

Appendix F - Glossary

- Abundance** presence in relatively large numbers
- Acid** a substance with more hydrogen (H⁺) ions than hydroxide (OH⁻) ions
- Aerobic** organisms and processes that require free oxygen
- Aggradation** the process of building up surfaces, such as stream-beds or floodplains, by the deposition of sediment and/or colluvium
- Algae(pl), alga** a collective term referring to several groups of simple photosynthetic plants, mostly microscopic, lacking roots, stems and leaves; they can be found in a variety of habitats; many species of algae exist as single cells, others form simple filaments or colonies and others exist as more complex structures like the larger seaweeds
- Algal bloom** a particularly extensive growth of algae in a body of water; this is usually a result of increased nutrient content, often from excessive use of fertilisers and detergents
- Alluvium** an extensive stream-laid deposit of unconsolidated material, including gravel, sand, silt and clay; typically it forms floodplains that develop alluvial soils
- Ammonia** a colourless gas consisting of nitrogen and hydrogen atoms; it is the main substance used by organisms as a source of nitrogen
- Anabranch** a secondary channel of a river, parallel to the main channel, that usually flows only when river levels are high
- Anaerobic** living or occurring in the absence of oxygen
- Anoxic** conditions in which oxygen is absent
- Aquifer** a layer of porous rock or soil that both holds water and allows this water to percolate through
- Aquitard** a layer that retards but does not prevent the flow of water to or from an adjacent aquifer
- Arable** describes land suitable for the economic production of crops, usually involving regular cultivation
- Bacteria(pl), bacterium** a group of essentially single-celled microscopic organisms lacking chlorophyll
- Bank** the relatively steep part of a river channel, generally considered as being above the usual water level
- Basin** an area drained by a given river and its tributaries
- Bed** the bottom of a watercourse or of any water body
- Bedload** the sediment that moves by sliding or rolling along the bed of a channel due to the action of the water
- Benthic** the bottom layer of a water body
- Benthos** those animals and plants living on the bottom of a water body
- Billabong** an old river meander that has been cut off and become isolated from the main channel
- Biochemical oxygen demand (BOD)** the amount of oxygen required to break down organic matter; measures of BOD are used to estimate organic loads in water samples
- Biological magnification** the process where the concentration of a material increases in the animals higher in the food chain due to the increasingly larger rates of consumption by the higher organisms
- Biomass** the amount of living material existing at a given instant of time in a unit volume or area
- Biota** living organisms; all animal and plant life
- Bloom** describes the discolouration of the waters of ponds, lakes or sometimes slow-flowing rivers by the dense growth of free-floating algae or algae forming a scum on the surface; quite often, conditions in a water body (e.g., temperature, nutrient content, etc.) become highly favourable for the profuse growth and reproduction of a particular species of alga that results in the bloom formation
- Bore** a deep hole that reaches an underground water source and through which water rises due to hydrostatic pressure
- Brackish** water that is slightly salty
- Buffer zone** established zone of perennial grass or other erosion-resistant vegetation that minimises run-off and erosion
- Capillary** fine channels in rock or soil
- Capillary fringe** the region immediately above the watertable, in which the capillaries are full of water

- Capillary movement** movement of water in saturated soil towards an area of drier soil; it can refer to movement in any direction, but upwards capillary movement is of most significance to the salinity problem
- Capillary zone** the zone of soil in which capillary movement occurs; the lowest part of this zone is the capillary fringe
- Carnivore** an animal that feeds solely on other animals
- a meat-eater
- Carrying capacity** a. the level of population that can support a given ecosystem
b. the amount of solid matter that can be suspended in a given water body
- Catchment** the area of land that is drained by a river and its tributaries; the watershed or dividing line between catchments is physically defined by mountains, crests of hills or the ridge of high ground
- Channelled** the process of modifying the course of a waterway
- Chlorophyll** the green pigment in plants that enables them to use the energy of the sun for photosynthesis
- Chlorination** the application of chlorine to wastewater to prevent septicity, or to water for the purpose of disinfection
- Community** a directly or indirectly interacting assemblage of organisms occupying a particular habitat
- Coliform bacteria** bacteria, found in the intestines of warm-blooded animals, that aid in the digestion process; used as indicators of faecal contamination in water-quality analyses
- Compaction** some soil types, most notably clays, can form dense, compacted layers up to several metres below the surface after constant trampling or pressure from tractors and livestock; these layers, or plough pans, can cause waterlogging and other drainage problems, which reduce plant growth and increase the likelihood of soil salinity
- Conductivity** a measure of the inorganic materials and inorganic ions in water; as total soluble salts form a major component, conductivity is used to measure salinity of water
- Confluence** running together, flowing together or intermingling - as where a tributary joins a river
- Contaminant** a substance that renders another substance impure by contact or mixture; e.g., the introduction into a water supply of a substance that reduces the usefulness of the water to humans and other organisms
- Contour bank** a constructed earth bank used to direct water flow over the land to prevent erosion and drainage problems; the bank follows the contour of the land
- Cross-section** transverse section representation or diagram of an object or area as if cut through
- Decomposition** the breakdown of organic materials by micro-organisms
- Deep lead** an aquifer at great depth formed in the sand and gravel that has filled an ancient river valley; it may lie at depths of 60 metres or more and be several kilometres wide; deep leads are the major regional aquifers under the Loddon, Campaspe and Goulburn Plains
- Detritus** organic debris from decomposing plants and animals
- Die-back** a general name for a significant decline in tree health; it mainly affects native trees and is caused by a variety of agents including attack, fungal disease, pollution from industrial development and other changes in the environment caused by human activity; in some areas these problems have caused widespread tree deaths, resulting in serious environmental concern and stimulating wide interest in tree-planting
- Diffuse-source pollution** contaminants that have originated from an unidentifiable source from various dispersed locations, such as roads, shopping centres and agricultural activity
- Discharge zone** an area where the groundwater moves upward and escapes through natural springs, evaporation, transpiration and surface drainage
- Dissolved oxygen** the amount of oxygen dissolved in water
- Distributory** branch of river or stream that does not return to the main stream after leaving it
- Dredging** the removal of sediment from a waterway
- Drift** the down-stream, free-floating movement of normally benthic animals in a flowing river or stream in a well-defined and characteristic pattern
- Ecosystem** a system involving the interactions between the living organisms and their environs
- Effluent** waste material (e.g., smoke, sewage etc.) discharged into the environment

Endemic referring to organisms (either plants or animals) that appear to be confined to a particular geographical area; often native to a country

Ephemeral stream one that only flows after rain

Epiphyte a plant that grows attached to the stems or leaves of another plant but is not parasitic

Erosion the wearing away of the land by running water, rainfall, wind, ice or other geological agents, including such processes as detachment, entrainment, suspension, transportation and mass movement

-natural erosion that occurs under natural environmental conditions, undisturbed by humans, and occurring over long geologic periods

-accelerated erosion much more rapid than natural erosion, primarily involving the loss of soil material from the land as a result of the influence of human activities

-soil erosion the detachment and transportation of soil and its deposition at another site by wind, water or gravitational effects; although a component of natural erosion, it becomes the dominant component of accelerated erosion as a result of human activities, and includes the removal of chemical materials

-erosion hazard the susceptibility of a parcel of land to the prevailing agents of erosion; it depends on a combination of climate, landform, soil, land use and land management factors

E. coli (Escherichia coli) one of the species of bacteria in the faecal coliform group; it is found in large numbers in the gastro-intestinal tract and faeces of warm-blooded animals and humans; its presence in water is considered indicative of fresh faecal contamination

Estuary an open drainage depression adjacent to the sea, typically at the mouth of a river, into which the tide ebbs and flows; tide movements accentuate erosion and continually modify the drainage channels within the estuary

Euryhaline exhibiting or tolerating a wide range of salinity

Eutrophic waters enriched with plant nutrients, which may become deoxygenated

Eutrophication the accumulation of excessively high levels of naturally occurring nutrients; if the situation is human-induced, it is often referred to as 'cultural eutrophication'

Evaporation the process by which water changes its physical state from a liquid to a gas

Evapotranspiration the process of living plants transforming water into vapour that is released into the atmosphere

Fallowing the management practice of leaving land in an uncropped state for a period of time prior to sowing another crop; its purpose is to allow for the accumulation and retention of water and mineralised nutrients in the soil, and generally to also allow for weed control

Faecal relating to animal, including human, excrement

Fauna all the animals of a certain area or period

Fertiliser any substance, natural or manufactured, added to the soil to supply essential plant nutrients for plant growth, and thereby either maintaining or increasing the general level of crop yield and pasture productivity

Filamentous plant body of some types of algae, made up of a row of closely adjoined similar cells

Filter feeder an organism that uses complex filtering mechanisms to trap particles suspended in the water column

First flush the initial flow of storm-water run-off that often contains high concentrations of contaminants that have built up during intervening dry periods

Flagellum/flagella a whip-like structure present in motile algae, which serves as an organ of propulsion

Floodplain the area covered by water during a major flood; the area of alluvium deposits laid down during past floods

Flora all the plants of a certain area or period

Fluvial pertaining to or produced by a river

Food chain a 'chain' of organisms, existing in any natural community, through which energy is transferred; each 'link in the chain' feeds on and obtains energy from the one preceding it, and in turn is eaten by and provides energy for the one following it; e.g., plant to herbivore to carnivore

Genera (pl), genus the second-most specific level of the hierarchical classification of organisms: Kingdom-Phylum-Class-Order-Family-Genus-Species

Grazer/scrapper species of animals that consume algae and associated material attached to the surface of submerged plants or rocks

Groundwater water stored beneath the surface of the land

Habitat the preferred location, or 'home', for each species of plant and animal to live and reproduce

Heavy metals any element with an 'atomic number' larger than 20 that can be precipitated by hydrogen sulfide in acid solution; e.g., copper, cadmium, chromium, lead and mercury

Herbicide a chemical substance used for killing plants, usually weeds; such substances are typically concentrated and have to be diluted with water prior to spraying onto the soil, the growing crop or an area infested with weeds

Herbivore an animal that feeds solely on plant matter

Humus the decomposed organic material found to varying degrees in different layers of soil; it stores nutrients, helps the soil to retain water and improves the soil texture

Hydrograph a graph showing the seasonal variation in the level, velocity or discharge of a body of water

Hydrology an applied science concerned with the water cycle, which includes precipitation, run-off or infiltration and storage and evaporation

Impervious not allowing, or allowing with great difficulty, the penetration of water into or through a surface

Infiltration the movement of water through the pores of soil or other porous medium

In-stream erosion the wearing away of the bed or banks of a stream by flowing water of the stream

Invertebrates organisms without a backbone or spinal column

Ions electrically charged molecules; often formed when an electrically neutral molecule is dissolved in water and disassociates

Lacustrine lake environment; living or growing a lake or on its shores

Land capability the ability of land to accept a type and intensity of use permanently, or for specialised periods under specific management, without permanent damage; it is an expression of the effect of biophysical land resources, including climate, on the ability of land to sustain, without damage, various uses, such as crop production requiring tillage, grazing, woodland or wildlife

Land degradation the decline in quality of natural land resources, commonly caused through improper use of the land by humans

Land management the application to land of cultural, structural, vegetative or any other types of measures, either singly or in combination, in order to achieve a desired land use; in a soil conservation context land management includes provision for the control and/or prevention of soil erosion

Land resources the total amount of land available for the supply of natural products from which living organisms, including humans, can draw, to provide their requirements for life

Land use the purpose for which land is used; the term encompasses the entire spectrum from generalised descriptions such as rural land use to specific conditions such as improved pasture production

Larvae (pl), larva the pre-adult form which differs distinctly from the sexually mature adult and usually requires an intermediate development stage (i.e., the pupa) before developing to the adult

Leachate water that has percolated through contaminated soil e.g., from a rubbish tip or mine site

Leaching the process by which water percolates through a particular solid, usually layers of soil; when water 'leaches' through the soil it often dissolves and then carries away many other substances

Lentic waters standing water bodies such as lakes and ponds

Littoral relating to the shore of a lake or the sea

Load the volume or mass of a substance - derived by multiplying the concentration by the flow rate over a specific period of time

Long profile a longitudinal section of a river

Lunette crescentic transverse dune on the down-wind side of a lake; clay or gypsum-rich dunes indicate saline lake conditions related to high groundwater levels

Macro-invertebrate animals without a backbone and visible to the naked eye

Macrophyte literally 'big plant', used to describe water plants, either rooted or floating, other than microscopic algae

Marginal land land that due to its climatic, geographic or topographic location, and/or the nature of its soils, cannot be used for a form of regular agricultural or pastoral use without stringent land management controls to protect it from degradation; marginal land may be found in different climatic zones and the factors rendering the land marginal will vary from zone to zone

- Mass movement** a general term encompassing erosion processes in which gravity is the primary force acting to dislodge and transport land surface materials; it is a function of the gravitational stress acting on the land surface and the resistance of the materials to dislodgement; when the gravitational stress exceeds this resistance, mass movement occurs; the occurrence of mass movement depends upon the interaction of various factors, including landform, lithology, soil type, rainfall intensity and duration, drainage characteristics, vegetative cover and human intervention
- Mean annual flow** the average of the annual flow observed in the past; it is the most important parameter of a river in assessing its potential for water resources development; the larger the value, the higher is the potential
- Meander** a curve in the course of a river that continually swings from side to side in wide loops, as it progresses across flat country
- Micro-organisms** either plant or animal, (e.g., algae or bacteria) that are invisible or barely visible to the naked human eye
- ML - megalitre** one million litres (approximately the quantity contained in one Olympic-sized swimming pool)
- Motile** capable of motion, particularly locomotion in some algae through the beating of flagella
- Nitrate (NO₃)** a compound of nitric acid and a given alkali
- Nitrogen (N)** a colourless, tasteless element usually occurring in the gaseous state. It forms approximately 80% of the earth's atmosphere and is essential for all organisms
- Non-point-source pollution** a source of pollution that cannot be pinpointed, because it comes from many individual places or a widespread area (e.g., urban and agricultural run-off); in a soil conservation context it typically applies to a sediment source that is spread over a wide area; for example, an area of cropping land could be a non-point source of sediment contributing to the blocking of a road culvert
- Nutrient** derived from living matter and including elements such as nitrogen, phosphorus and sulfur; nutrients are essential for plant growth but can adversely affect land and aquatic ecosystems if present at high levels
- Nymph** young, sexually immature stage of certain insects, usually similar to the adult in form, which do not require an intermediate development stage between the nymph and adult
- Omnivore** an animal that eats food of both animal and vegetable origin, or any type of food indiscriminately
- Organism** a living thing
- Outfall** the site of discharge of a liquid from a pipe; applied particularly to the point at which a sewer discharges to a treatment works or receiving waters
- Overclearing** the removal of trees and shrubs, particularly from steep areas, to an extent that makes the land susceptible to appreciable soil erosion; the presence of permanent tree cover on many steep lands ensures their stability; but removal of the trees increases erosion hazard, due mainly to the slope and the typical shallowness and erodibility of soils on such land, can cause soil salting and may also leave insufficient shade and shelter for livestock; in arid and semi-arid areas the removal of trees and shrubs increases the risk of wind erosion
- Overgrazing** continued grazing of pasture or rangeland at a level that permanently and adversely affects its plant components; this leads to a reduced capacity to produce forage, deterioration in pasture or range condition and increased erosion hazard
- Pasture** land covered by grass or herbage, usually used or suitable for the grazing of agricultural stock
- Pathogen** disease-causing organism (e.g., bacteria, viruses, fungi, etc.)
- Peak flow** the maximum flow of a waterway
- Percolation** the downward movement of water through soil or rocks
- Periphyton** plants and animals that are attached to submerged objects, such as rocks, macrophytes and tree debris, often microscopic in size
- Permeability** the ease with which water flows through a sediment or rock (also called hydraulic conductivity)
- Pesticide** any chemical or biological agent that kills a plant or animal pest; herbicides, insecticides, fungicides, rodenticides, etc. are all types of pesticides
- pH** a logarithmic scale that assigns values from 0 to 14 according to levels of acidity or alkalinity in soils or water; a value of 7 is neutral, values less than 7 are acidic and greater than 7 are basic or alkaline; as the pH is a logarithmic scale, a pH of 3 is 10 times as acidic as a pH of 4 and 100 times as acidic as a pH of 5

- Phosphate (PO₄)** a salt or ester of any phosphoric acid: it provides organisms with phosphorus in a useable form; often used in fertilisers and detergents
- Phosphorus (P)** a non-metallic element that can absorb light energy and then appear to 'glow in the dark'; it is an important nutrient for all organisms and a deficiency is considered a major 'growth-limiting factor'
- Photosynthesis** the process by which plants produce organic matter from inorganic chemicals, using solar energy, with the liberation of oxygen
- Phytoplankton** free-floating microscopic plants that live suspended in a body of water
- Physico-chemical indicators** measurable physical and chemical parameters of water
- Plankton** small animals and plants which float or drift in the water body
- Point-source pollution** a source of pollution that can be pinpointed: in a soil conservation context it typically applies to a source of sediment that can be limited to one precise location; e.g., an actively eroding gully head could be a point source of sediment contributing to the blocking of an adjacent road culvert
- Pollution** (of water) when the level of concentration of a contamination is high enough to impair water quality to a degree that has an adverse effect upon any beneficial use of the water.
- Potable** suitable for drinking
- Predator** an animal that consumes living animal tissue; the predator is generally larger than the prey
- Prior stream** the course of an ancient river
- Pupae (pl), pupa** a developmental stage in an insect's life cycle between the larva and the adult
- Recharge zone** an area of land where the groundwater moves downward and water infiltrates from the surface into the geological formations below
- Riffle** a section of river or stream with rapid, turbulent flow; generally shallow
- Riparian** belonging to a river bank; typically used to describe the rights of access to a river via its banks;
- Riparian vegetation** the vegetation occurring between normal river level and the edge of the floodplain
- Run-off** the portion of rainfall or irrigation (e.g., lawn sprinkler) water that flows across the land's surface, does not soak into the ground and eventually runs into a water body; it may pick up and carry a variety of pollutants
- Salinisation** a process in which the concentration of salts in the root zone of the soil increases; this is often caused by the capillary rise of saline moisture from a shallow water table
- Salinity** concentration of salts, measured in parts per million or grams per litre
- Salts** compounds that dissociate in water to yield a positively charged ion and a negatively charged acid radical ion
- Scavenger** an animal that feeds on dead organic matter
- Sediment** insoluble material suspended in water consisting mainly of particles derived from rocks, soil and organic materials; a major non-point-source pollutant to which other pollutants may attach
- Sedimentation (siltation)** deposition of sediment; the typical use of the term would imply deposition by water; in a soil conservation context, sedimentation is an end point in the erosion process, with transported soil material being deposited in locations such as in a channel, along a fence line, on an area of low slope or in a gully, creek, river, sediment trap or dam; note that, technically, the term siltation refers to the deposition of silt particles, but it is more commonly used to refer to the deposition of sediment
- Sediment load** the solid material that is transported by water
- Seepage** the process by which water percolates downwards and/or laterally through the soil, often emerging at ground level lower down a slope
- Sewage** household and commercial waste-water that contains human waste
- Sewerage** a complete and contained pipe system that facilitates the collection, transportation, treatment and discharge of waste-water
- Silt** fine particles of rock, soil or organic material suspended in water
- Snag** a dead tree or part of a tree that has fallen into a stream and obstructs flow
- Soil** the natural dynamic system of unconsolidated mineral and organic material at the earth's surface; it has been developed by physical, chemical and biological processes, including the weathering of rock and the decay of vegetation; soil materials include organic matter, clay, silt, sand and gravel mixed in such a way as to provide the natural medium for the growth of land plants; soil

comprises organised profiles of layers more or less parallel to the earth's surface and formed by the interaction of parent material, climate, organisms and topography over generally long periods of time; it differs markedly from its parent material in morphology, properties and characteristics

- Soil degradation** decline in soil quality, commonly caused through its improper use by humans; it includes physical, chemical and/or biological deterioration; examples are loss of organic matter, decline in soil fertility, decline in structural condition, erosion, adverse changes in salinity, acidity or alkalinity and the effects of toxic chemicals, pollutants or excessive flooding
- Soil fertility** capacity of the soil to provide adequate supplies of nutrients in proper balance for the growth of specified plants, when other growth factors, such as light, moisture and temperature are favourable
- Soil resource** all the soil within a given area available as a natural medium for plant growth: it is limited and exhaustible, and thus, its management must aim to avoid degradation to ensure its potential productive capability is maintained or improved
- Soil salinity** characteristic of soils relating to their content of water-soluble salts; such salts predominantly involve sodium chloride, but sulfates, carbonates and magnesium salts may occur, high salinity adversely affects the growth of plants, and therefore increases erosion hazard; soil salinity is normally characterised by measuring the electrical conductivity of a soil/water saturation extract and is expressed in milliSiemens per centimetre at 25°C (mS/cm)
- Soil structure** combination or spatial arrangement of primary soil particles (clay, silt, sand and gravel) into aggregates such as peds or clods and their stability to deformation
- Soil texture** coarseness or fineness of soil material as it affects the behaviour of a moist ball of soil when pressed between the thumb and the forefinger; it is generally related to the proportion of soil particles of differing sizes (sand, silt, clay and gravel) in a soil, but is also influenced by organic matter content, clay type and degree of structural development of the soil
- Soil type** a term used to describe a group of soils that can be managed in a similar way or exhibit similar features; Australia contains six major soil types - sand, cracking clays, calcareous soils, duplex soils, sesquioxidic soils and shallow stony soils

Storm-flow that portion of rain that leaves a drainage area in a comparatively short time, also called excess rainfall, surface run-off

- Stratification** development or formation of layers where different conditions of temperature, light, nutrients, etc. prevail, in a body of water
- Stream-bank** a laterally extensive, moderately inclined to precipitous slope forming the margin of a stream channel and resulting from erosion or aggradation by channelled stream flow: stream-banks are identified as left or right looking downstream
- Stubble retention** a conservation farming practice that involves the retention of stubble either in or on the soil, between harvest and the sowing of the subsequent crop; it is done primarily to protect the soil against erosion but also to conserve soil moisture
- Subsoil** sub-surface soil material comprising the B horizons of soils with distinct profiles. In soils with weak profile development, the subsoil can be defined as that below the topsoil
- Suspended sediment** the sediment that is being transported by water or air while held in suspension
- Taxon** a taxon (plural taxa) is recognised as a category or group of organisms belonging to a taxonomic rank - say, a genus with several species
- Terrace** a former floodplain on which erosion and aggradation by channelled and overbank stream flow is barely active or is inactive; deepening or enlargement of the stream channel has lowered the level of flooding
- Tillage** the mechanical preparation of the soil to facilitate the growth of a crop or pasture, through the principal functions of seed-bed preparation and weed control
- Topography** the shape of the ground surface as depicted by the presence of hills, mountains or plains; steep topography is characterised by steep slopes and hilly land; flat topography is characterised by flat land with minor undulations and gentle slopes
- Topographic map** a map that shows (by means of colour and contour lines) the ground surface features of a region
- Topsoil** that part of the soil profile, typically the A1 horizon, containing material that is usually more fertile and better structured than underlying layers

Total catchment management (integrated catchment management) management of land, water and other biophysical resources and activities, on a catchment basis; its aim is to ensure:

- ◆ the continuing stability and productivity of the soils
- ◆ maintenance of an appropriate protective and productive vegetative cover
- ◆ a satisfactory yield of water of high quality
- ◆ minimisation of adverse environmental effects due to development

such management is achieved by the co-ordination of policies and activities of relevant departments, authorities, companies and individuals who have responsibilities for the management of land within catchments

Toxic being harmful, destructive or deadly to organisms

Transpiration the process by which water taken up by plants from the soil is evaporated from tiny pores on the leaf surfaces

Tributary an inflow of water from a smaller body into a larger one; natural examples include streams and creeks, while human-made examples include drains and sewerage pipes

Trophic the nutrient status of a water body

Turbidity the cloudy or muddy appearance is mainly indicative of the amount of solids suspended in the water and, to a lesser extent, the colour of the water; this is usually measured by some type of 'light penetration' test.

Vegetation plants in general or the sum total of plant life in an area; the role of vegetation in a soil conservation context is a vital one; whether it comprises grasses, shrubs or trees, vegetation protects the soil from wind and/or water erosion by one or a combination of the following;

- ◆ providing a canopy to protect the soil from raindrop impact
- ◆ providing a near-ground retardance to run-off flow
- ◆ binding the soil together by root proliferation
- ◆ reducing the velocity of wind near the ground
- ◆ providing organic matter to improve soil structure
- ◆ providing plant litter to protect the soil

Verge the area commencing at the top of the bank and extending from the bank to the next major vegetation or land use change

Watercourse a channel, having defined bed and banks, down which surface water flows on a permanent or semi-permanent basis or at least, under natural conditions, for a substantial time after periods of heavy rainfall within its catchment: it is a general term including rivers and creeks or streams: a river conveys relatively large flows under average coastal and tableland climatic conditions, - typically continuous while a creek / stream is a smaller watercourse that usually forms the link between a drainage line and a river in a natural catchment flow path

Water cycle movement of water from the atmosphere to the earth and back to the atmosphere through precipitation, run-off, infiltration, percolation, storage, evaporation and transpiration

Waterlogged condition of a soil saturated with water and lacking most or all of the soil air; the condition may be caused by excessive rainfall, poor soil drainage or excessive irrigation

Waterlogging this results when the watertable rises as far as the root zone; it can cause anoxic conditions and kill many plants

Watershed dividing ridge between two catchments; the North American term for catchment

Watertable surface of the body of groundwater, which has a pressure equal to that of atmospheric pressure; below this 'watertable' the soil is completely saturated with water