

Glossary of Terms used in the Stormwater Industry

Term	Code	Definition
Calcareous	Gel	Material, especially soil and rocks, containing calcium carbonate (and often magnesium carbonate) and usually having an alkaline pH.
Calgon	Sol	A chemical dispersant used to provide a control in the soil dispersion percentage test.
Calibration	Hyd	The process of adjusting model parameters so that model output adequately reflects observed field data.
Canal	Gen	A long, narrow arm of the sea which extends far inland, or a channel constructed to allow the passage of boats or ships inland, for example, the Suez Canal.
	Eng	1. A channel usually of uniform or near-uniform cross-section constructed to convey water for water supply or irrigation. Very occasionally used to mean drainage channel.
	Eng	2. A long, narrow, artificial arm of the sea constructed to allow navigable passage to inland areas, such as in a residential CANAL ESTATE.
Canal estate	Eng	An urban area and associated canals in proximity to the sea that has been constructed to provide waterfront properties.
Capacity (hydraulic)	Hyd	The maximum storage volume of a hydraulic structure. Occasionally used to mean maximum discharge capacity.
Capillary water	Sol	Water drawn upwards into soil pores and held by surface tension.
Capillary zone	Gel	The zone immediately above the water table where water is drawn upward by capillary attraction.
Capture trench	Min	A trench excavated to below the level of the watertable to allow the drainage of groundwater.
Carcinogen	Eco	A substance that induces, or tends to induce, cancer in a living organism.
Carcinogenic	Gen	Relating to any substance deemed to be a cause of cancer.
Cascade	Top	A succession of small drops on a watercourse that is intermediate in fall between rapids and a waterfall. The slope is steep enough to allow a succession of small drops, but not sufficient to cause the water to drop vertically, such as in a waterfall.
	Eng	A constructed channel consisting of a series of steps, for example, a stepped fountain, a staircase chute, or stepped drop structure.
Cataract	Top	A series of rapids or waterfalls, usually used in the context of major rivers, for example, the six cataracts of the Nile River between Khartoum and Aswan.
Catch bank	Esc	An excavated earth drain with an associated down-slope embankment formed from the excavated material.

Catch basin	Sto	A modified stormwater pit fitted with baffles that are specifically designed to encourage heavy sediments and floating debris to remain in the pit. Also known as a BAFFLED PIT or TRAPPED STREET GULLY.
Catchbasin	Sto	A combined stormwater inlet and junction pit (USA).
Catch drain	Eng	A minor drainage channel constructed along the high side of a road or embankment, outside the batter, to intercept surface water.
	Esc	A minor excavated drain, either temporary or permanent, used for such purposes as to: <ul style="list-style-type: none"> • limit the travel path of overland flow, to prevent or reduce soil erosion (particularly rill erosion) on exposed slopes; • divert up-slope runoff around disturbed areas to prevent the contamination of this runoff, and reduce soil wetness and erosion within the isolated area; • collect contaminated flow from within a disturbed area and direct it to a sediment trap; and • divert up-slope runoff around stockpiles of erodible material. Earth excavated to form the drain can be placed down-slope of the excavation to form a stable embankment, thus increasing the effective hydraulic capacity of the catch drain. The combined drain and embankment is also known as a CATCH BANK.
Catchment	Hyd	That area of land from which stormwater runoff contributes to stream flow at the most downstream point of the catchment. Also known as a DRAINAGE BASIN, DRAINAGE CATCHMENT, and WATERSHED (USA).
Catchment area	Hyd	The area (in plan view) of the drainage catchment. Usually measured in hectares (ha) or square kilometres (km ²).
Catchment basin	Hyd	See CATCHMENT.
Catchment storage	Hyd	The volume of surface storage within a drainage catchment that collects and temporarily retains stormwater runoff, excluding in-channel and floodplain storage volumes. This can include ponds, dams, lakes and constructed detention/retention basins.
Catchment wetness index	Hyd	A measurement of catchment conditions before a rainfall event.
Catchment yield	Hyd	The volume of water that flows from a catchment past a given point (such as a stream gauging station). Typically calculated on an annual basis, but can be assessed over a defined period or a single storm. It comprises surface runoff and base flows.
Catch pit	Sto	A stormwater inlet or junction pit with a depressed base that accumulates coarse sediment. Can also incorporate a trash screen and/or oil skimmer.
Cation	Sci	A positively charged ion that is attracted to the cathode during electrolysis.

Cation-exchange capacity (CEC)	Sol	<p>The total amount of exchangeable cations that a soil can absorb, expressed in centimoles of positive charge per kilogram of soil. Cations are positive ions such as calcium, magnesium, potassium, sodium, hydrogen, aluminium and manganese, these being the most important ones found in soils.</p> <p>Cation exchange is the process whereby these ions interchange between the soil solution and the clay or organic matter complexes in the soil. The process is very important as it has a major controlling effect on soil properties and behaviour, stability of soil structure, the nutrients available for plant growth, soil pH, and the soil's reaction to fertilisers and other ameliorants added to the soil.</p>
Causeway	Gen	A raised road or path constructed across low, wet ground or across tidal water.
	Eng	<p>A raised carriageway constructed across a watercourse or tidal waterway.</p> <p>The term most commonly refers to watercourse crossings where the culvert has a relatively small cross-sectional area compared to that of the raised embankment, the culvert is abutted on one or both sides by a raised roadway embankment of significant length, or a raised embankment crossing that has no low-flow culvert.</p>
Cell	Eng	The individual flow conduit of a culvert between the end walls. Also known as a BARREL.
Centrifugal pump	Eng	1. Any pump in which fluid is pressurised by a rotating impeller, whether the flow is radial, axial, or a combination of both (mixed).
	Eng	2. A radial flow pump (Europe).
Channel (none)	Gen	1. That part of a drain or watercourse confined by its bed and banks.
	Gen	2. A well-defined deepwater passageway within a navigable channel, whether natural or constructed, such as a dredged shipping channel.
	Gen	3. A navigable route between two bodies of water, such as the English Channel between the Atlantic Ocean and the North Sea.
	Eng	A natural or constructed open conduit with well-defined sides (banks). Used to transport fluid.
	Wwy	That part of a watercourse located between the top of each bank, or the top of the bank located immediately adjacent a floodplain if there is more than one bank on a given side of the watercourse.
Channel (verb)	Gen	To convey a fluid along a channel.
Channel capacity	Eng	The maximum flow rate or discharge of water along a channel just prior to it spilling over its lowest bank. Channel capacity can vary depending on surface roughness conditions at any given time.
Channel complexity	Eng	1. The complexity of a channel's cross-section (that is, the irregularity of the cross-section or the number of benches).
	Eng	2. The variability of a channel's roughness within a given cross-section.

Channel freeboard	Eng	The vertical distance between the design water surface elevation in an open channel, and the elevation of the top of the channel bank.
Channelise	Eng	The act of modifying a landform such that all or part of the overland flow is forced to flow within a channel.
	Wwy	The act of modifying a natural channel to increase its capacity and/or reduce its irregularity or sinuosity.
Channel lining	Eng	Material placed on, or incorporated into, the inner surface of a channel or chute, usually to protect the channel from erosion. May also be aesthetic, ecological, affect hydraulic capacity, or relate to operational and maintenance issues.
Channel stabilisation	Eng	The process of either modifying the channel surface (eg revegetation), or using a channel lining (e.g. rock lining) to stabilise a channel against the forces of flow or gravity.
Channel stability	Eng	A measure of a channel's resistance to erosion, displacement or damage by the forces of flow or gravity.
Charophytes	Eco	A class of algae (commonly known as green algae).
Check dam	Esc	Small, regularly spaced, flow control structures that reduce the velocity of water in drains by "damming" the water and so increasing the flow depth. Typically used to control soil erosion in newly formed drains, and/or to act as minor sediment traps. The dams may be constructed from semipervious or impervious materials, including timber, rock, sand/gravel bags or synthetic mesh.
	Sto	A permanent flow control structure placed intermittently along a bio-retention cell to increase the effective flow depth, thus increasing infiltration and the water-vegetation contact time.
Check structure	Eng	A permanent grade control structure installed in a channel or gully to check (arrest) a worsening bed erosion problem, such as a migrating head-cut.
Check valve	Eng	A directional control valve that allows liquid to flow in only one direction.
Chelate	Sci	The type of coordination compound in which a central metal ion is attached by coordinate links to two or more non-metal atoms (ligands) in the same molecule.
Chemical antagonism	Eco	A process that results in a total mixture of chemicals being less toxic than would be expected from a simple summation of the toxicities of the individual chemicals in the mixture (i.e. algebraic subtraction of effects).
Chemical coagulation	Res	The process of adding a chemical (coagulant) to water to cause fine or colloidal dispersed particles to combine in order to remove them by sedimentation or filtration.
Chemical nutrient removal	Res	The chemical process for removing nutrients from water.
Chezy coefficient	Hyd	The resistance coefficient for open channel flows first introduced by A. Chezy. The coefficient is a function of the relative roughness and Reynolds number.

Chloramination	Wat	The process of disinfecting water with a mixture of chlorine and ammonia.
Chloramine	Wat	The compound formed by the reaction of hypochlorous acid with ammonia.
Chlorination	Wat	The application of chlorine to water, sewage or industrial wastewater for disinfection or other biological or chemical results.
Chlorophyll	Bot	The green pigment in plants. Used as a measure of algal biomass.
Choke	Hyd	A channel contraction that obstructs the flow and induces the appearance of critical flow conditions. Also known as a CONTROL SECTION.
Chronic	Eco	Relating to a stimulus that is lingering or continues for a long time from several weeks to years, depending on the reproductive life cycle of the species. Can be used to refer to either the exposure or the response to an exposure (effect). Chronic exposure typically induces a biological response of relatively slow progress and long continuance.
Chronic value	Eco	The measure of the geometric mean of the lower and upper limits obtained from an acceptable chronic test or by analysing chronic data using a regression analysis. A lower chronic limit is the highest tested concentration that did not cause an unacceptable adverse effect on any of the specified biological measurements, and below which no tested concentration caused unacceptable effect. An upper chronic limit is the lowest tested concentration that did cause an unacceptable adverse effect on one or more biological measurements and above which all tested concentrations also caused such an effect.
Chute	Hyd	A steeply inclined section between the inlet and outlet of a flume, or other similar hydraulic structure, that conveys the flows directly from one level to another.
	Esc	A short open channel that conveys water down a steep slope, e.g. the spillway of a sediment basin.
	Sto	A permanent drainage structure designed to convey concentrated storm runoff down the face of an embankment without causing erosion.
	Wwy	A steep section of a river or a steep channel used to convey materials.
Chute spillway	Hyd	A spillway with a chute for its control section. Where a chute spillway incorporates a drop structure at its inlet, it is referred to as a drop inlet chute spillway.
Circular screens	Sto	A circular debris screen, usually contained in an enclosed chamber, which separates gross pollutants from stormwater passing through the chamber. Separated solids are kept in continuous motion by the momentum of the incoming flow, thus reducing the risk of debris blockage of the screen blockage.

Circular settling tank	Sto	<p>A primary treatment system, circular in plan view, usually used to settle gross pollutants in stormwater. Some systems can retain oil and trap floating materials.</p> <p>The tank can be divided into a series of chambers specifically designed to remove and retain different pollutants, such as coarse pollutant, floating pollutants, sediment, oils and grit.</p>
Cladoceran	Eco	Zooplankton (Water flea) belonging to the fourth order of the Branchiopoda, the Cladocera. Commonly found swimming in standing inland water.
Clarification	Res	<p>The process by which particles are settled out in a large quiescent tank that releases clearer water as effluent.</p> <p>Also known as SEDIMENTATION.</p>
Clay	Sol	1. Soil material consisting of mineral particles smaller than 0.002mm in equivalent diameter. This generally includes the chemically active mineral part of a soil. The 3 broad classes of clay type are recognised, namely montmorillonite, kaolinite and illite.
	Sol	2. A soil texture group containing at least 35 per cent clay and no more than 40 per cent silt.
Clay loam	Sol	<p>A soil texture group comprising a well-graded soil of approximately equal parts by weight of clay, silt and sand.</p> <p>A bolus formed in the hand can be easily rolled to a thread 3 to 4mm thick, but it will have a number of fractures along its length. The soil becomes plastic, capable of being moulded into a stable shape. Clay content is approximately 30%.</p>
Clay-based stream	Wwy	<p>A watercourse where clayey soils are dominant within the stream channel.</p> <p>In this type of watercourse, stability is usually dominated by the existence of bed and bank vegetation. In their natural condition there is usually little if any sediment flow along the creek during most flood events within minor (i.e. non-river) stream.</p>
Clean water	Gen	Water, (fresh, brackish or saline) that is free of contaminates.
	Esc	Surface runoff that has not been contaminated by a given work site, or by the actions of a construction or building activity.
	Min	Surface runoff that has not picked up any solid or dissolved pollutants from disturbed or contaminated surfaces.
Clearing	Esc	The process of removing vegetation and debris from an area to prepare it for future works.
	Wwy	The removal of vegetation, structures or other objects from a watercourse or floodway.
Climate	Gen	The prevailing weather conditions of a region, including temperature, pressure, humidity, precipitation, sunshine, cloudiness, and winds, averaged over years.
Climate change	Met	Changes in climate attributed directly or indirectly to human activities that have altered the composition of the Earth's atmosphere.

Climatological data	Gen	Data relating to local climate conditions as averaged over a series of years.
COAG	Gen	Council of Australian Governments.
Coagulant	Esc	A substance that produces coagulation.
Coagulation	Esc	The process of converting a colloidal or finely divided suspension of particulate matter into particles that settle.
Coastal erosion	Coa	An erosion process in which soil is detached and transported from the land by the action of ocean waves and/or currents.
Coastal plain	Lfm	A complex landform adjacent to the coast that is level to very gently inclined. The plain is formed by the deposition of material from overbank stream flow, overland sheet flow and marine inundation.
Cobble	Eng	A water-worn rounded stone usually measuring 75 to 300mm.
	Wwy	Granular bed or bank material measuring 10 to 250mm equivalent diameter.
Coefficient of discharge	Hyd	A dimensionless calibration coefficient used in the Rational Method to calculate the peak rate of storm runoff for a given design ARI. The coefficient is not directly related to the volumetric runoff coefficient. Also known as the COEFFICIENT OF RUNOFF, DISCHARGE COEFFICIENT, and DISCHARGE COEFFICIENT OF RUNOFF.
Coefficient of runoff (discharge)	Hyd	See COEFFICIENT OF DISCHARGE.
Coefficient of runoff (volumetric)	Hyd	The ratio of the amount of water that runs off a catchment to the amount that falls on the catchment. Also known as the VOLUMETRIC RUNOFF COEFFICIENT.
Cofferdam	Eng	A watertight enclosure constructed in watercourses and then pumped dry so that bridge foundations or similar may be constructed in the open. Typically incorporates two cofferdams forming the dry chamber in which channel works are performed.
Cohesive sediment	Sol	Sediment material with small particles (i.e. less than 50: m) in which cohesive bonds between particles (e.g. intermolecular forces) are significant and affect the material's properties.
Cohesive soil	Sol	A soil whose relevant behaviour characteristics are derived largely or entirely from the cohesive bonds associated with the fine fraction.
Collector drain	Sto	A channel, pipe or overland flow pathway that collects runoff from branch drains and passes it to the main drain.

Colloid	Eco	Fine abiotic and biotic particles typically 0.1: m to 1µm in diameter.
	Sol	A state of matter that is between a true solution and a suspension, in which the material is typically 0.1: m to 1µm diameter. Colloids (colloidal particles) cannot settle out of a circulating medium through the force of gravity.
Colloidal material	Sol	The finest clay and organic material, with a particle size generally less than 0.001mm diameter. This material is made up of the finest particles removed by erosion. They remain permanently in suspension, unless subject to coagulation.
Colluvial	Gen	Material mostly transported by gravity.
Colluvium	Sol	Loose and incoherent deposits, usually at the foot of a slope or cliff line and deposited by gravity.
Colour	Wat	The colour of water from which turbidity (suspended matter) has been removed. Colour in water may result from the presence of natural metallic ions (e.g. iron and manganese), humus and peat materials, plankton (algae), weeds or industrial wastes.
Combined drain	Eng	A drain that functions as a surface water drain and as a subdrain. Several combinations are possible including: combined base drain and subdrain; and combined subdrain and stormwater drain.
Combined sewer	Eng	A sewer designed to carry foul sewage and surface runoff in the same pipe or channel.
Combined system	Sto	A conduit designed to carry both sewage and stormwater during normal operation conditions (i.e. excluding those systems that carried combined flow during surcharge or flood conditions).
Community	Eco	An assembly of organisms characterised by a distinctive combination of species occupying a common environment and interacting with one another.
Compaction	Eng	The process of increasing the density of a material by removing air and compressing its particles. Optimum structural compaction of soils depends on the moisture content of the material.
Compensation point	Eco	The depth at which assimilation and dissimilation are equal.
Completely mixed reactors	Sci	An ideal reactor in which the conditions are completely homogeneous throughout the reactor.
Complexation	Sto	The process of forming a compound by uniting a metal ion with a non-metallic ion or molecule called a ligand or complexing agent. Complex atoms are generally less available to biota.
Complex outlet	Sto	The outlet of a hydraulic structure, e.g. a detention basin, that incorporates more than one type of outlet device or system. Each type of outlet device incorporated provides specific hydraulic properties at different flow rates to achieve the required complex stage-discharge relationship.
Composite channel section	Hyd	A cross section of a channel where the hydraulic roughness (i.e. Manning's roughness) varies across its width. Also known as a COMPOSITE CROSS-SECTION.

Composite cross-section	Hyd	A cross section of a channel where the hydraulic roughness (i.e. Manning's roughness) varies across its width. Also known as a COMPOSITE CHANNEL SECTION.
Compound channel section	Hyd	A cross section of a channel that has an irregular shape with sectors of deep and shallow flow such as a waterway channel with attached floodplain(s). Flow conditions within each sector are primarily influenced by a different value of hydraulic radius. Also known as a COMPOUND CROSS-SECTION.
Compound cross-section	Hyd	A cross section of a channel that has an irregular shape with sectors of deep and shallow flow such as a waterway channel with attached floodplain(s). Flow conditions within each sector are primarily influenced by a different value of hydraulic radius. Also known as a COMPOUND CHANNEL SECTION.
Concentrated flow	Hyd	A fluid flowing in a confined feature such as a channel, ditch, swale, or river, as opposed to a fluid flowing as sheet flow.
	Sto	1. Stormwater flowing in a confined feature such as a channel, ditch, swale, or river; or stormwater discharged from a confined feature (such as a pipe) prior to the stormwater achieving sheet flow conditions.
	Sto	2. Stormwater flowing at a greater discharge per unit width than would have naturally occurred, or prior to a specific human activity, for example, the way stormwater runoff enters a property after being confined by up-slope construction or land-reshaping.
Concentration	Gen	The measurement of one substance in another, e.g. milligrams per litre or parts per million.
Conductivity	Wat	The ability of water to carry an electric current.
Conduit	Gen	A pipe, tube, or the like, used for conveying water or other fluid.
Confined aquifer	Gel	An aquifer in which the upper surface is impervious and the water is held at greater than atmospheric pressure.
Confined sand filter	Sto	A sand filter housed inside an impervious chamber, typically a concrete chamber, where filtered stormwater either infiltrates from the sand filter into a sub-surface perforated drainage pipe, or passes into the surrounding earth through drainage slots in the wall(s) of the chamber.
Confluence	Wwy	The place where two or more streams meet and begin to flow together.
Consequence	Gen	An outcome or impact of an event expressed qualitatively or quantitatively.
Consistence	Sol	The strength of cohesion and adhesion in soil. Strength is determined by the force just sufficient to break or deform a 20mm diameter piece of soil when a compressive shearing force is applied between thumb and forefinger.

Consolidation	Eng	The process of increasing the density of a material through compaction or gradual drainage.
	Min	The process of reducing the volume of wet material, such as a slurry, by gradual drainage.
Constant energy structure	Hyd	<p>A hydraulic structure designed to yield critical flow at all points for a particular discharge. At discharges greater than the design discharge choking will probably occur at the throat or barrel.</p> <p>Also known as MINIMUM ENERGY STRUCTURE or CRITICAL FLOW STRUCTURE.</p>
Constant loss rate	Hyd	<p>An assumed maximum potential removal (loss) of water from the rate of rainfall to achieve a measure of stormwater runoff where the "rate of loss" is constant over a period of time within a given storm.</p> <p>Usually measured in units of mm/hr per unit catchment area. The assumed loss rate usually varies across the drainage catchment in accordance with known or assumed surface conditions.</p>
Constructed pond	Sto	A small, artificial, low-velocity water body deeper than 2m containing zones of open water and zones of macrophytes.
Constructed wetland	Lfm	A wetland made by human skill and labour.
	Sto	<p>A constructed shallow lake or pond, characterised by extensive areas of emergent aquatic plants/macrophytes, designed to support a diverse range of micro-organisms and plants associated with the breakdown of organic material and the uptake of nutrients.</p> <p>Constructed wetlands typically contain substantial areas of shallow water less than 500mm deep, but can also include areas deeper than 1m, referred to as the pond or lagoon.</p> <p>They may operate as permanent wet basins (perennial), or alternate between wet and dry conditions (ephemeral).</p>
Construction drainage plan (CDP)	Esc	A site drainage plan developed specifically for a given intermediate stage of a building or construction project. The plan identifies overland flow paths, areas of sheet and concentrated flow, flow entry and exit points, and flow paths of clean water and dirty water.
Construction flood	Eng	A flood of specified characteristics that is able to be diverted around or past a structure while it is under construction.
Contact time	Sto	The long-term average duration of contact between water and a given treatment process within a given water body or segment of a water body.
Contaminant	Eco	A toxic substance that is a health hazard to biota.
	Sto	<p>A substance that renders matter impure by contact or mixing. Can be a gas, liquid or solid; an odour; an organism (whether alive or dead), including a virus; energy, including noise, heat radioactivity or electromagnetic radiation; or a combination of these.</p> <p>In stormwater, potential contaminants include nutrients, metals, biological organisms, temperature, dissolved oxygen, colour, turbidity, suspended sediments, leachate, hydrocarbons, and litter.</p>
Contamination	Gen	The act of contaminating biota with a contaminant.

Continuing loss	Hyd	An assumed maximum potential removal (loss) of water from rainfall that occurs immediately after the removal of initial losses during the process of forming stormwater runoff.
Continuing loss rate	Hyd	The assumed rate of ongoing rainfall losses that occurs immediately after the removal of initial losses. The assumed loss rate usually varies across the drainage catchment in accordance with known or assumed surface conditions.
Continuous precipitation	Hyd	Rainfall characterised by gradual changes of intensity, usually associated with stratiform clouds that densely cover the whole sky. Applies to any precipitation that is not a shower or intermittent precipitation.
Continuous simulation models	Hyd	A numerical model that simulates a long-term hydrologic process.
Continuously stirred tank reactor	Sto	A simple means of numerically describing mixing and the mass balance of pollutants within ponds and wetlands during rapidly changing storm discharge conditions.
Control	Gen	An existing process, policy, device, practice or other action that acts to minimise negative risk, or enhance positive opportunities.
	Eco	A treatment in a toxicity test that duplicates all the conditions of the exposure treatments but contains no test material. The control is used to determine the absence of toxicity in the basic test conditions (e.g. health of test organisms, quality of dilution water).
	Hyd	A location or cross-section within an open channel where critical flow conditions occur and a fixed and definable relationship exists between the stage and the discharge. Subcritical flows are controlled by downstream flow conditions. Supercritical flows are controlled by upstream flow conditions.
Control section	Hyd	A location or cross-section within an open channel where critical flow conditions occur and a fixed and definable relationship exists between the stage and the discharge. Also known as a CONTROL.
Contour	Top	An imaginary line on the surface of the Earth connecting points of the same elevation. Such lines on maps portray the shape of the land surface.
Contour bank	Rur	A bank constructed along the true contour forming a level channel that discharges at either or both ends depending on its design requirements. Typically used on grazing land. Also known as a LEVEL BANK.
Contour ditch	Rur	A level excavated channel designed to hold and spread water on low slope country. The water accumulates and spreads along the length of the ditch, before spilling on a broad, even front. Typically used on marginal arable land of slope less than 3 percent, and constructed using a disc plough or grader blade. Normally dish-shaped in cross-section measuring approximately 150 to 300mm deep and 2 to 2.5m wide.
Contour drain	Rur	A drain constructed along the contour.

Contour furrow	Rur	<p>A small level channel designed to hold water on moderately steep land. Typically constructed to increase the retention of rainfall on the land, thereby reducing runoff and erosion, and increasing pasture productivity.</p> <p>Most commonly formed at regular intervals down a slope with the interval being determined from soil properties, land slope and rainfall data.</p>
Contour ploughing	Rur	The process of ploughing horizontally along a contour.
Control valve	Eng	<p>A valve used in a conduit that can be partly opened to regulate flow or pressure.</p> <p>Also known as a FLOW CONTROL VALVE.</p>
Converter	Eng	A length of drain constructed to provide a transition between two sections of a drain with different-shaped cross-sections.
Conveyance	Hyd	A measure of the hydraulic properties of a channel defined by the expression, $K = Q/S_f^{1/2}$, where K is the conveyance of a channel, Q is the discharge, and S_f is friction slope (i.e. the rate of head loss due to boundary resistance).
Conveyance structure	Sto	A pipe, open channel, or other facility that transports stormwater runoff from one location to another.
Copepods	Eco	Crustaceans of the sub-class Copepoda. A diverse and large group of small animals that are most commonly found in freshwater and marine situations.
Core	Eng	The central compacted mass of impervious soil material in an earth embankment that prevents seepage.
Core trench	Eng	The excavation filled with impervious core material in the construction of an earth embankment.
Coriolis coefficient	Hyd	<p>A factor (α) when multiplied by the velocity head ($V^2/2g$) results in the true velocity head of flow at a given location and time.</p> <p>Also known as the KINETIC ENERGY CORRECTION FACTOR.</p>
Coriolis effect	Met	An effect resulting from a combination of momentum and the Earth's rotation that causes the specific rotation of large air masses. The Coriolis effect promotes the clockwise rotation of low-pressure cells and the anti-clockwise rotation of high-pressure cells in the southern hemisphere.
Corrosion	Gen	The process by which a surface of a solid is 'eaten away' as a result of chemical action, e.g. rusting.
	Sci	The process of electrochemical degradation of metals or alloys due to reaction with their environment; it is accelerated by the presence of acids or bases.
Cover	Bot	Any vegetation that forms a mat on or just above the soil surface. In forests, this might be formed by low-growing shrubs, vines, or herbaceous plants under the trees.
	Eng	The depth of material between the surface of the ground or carriageway and the top of a culvert or pipe.

	Esc	Any mat-forming vegetation (e.g. ground cover, or cover crop), organic or inorganic mulch, or synthetic material located on or just above the soil surface.
Cover crop	Agr	Plants, particularly cereals, grown mainly to temporarily protect the soil during or prior to the establishment of more protective plant cover.
Creek	Gen	A small stream, brook, or minor tributary of a river, or other watercourse sufficiently narrow to allow significant vegetation shading of the channel.
	Coa	An inlet in a shoreline, channel in a marsh, or other narrow, sheltered waterway.
	Wwy	A watercourse, minor in comparison to local rivers, whether natural or artificial, permanent or ephemeral, with static or flowing water that is fresh, brackish or salty. Natural in its appearance and ecological function, and with a significant ecological association with adjacent riparian vegetation.
Creek whisperer	Wwy	A waterway designer or manager who has the ability to focus their design and/or management recommendations primarily on the needs of the watercourse and its ecosystem based on past experience and meticulous observations of the watercourse in question.
Crest	Hyd	The overflow section of a weir or similar structure.
Crest of dam	Eng	The top of a dam, or the level at which water overflows the spillway.
Cresylic	Sci	An acidic commercial mixture of phenolic materials boiling above the cresol range (greater than 240°C).
Crib dam	Eng	A gravity dam built up of boxes, cribs, crossed timbers or gabions, and filled with earth or rock.
Criteria (water quality)	Wat	Scientific data evaluated to derive the recommended limits of water uses.
Critical depth	Hyd	The depth of water occurring in a channel or partially full conduit at the point of critical flow when the Froude Number is equal to 1.0 and the specific energy is a minimum. It is the flow condition that exists between supercritical and subcritical flow when the speed of the water and the speed of the hydraulic pressure wave, at a given point, are the same.
Critical downstream node	Sto	The most sensitive downstream water body (or bodies) in respect to sustainable pollutant loads, which dictate land use and management practices across the catchment.
Critical event	Sto	A storm or flood, whether real or fictitious, that causes a specific action or consequence that is considered undesirable. The critical event may not necessarily be the design event or design storm.
Critical flow	Hyd	The state of flow in a section of a channel or partial-full conduit when the flow is at critical depth. Flow in which the Froude Number is equal to unity and the specific energy (of the mean flow) is a minimum.

Critical flow structure	Hyd	A hydraulic structure designed to yield critical flow at all points for a particular discharge. At discharges greater than the design discharge 'choking' will probably occur at the throat or barrel. Also known as a MINIMUM ENERGY STRUCTURE or CONSTANT ENERGY STRUCTURE.
Critical pollutant	Sto	Pollutants of primary concern because of their impacts on water quality and biota.
Critical rainfall duration	Hyd	The design storm duration that produces the maximum peak discharge at a given location within a given catchment.
Critical velocity	Hyd	The average velocity of flow in a section of a channel or partial-full conduit when the flow is at critical depth.
Cross bank	Sto	A longitudinal earth mound with low vertical curvature placed diagonally across an unsealed road or track to collect and divert stormwater runoff across the road or track to a table drain or suitable discharge point. Such banks are ordinarily designed to handle larger flows than cross drains. Also known as a WHOA BOY.
Cross connection	Sto	The hydraulic connection to two conduits or pipe networks that are meant to be separate systems where such a connection allows fluids from the two systems to mix.
Cross drain	Eng	A drain of various forms (e.g. cross bank or sub-surface pipe) that collects the flow of water on a road, trail or other access way and diverts it across the road surface. Typically required where runoff cannot be controlled by crossfall drainage.
Cross drainage	Eng	A system of pipes or culverts that conveys storm flows transversely across or under a roadway.
Cross-section	Hyd	A vertical section on a plan showing the profile of the conduit at right-angle to the dominant direction of flow.
Cross slope	Top	The slope of the land's surface measured at right angles to the general direction of the main slope.
Crossfall	Eng	The slope, at right angles to the alignment, of the surface of any part of a carriageway.
Crossfall drainage	Eng	The type of drainage that take place when the surface of a road, trail or other access-way has sufficient cross slope to cause water to flow across and off the surface, rather than along it. Where the water flows into the hillside it is termed infall, and where flow is away from the hillside it is termed outfall.
Crown	Eng	The highest point on the cross section of a carriageway with two-way crossfall.
Crustaceans	Eco	Invertebrate aquatic animals with hard shells. Includes daphnia, crabs, lobsters, yabbies, and prawns.
Culm	Bot	An aerial stem of a grass or sedge, terminating in an inflorescence (common term is flower).

Cultural significance	Gen	Sites, places, artefacts or memories that are meaningful to contemporary society or parts of society, e.g. sites exhibiting material evidence of past indigenous occupation.
Culvert	Gen	A drain or channel crossing under a road.
	Eng	One or more adjacent pipes or enclosed channels for conveying a watercourse or stream below formation level. When it has a rectangular cross section, it is termed a box culvert.
Culvert leg	Eng	The vertical sidewall of a box culvert.
Culvert sidewall	Eng	The inside surface of the sidewall of a box culvert.
Curb	Eng	A kerb (USA). See KERB.
Curtilage	Gen	Land area within a property's (house, yard and garden) boundaries.
Cut	Eng	The depth from the natural surface of the ground to the finished land surface.
Cut and fill	Eng	A process of slope modification in which soil is excavated from along one section of a slope and used to construct an embankment below.
Cut batter	Eng	An earth batter constructed by excavation of material.
Cut-off	Eng	An impervious barrier of material or concrete designed to prevent seepage flows through or beneath a structure.
Cut-off trench	Eng	A long, narrow excavated keyway constructed along the centre line of a dam, dyke, levee or embankment and filled with relatively impervious material intended to reduce seepage of water.
Cut-off wall	Eng	An impervious barrier of material or concrete designed to intercept seepage flows through or beneath a structure, and to prevent downstream bed erosion from undermining a hydraulic structure. Commonly used at culvert head walls and on the discharge apron of drop structures.
Cyanobacteria	Eco	A type of naturally occurring, microscopic, primitive photosynthetic bacteria. Also known as BLUE-GREEN ALGAE.
Cyclopean dam	Eng	A gravity masonry dam made of very large stones embedded in concrete.