Glossary of Terms used in the Stormwater Industry

Term	Code	Definition
Wake vortex	Wwy	A vertically aligned vortex forming downstream of a pier or other obstruction in open channel flow.
Wash load	Wwy	That part of the total suspended sediment load finer than the bed material.
Wastewater	Eng	The liquid waste that includes wash-water from construction equipment and industrial/commercial activities, excess water released after its use is not longer needed, and cooling water from construction activities such as diamond saw cutting.
	Res	The water discharged from residential, commercial and industrial properties through a formal sewer system.
Water	Gen	The liquid state of the hydrogen–oxygen combination H_2O that, in a more or less impure state, constitutes rain, oceans, lakes, rivers, and so on. In its pure state it is a transparent, odourless, tasteless liquid.
Water body	Res	Any surface water of a landscape, including: • All waters subject to the ebb and flow of the tide. • All waters such as lakes, rivers, streams (perennial or ephemeral), watercourses (natural or constructed), mudflats, sandflats, wetlands, sloughs, wet meadows, or natural ponds. • All impoundments of waters, including all water reservoirs, natural or constructed. • The bed, banks and wetted surface of such water bodies that allows distinction between the different types of water bodies, e.g. a creek, river, lake, estuary.
Water-column	Eco	The part of a water body between the bottom and water surface.
Water consumption	Hyd	The use of water in a manner that prevents its immediate reuse, e.g. evaporation, plant transpiration, contamination, or incorporation into a finished product.
Watercourse	Gen	A channel with defined bed and banks, including any gullies and culverts associated with the channel, down which surface water flows on a permanent or semi-permanent basis or at least, under natural conditions, for a substantial time following periods of heavy rainfall within its catchment.
Water-dependent ecosystem	Eco	Those parts of the environment, the species composition and natural ecological processes, that are determined by the permanent or temporary presence of flowing or standing water, above or below ground. It includes the in-stream area of rivers, riparian vegetation, springs; wetlands, floodplains, estuaries and lakes are all water-dependent ecosystems.
Water erosion	Esc	The erosion process in which soil is detached and transported from the land by the action of rainfall, runoff, seepage and/or ice.
Waterfall	Wwy	A steep fall, cascade or flow of water from a height.
Waterfront	Gen	Land abutting on a body of water.

Water hammer	Hyd	1. A relatively short-term, transient flow condition that occurs when one steady-state flow condition suddenly changes to another slower-velocity (or zero velocity) steady-state condition.
	Hyd	2. The concussion caused by a positive pressure wave moving along a pipe or pipe network following a sudden change in the steady-state flow rate.
Water harvesting	Res	The collection and storage of surplus water for later use.
Water-level	Hyd	The surface level of any body of water.
Water-meter	Gen	A device for measuring and registering the quantity of water that passes through a pipe.
Water quality	Gen	The chemical, physical and biological condition of water.
Water quality indicators	Wat	Measurable water properties that indicate a likely change in an environmental value, such as the properties linked to unsustainable seagrass growth. There are three types of water quality indicators: • Indicators that are normally present in the water and can be usefully monitored for change that can be linked to a change in the environmental value. • Indicators that are not normally present but if detected can be used to identify a change in an environmental value. • Indicators that are normally present and whose absence reflects a change in an environmental value.
Water quality objectives (WQOs)	Wat	Upper limits or ranges within which median values of water quality should lie. Typically used as targets to guide the actions of water resource and environmental managers.
Water reclamation	Res	The process of treating wastewater to produce water of suitable quality for beneficial uses.
Water recycling	Res	The sustainable use of appropriately treated wastewater, urban stormwater and rainwater for beneficial purposes, in ways that safeguard public health and environmental values.
Water regime	Wwy	The typical seasonal or temporal characteristics of inflow to a water body.
Water resource	Res	The sources of supply of groundwater and surface water in a given area.
Water resource engineering	Eng	The engineering of both water supply and the management of wastewater, groundwater and stormwater for the purposes of water supply.
Water resources	Res	The areas of study in the biological sciences, engineering, physical sciences, and social sciences relating to water as a resource.
Water right	Res	The right to make use of the water from a particular body of water.
Waters	Gen	The tidal waters below mean high water mark, and the waters of perennial and ephemeral streams, gullies, rivers, lakes, coastal lagoons, wetlands and other forms of natural and constructed water bodies, including the bed and banks of these waters.

Waterscape	Gen	A picture or view of the sea or other body of water.
Water Sensitive Urban Design	Sto	A holistic approach to the planning and design of urban development with aims of minimising negative impacts on the natural water cycle, protecting the health of aquatic ecosystems, and promoting the integration of stormwater, water supply and sewage management at a development scale.
Watershed	Hyd	1. The ridge or crest line dividing two drainage areas.
	Hyd	2. The area of land from which stormwater runoff contributes to stream flow at the most downstream point of the catchment (USA). Also known as a CATCHMENT, DRAINAGE CATCHMENT, and DRAINAGE BASIN.
Waterside	Gen	The margin, bank, or shore of a water body.
Water surface elevation	Hyd	The elevation of the water surface relative to a given datum.
Water surface superelevation	Hyd	The phenomenon where the water surface around a horizontal curve in an open channel is at a higher level at the outer edge than at the inner edge of the curve.
Watertable	Sol	1. A surface that defines the top of the saturated zone in an unconfined aquifer at which the pressure is atmosphere.
	Sol	2. The upper limit of the portion of ground saturated with water within a confined aquifer.
Water-tower	Res	A vertical pipe or tower into which water is pumped to obtain a required head.
Water use	Hyd	All water flows that are a result of human intervention within the hydrologic cycle.
Waterway	Gen	A term commonly interchangeable with the term ‘watercourse’. The legal definition may vary from state to state, and region to region.
	Rur	A stable overland flow path of sufficient capacity to discharge surplus runoff from pasture or cultivation paddocks and to allow it to flow to a lower level without causing erosion. The runoff would normally be concentrated within the waterway by the natural landscape or by soil conservation banks and/or gully control structures.
	Wwy	A river, canal, or other body of water used as a route or way of travel or transport (i.e. navigable channel), including the area available for water to pass through or under a structure such as a bridge or culvert.
Waterway channel	Wwy	The area of land between the overbank riparian zones, or the area of land located below the top of the lower banks (i.e. not including the floodplain), whichever is the greater.
Waterway officer	Wwy	A regulator or manager of waterways, including creeks, rivers, wetlands and estuaries.
Water year	Hyd	A 12-month period usually beginning at the end of the period of lowest average flow during the year. Commonly set at 1 September to 31 August within tropical regions.

Wave	Hyd	A disturbance of the surface of a liquid body, e.g. sea or a lake, in the form of a ridge, swell or surge.
Wave celerity	Hyd	The velocity with which either a change in flow rate, or a change in water surface elevation, travels on the surface (i.e. the speed of the wave).
Wave erosion	Coa	An erosion process in which soil is detached and transported from the land by the action of waves. It is typically associated with coastal areas and is often referred to as coastal erosion. Wave erosion may occur at the margin of any water body, such as a retention structure, lake or dam.
Wave run-up	Coa	The maximum vertical height attained by a wave running up a dam face, measured from the still-water level.
Wave setup	Coa	The raising of sea level inside the surf zone resulting from the momentum flux of broken waves.
Webbing (geotextile)	Eng	A coarse woven geotextile made of strips a few centimetres wide to resemble coarse slit film woven fabric. Usually used for erosion control, bank protection, and soil reinforcement.
Weep-hole	Eng	A small hole through an abutment or retaining wall for drainage of soil water.
Weir	Hyd	An open channel flow control device, or overflow structure, placed normal to the direction of flow causing upstream sub-critical flow to pass through critical depth at the weir crest.
	Wwy	A structure or wall built across a channel, drain or watercourse to raise the water level to allow diversion or measurement of discharge rate. Weirs may be either sharp-crested or broad-crested, and may operate in either a state of free discharge, or a submerged or drowned state.
Weir pool	Wwy	The still body of water that is held back by the presence of a weir.
Wet detention practices	Sto	Stormwater detention systems that incorporate a permanent pool of water, detain and release runoff over five days or even longer, and allow sedimentation, flocculation, and chemical and biological processes to occur, reducing stormwater pollutants. During and immediately after storms, runoff is temporarily stored above the permanent water pool. Also known as RETENTION PRACTICES.
Wet pond	Sto	A large, permanent open water treatment pond often incorporating a heavily vegetated macrophyte) area, e.g. retention basin, lake, wetland.
Wet storage pond	Sto	A storage pond designed to retain water during dry weather.
Wetland	Wwy	1. An area of land inundated temporarily or permanently with shallow water that is usually slow moving or stationary, including areas of marine water up to 6m deep; emergent and submerged plants are the dominant feature.

	Wwy	2. An area of marsh, fen, peatland or water, natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water up to 6m at low tide (as defined in the Ramsar Convention). May include rivers, streams, billabongs, river overflow areas such as floodplains and swamps, some riparian forests, melaleuca (tea-tree) swamps, lakes, ponds, salt lakes, claypans, lagoons, mangrove areas, mud flats and salt marshes.
Wetland flow control structure	Wwy	A culvert or flume used to control water movement into and out of a wetland, with or without the provision of vehicular passage across the structure.
Wetted perimeter	Hyd	The length of wetted contact between the flowing stream and the solid boundary (i.e. wetted bed and banks) of a channel with a cross-section normal to the dominant flow direction.
Wetted surface	Hyd	The surface area in contact with the flowing liquid within an open channel.
White waters	Wwy	A non-technical term used to describe free-surface aerated flows
Whoa boy	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 that cross drains. Also known as a CROSS BANK.
Wicking	Sto	The act of selectively applying herbicide to tall grasses within small drains using a length of stiff wire shaped to the approximate cross-section of the drain and wrapping it in cloth soaked with herbicide. The wick is then passed down the drain so that the herbicide only comes in contact with the taller grasses.
Wind erosion	Esc	An erosion process in which soil is detached and transported from the land surface by the action of wind. Where the removal of a fairly uniform layer of soil from the land surface occurs, the term 'sheet erosion' may be used. The transport of wind-blown particles occurs by suspension, saltation or surface creep.
Wind set-up	Coa	The rise in stillwater level caused by wind stress on the surface of the body of water.
Windrow	Agr	A longitudinal accumulation of straw, timber, soil or other material, stacked or piled-up by mechanical means. Ordinarily associated with hay crops, whereby after cutting, the hay is windrowed to allow more uniform drying prior to bailing.
	Eng	A longitudinal accumulation of straw, timber, soil or other material, stacked or piled-up by mechanical means. Earth windrows are typically created by spillage at the edge of a bulldozer blade during earthmoving operations, e.g. during the construction and maintenance of trails.

Windrow drains	Sto	A drain formed by a windrow along the edge of a trail, used to direct stormwater runoff to a stable outlet.
Wing wall	Eng	A wall forming an extension of an abutment or headwall, as in a bridge or culvert, used for retaining the slope of earth filling.
Withdrawal	Hyd	The act of taking water from a source for storage or use.
Work area	Eng	The area that will be disturbed by building or construction works, including the area that fully encloses any soil disturbances, the building activities, materials stockpiles and vehicle pathways.
Work site	Eng	The area of potential disturbance by building or construction works, including any area enclosed by temporary exclusion fencing, the area of ground disturbance and building activities, any structures, materials stockpiles and vehicle pathways.
Woven geotextile	Eng	A geotextile formed from by systematically interlacing two sets (warp and filling) of parallel yarns to form a sheet.
WQO	Wat	Abbreviation for water quality objective. The upper limit or range within which the median value of a given water quality parameter should lie. Typically used as a target to guide the actions of water resource and environmental managers.
Xenobiotic	Eco	A foreign chemical or material not produced in nature and not normally considered a constitutive component of a specified biological system, usually applied to manufactured chemicals.
Xeriscaping	Bot	A type of landscaping involving the selection and placement of plant species specifically adapted to the local environment in order to reduce water consumption.
Xeromorphic	Bot	Vegetation adapted to dry climatic conditions and able to withstand prolonged droughts.
Yield	Res	The amount of runoff produced or expected to be produced from a catchment.
Zooplankton	Eco	Small animal organisms that float or drift in water at or near the surface.