time during an average rainfall year

Stream order – a numerical system (ranking from headwaters to river end) used to designate the relative position of a stream or stream segment in a drainage basin

Streambank – the portion of the channel cross-section that restricts lateral movement of water at normal water levels

Surface water – a natural or artificial channel that carries water either intermittently or continuously throughout the year; also a lake, reservoir, pond, sinkhole or wetland

Terraces – a form of farmland erosion control structure where berms are constructed along contours or across field slopes to reduce slope length and divert surface runoff to a safe outlet

Watershed – an area of land that drains into a particular river or body of water; usually divided by topography. 2) The total area of land above a given point on a waterway that contributes surface runoff water to the flow at that point; a drainage basin or a major subdivision of a drainage basin