

Glossary¹

Agronomy	The applied aspects of both soil science and the several plant sciences, often limited to applied plant sciences dealing with crops.
Annuals	Plants that live for one growing season.
Aquifer	A layer of rock which holds and allows water to move through it, and from which water can be extracted. Confined aquifers have a layer of rock above them which are impermeable to water.
Bedrock	Unweathered hard rock at the base of a soil profile.
Biophysical	Relating to biological and physical processes.
Bore	A hole of uniform diameter (usually 150 mm to 160 mm) drilled vertically into the ground to tap an aquifer. It contains a pipe through which groundwater can be pumped or can flow to the surface by artesian pressure (see also pressure and hydraulic pressure).
Break of slope	The line across a landscape at which the surface slope is reduced and where the hydraulic conductivity of the underlying material or the hydraulic gradient decreases.
Catchment	The area of land from which rainwater or snow melt drains into a reservoir, pond, lake or stream.
Discharge	Flow of groundwater from the saturated zone to the earth surface.
Discharge area	The area in which there is upward movement of groundwater and where groundwater is discharged from the soil surface. Groundwater escapes via springs, evaporation, transpiration and surface drainage (see also recharge area).
Drain	A channel for the purpose of interception and removal of excess surface or sub-surface water to a stable outlet.

1 Sourced from the *Australian Dryland Salinity Assessment 2000*, www.audit.ea.gov.au/ANRA/land/docs/national/Salinity_Glossary.html, accessed 4 January 2006.

Ecosystem	A community of organisms, interacting with each other, plus the environment in which they live and with which they also interact such as a pond or forest.
Electrical conductivity	Ability of a substance to conduct electricity.
Evaporation	The process of water changing from a liquid to a vapour.
Geology/geologic	Science of learning about the earth: its origin, structures, composition, historical changes and processes.
Geomorphology	Science of describing and interpreting landform patterns and processes of landscape formation.
Geophysics	The science of studying the earth's physical properties such as magnetism, conductivity and density.
Groundwater	All free water below the surface in the layers of the Earth's crust.
Hydrogeology	The study of groundwater movement.
Perched aquifer/watertable	A watertable above the main watertable level where impermeable soil or rock prevents the water from percolating through to the main groundwater body.
Permeability	The capacity of a substance (for example, soil or rock) to allow water to pass through it. Sand, for example, is said to have high permeability.
Perennial	Plant that lives for several years (annuals live for only one growing season).
Recharge	A component of rainfall that drains below the root zone of vegetation and joins the groundwater.
Recharge area	The area where water can enter and move downward to the groundwater. Recharge areas are usually permeable in the upper slopes and are often on shallow soils.
Regolith	Weathered or sedimentary material that is over bedrock.
Root zone	Near-surface part of a soil profile where roots are active.
Seeps/seepage	Where there is permanent or seasonal appearance of water at the soil surface causing soil salinity either directly through saline water or by evaporative concentration. Non-saline seepages also occur.

Topography	The detailed description and analysis of the features of a relatively small area, district or locality.
Water balance	A state of equilibrium when rainfall or irrigation water in a landscape is accounted for by the sum of run-off, plant water use, evaporation, recharge and changes in soil moisture content.
Waterlogging	Waterlogging occurs when the watertable rises into the root zone. It results in anaerobic (absence of free oxygen) conditions which reduce plant growth and may kill plants.
Watertable	The watertable is the upper surface of groundwater. The soil profile is fully saturated below the watertable and unsaturated above it.
Weathering	Chemical, physical and biological decomposition of rocks. This can result in the formation of a soil profile.

