

## Glossary

**Aquifer** - A porous, water bearing geologic formation generally restricted to materials capable of yielding an economically significant or otherwise appreciable supply of water.

**Assimilative** - The amount of contaminant load that can be discharged to a specific waterbody without exceeding water quality standards or criteria. Assimilative capacity is used to define the ability of a waterbody to naturally absorb and use a discharged substance without impairing water quality or harming aquatic life.

**Attenuation** - The process of reduction of a compound's concentration over time. This can be through absorption, adsorption, degradation, dilution, or transformation.

**Bioretention** - An engineered process to manage stormwater runoff, using the chemical, biological, and physical properties afforded by a natural, terrestrial-based community of plants, microbes, and soil. Bioretention provides two important functions: (i) water quantity (flood) controls; and (ii) improve water quality through removal of pollutants and nutrients associated with runoff. ([www.Raingardens.org](http://www.Raingardens.org))

**Bubble permit** - Also called an overlay permit. This is an NPDES permit issued to two or more dischargers within a watershed and establishes aggregate loading limits with respect to one or more constituents, such as nitrogen and/or phosphorus

**Buffering** - A designated area adjacent to and a part of a steep slope or landslide hazard area which protects slope stability, attenuation of surface water flows, and landslide hazards reasonably necessary to minimize risk; or a designated area adjacent to or a part of a stream or wetland that is an integral part of the stream or wetland ecosystem. ([Stormwater Authority.org](http://Stormwater Authority.org))

**Catchment** - A part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or a body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

(<http://water.usgs.gov/wsc/glossary.html#Drainagebasin>)

**Denitrification** - A wastewater treatment process whereby nitrogen in wastewater is converted to nitrogen gas.

**Easement** - A limited right to make use of a property owned by another.

**Effluent** - Municipal sewage or industrial liquid waste (untreated, partially treated, or completely treated) that flows out of a treatment plant, septic system, pipe, etc.

(<http://www.deq.state.va.us/tmdl/glossary.html>)

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**Eutrophication** - A condition of a waterbody in which excess nutrients, particularly phosphorous, stimulates the growth of aquatic plant life usually resulting in the depletion of dissolved oxygen. Thus, less dissolved oxygen is available for other aquatic life.

**Forest banking** - A process where a landowner agrees to reforest a property, place a permanent protective easement on the woodlands, and then sells acreage from the planting to developers in need of mitigation.

**Groundwater** - The water beneath the surface that can be collected with wells, tunnels, or drainage galleries, or that flows naturally to the earth's surface via seeps or springs. Groundwater is the water that is pumped by wells and flows out through springs.

**Hydrogeologic units** - Any soil or rock unit or zone that because of its hydraulic properties has a distinct influence on the storage or movement of groundwater.

**Impervious** - An impermeable constructed covering over the land, such as roads or rooftops, which prevents infiltration of surface water into the subsurface.

**Infiltration** - The passage or movement of water into the soil surface.

**Inflow** - Rainwater that enters the sewer system from sources such as yard and patio drains, roof gutter downspouts, uncapped cleanouts, pond or pool overflow drains, footing drains, cross-connections with storm drains, and even holes in manhole covers. Inflow is greatest during heavy rainfall and, like infiltration, can cause excessive flows and sewage spills.

**Influent** - Water, wastewater, or other liquid flowing into a reservoir, basin, or treatment plant.

**Integrated water resources planning** - A process which promotes the coordinated development and management of water, land and related resources, in order to maximize the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems.

**Loading limit** - Maximum amount of a pollutant that can be applied to a unit area.

**Loading rate** - *The total amount of material (pollutants) entering the system from one or multiple sources; measured as a rate in weight per unit time.*

**Nitrification** - *A biological process involving the conversion of nitrogen-containing organic compounds into nitrates and nitrites.*

**Nitrogen loading** - *The quantity of nitrogen that a waterbody is carrying measured at a point in time.*

**Nonpoint sources** - Pollution in runoff and seepage from land areas. The major origins of nonpoint source pollution include agricultural runoff; pesticide and fertilizer use; feedlot runoff; urban runoff from streets, yards, and construction sites; leachate from septic

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systems; runoff from forestry and mining activities; highway de-icing chemicals; and dredging and drainage activities.

**Overnutrification** - Excessive nutrient loading; refers to eutrophic conditions.

**Point source** - Any discernible, confined, and discrete conveyance from which pollutants are or may be discharged.

**Pollutant load** - The quantity of a pollutant that a waterbody is carrying measured at a point in time.

**Potable water** - Water that is free from impurities in amounts sufficient to cause disease or harmful physiological effects.

**Recharge** - The addition of water to the zone of saturation, together with the associated groundwater within the saturated zone.

**Riparian buffers** - Vegetated areas next to water resources that protect water resources from nonpoint source pollution and provide bank stabilization and aquatic and wildlife habitat.

**Safe yield** - The maximum dependable withdrawals that can be made continuously from a water source including ground or surface water during a period of years in which the probable driest period or period of greatest water deficiency is likely to occur.

**Stormwater** - Runoff water resulting from precipitation.

**Watershed** - The total area draining into a stream, lake, river, river system, or body of water at a defined point.

**Xeriscape** - A sustainable landscape that conserves water and is based on sound horticultural principles.