Glossary of Terms used in the Stormwater Industry

Term	Code	Definition
Objective (water quality)	Sto	A numerical concentration limit or narrative statement that has been established to support and protect the designated uses of water at a specified site.
Obvert	Eng	The highest portion of the internal surface of a culvert or arch at a given cross-section. Also known as the SOFFIT.
Octanol-water partition coefficient (P_{ow})	Eco	The ratio of a chemical's solubility in n-octanol and water at equilibrium. The logarithm of P_{ow} is used as an indication of a chemical's propensity for bioconcentration by aquatic organisms.
Off-line	Sto	Relating to not being in the direct flow path of the stormwater drainage system.
Off-line device	Sto	A stormwater system, such as a tank or pond, in which the water level is independent of the level of flow in the associated drain or watercourse and through which flow does not pass during normal operating conditions.
Off-site	Eng	Relating to not being on the site, e.g. an off-site sediment trap located down-slope of a development site.
Off-stream	Wwy	Relating to being away from the main stream channel.
Off-stream basin	Sto	A flood detention/retention basin located away from the main stream channel, e.g. a basin located on an adjacent floodplain.
Off-stream dam	Eng	A water storage dam located away from the main stream channel in which water must be collected and pumped or channelled into the dam.
Off-stream wetland	Wwy	A wetland located away from the main stream channel, e.g. a wetland separated from the main channel by a natural or constructed embankment.
Off-take	Eng	A structure or point of diversion for water transfer, e.g. where water is released from a dam.
Oil-grit separator	Sto	A type of pollutant trap comprising two or three underground retention chambers designed to remove litter, coarse sediment and oils. The first chamber is used for sedimentation and the collection of large debris. The second chamber is used for oil separation. The third chamber (if used) collects and disperses flow into the stormwater system.
Oil trap	Sto	A stilling tank configured to separate lighter oily matter, scums and hydrocarbons from stormwater.
Oligotrophic	Wwy	Relating to waters with a small supply of nutrients.
One-dimensional flow	Hyd	A type of flow in which significant variations in flow conditions occur only along the primary direction of flow. One-dimensional flow analysis neglects the variations and changes in velocity and pressure transverse to the main flow direction.

On-line	Sto	Relating to being in the direct flow path of the stormwater drainage system.
On-line device	Sto	A stormwater system, such as a tank or pond, in which the water level is the same as the level of flow in the associated drain or watercourse and through which flow passes during normal operating conditions.
On-site	Eng	Relating to being on the site, e.g. in an on-site sediment trap located within an urban development.
On-site detention (OSD)	Sto	A stormwater detention system that is located wholly within a given property.
On-stream	Wwy	Relating to being within the existing stream channel.
On-stream dam	Eng	A dam, wall, or other structure placed on, or constructed across, a watercourse or drainage path for the purpose of holding back and storing the natural flow of that watercourse or the surface water run-off flowing along that drainage path.
Open channel	Wwy	A flow channel not enclosed by a roof, arch or other structural lid.
Open channel flow	Hyd	A condition of flow where there is a free surface, whether or not the flow is located in an open channel or enclosed conduit.
Open GPT	Sto	An open (non-enclosed) gross pollutant trap consisting of a combined sediment basin and trash rack usually located at the downstream end of a stormwater pipe network or constructed drainage channel. Also known as a MAJOR GPT and OPEN GROSS POLLUTANT TRAP.
Open gross pollutant trap	Sto	An open (non-enclosed) gross pollutant trap consisting of a combined sediment basin and trash rack usually located at the downstream end of a stormwater pipe network or constructed drainage channel. Also referred to as a MAJOR GPT and OPEN GPT.
Open subsoil drain	Sto	An open drain used to collect and remove subsoil water rather than surface water.
Operating head	Hyd	The difference in static water pressure upstream and downstream of a structure or component of a structure.
Organism	Eco	Any living thing capable of carrying on life processes.
Organoleptic	Eco	Relating to or perceived by a sensory organ.
Orifice	Hyd	An opening in the wall of a tank or in a plate located within a conduit normal to the axis of flow. Typically used to either measure or control the flow rate.
Orifice meter	Hyd	A flow rate measuring instrument based on the hydraulic properties of an orifice.
Orthophosphorus	Sci	A soluble form of phosphorus (PO_4) applied to urban and agricultural land as a fertiliser.
OSD	Sto	Abbreviation for on-site detention. See ON-SITE DETENTION.

Osmolality	Sci	A measure of osmotic concentration that refers to the total number of osmotically active particles in a litre of solvent.
Osmosis	Sci	The process in which a solvent diffuses through a semi-permeable membrane into a more concentrated solution that tends to equalise the concentrations on both sides of the membrane.
Outfall	Hyd	A point of discharge from a sewer or drain to a water body.
Outflow	Hyd	A discharge from a sewer or drain to a water body.
Outlet	Hyd	The point at which water discharges from a river, creek or other flow line; lake, tidal basin or drainage depression; or pipe, channel, dam or other hydrologic structure.
Outlet (basin)	Sto	The location or locations where water discharges from a basin.
Outlet (stormwater)	Sto	The point at which water discharges from a stormwater pipe or drain.
Outlet approach	Sto	A stormwater quality management system that relies on the placement of stormwater treatment devices at the outlet of a catchment or sub-catchment.
Outlet control	Hyd	A hydraulic condition in which factors downstream of a culvert's entrance govern the discharge characteristics.
Outlet facility	Sto	Any receiving water into which a storm drainage system discharges.
Outlet litter cage	Sto	A trash and litter collection cage attached to the outlet of a stormwater pipe. Gross pollutants collected by the cage are usually held above normal water level.
Outlet protection	Sto	Erosion protection measures placed downstream of a pipe or culvert outlet.
Outlet works	Sto	The combination of intake structures, screens, conduits, tunnels and valves that permit water to discharge under controlled conditions from a tank, basin or reservoir.
Overbank	Wwy	Relating to not being located between the top of the banks of a channel.
Overbank flow	Wwy	The portion of a flood flow that flows outside the main river channel at relatively small depths over part of or the full width of the floodplain and in a direction essentially parallel with the direction of the main channel.
Overland flow	Sto	1. Surface runoff that occurs in the form of sheet flow on the land surface without concentrating in clearly defined channels.
	Sto	2. Any surface runoff whether flowing as sheet flow or shallow concentrated flow e.g. flow within road reserves, shallow grassed channels and overbank flows, but not flow within deep drains, drainage channels or streams.
Overland flow path	Sto	The flow path of overbank flow, including roadways and shallow drainage easements over which stormater flows in excess of the capacity of the minor drainage system.
Overshot spillway	Eng	A spillway that discharges over the embankment.

Overtopping	Hyd	High discharge rates that exceed outlet pipe or primary spillway capacity, and flow over the top of the embankment or weir bounding the reservoir.
Oviposition	Eco	The act of egg laying typical of mosquitoes.
Oxic	—	See AEROBIC.
Oxidation	Sci	The process of combining oxygen with a substance, or removing hydrogen from it or, more generally, any reaction in which an atom loses electrons.
Oxidised	Sci	Relating to substances or atoms that have undergone oxidation.
Oxycline	Sol	The plane of maximum rate of oxygen concentration decrease in respect to sediment depth.
Oxygenation	Sci	The process of adding dissolved oxygen to a solution.
Oxygen-demanding substances	Sto	Numerous organic materials that are decomposed by microorganisms and create a need for oxygen.