

Glossary of terms for water

This list of water-related terms has been compiled from several different resources to support understanding of the work we do at Rous.

Term	Definition
1 in 100-year flood	A flood so severe it has only a 1% chance of occurring in any given year.
Artificial recharge	A process where water is put back into groundwater storage from surface-water supplies such as irrigation, or after purification of recycled water.
Aquifer	A geological formation, such as a body of rock or gravel, that contains or conducts groundwater.
Dam	A barrier or structure built across a waterway so that water is stored for supply.
Demand hardening	This is a reduction in a community's ability to achieve further water conservation. It may occur after long-term water conservation measures have been in place, including education, outdoor use restrictions, rebate programs, and price structure changes, which make it difficult to induce further reduction in water use.
Drought	Drought is a prolonged, abnormally dry period when the amount of available water is insufficient to meet our normal use.
Enduring supply	An amount of water that can be supplied confidently to meet demand for water in a city or region, irrespective of the duration and intensity of a drought.
Environmental buffer	A surface water body or groundwater recharge system that physically separates reclaimed / recycled water and drinking water treatment. An environmental buffer provides retention time and can provide treatment and dilution of the reclaimed / recycled water.
Groundwater	Naturally occurring fresh groundwater originates from precipitation. Groundwater can be found in fractured rock or layers of sand and gravel called aquifers. The water is accessed through bores and is treated to drinking water standards. Aquifers can be found at various depths under the surface of the earth, sometimes there can be multiple aquifers in an area that are totally independent of each other.
Groundwater bore / well	A cased hole into the earth that allows groundwater inflow to be pumped from an aquifer to the surface.
Non-revenue water	Often referred to as 'water loss', it is a water provider's unaccounted water and includes leaks in the system, meter inaccuracies, some community services (i.e., firefighting, parks and gardens maintenance) and unauthorised use.
Off-stream storage	A reservoir not on a river or permanently flowing stream, instead, water is diverted from a river into a separate area where it is stored.
Potable water	Water of a quality suitable for drinking.
Purified recycled water for drinking	Water recycled from industry and homes (including from kitchens, showers and toilets) that has been purified to meet strict Australian Guidelines for Water Recycling to supplement drinking water supplies.
Rainfall-independent water supply	Sources of water for drinking and non-drinking uses that are not dependent on rain. The two key sources of rainfall-independent supply are seawater desalination and, to some extent, recycled wastewater.
Rainwater tanks	A water tank used to collect and store rainwater runoff from a property's rooftop via pipes, used for non-drinking water purposes in metropolitan areas and to supplement drinking water supplies in semi-urban and rural areas.
Recycled water for non-drinking	Recycled water is sourced from wastewater and treated to provide water for non-drinking purposes, including irrigation, industrial and household uses such as toilets and washing machines. Using recycled water reduces demand on drinking water systems and limits discharge of wastewater to the environment.

Term	Definition
Resilient water supply	A water supply able to withstand or recover quickly from difficult conditions, such as prolonged and intense droughts.
Riparian zone	An area relating to or situated on the banks of a river, or wetlands adjacent to rivers and streams.
Seawater desalination	Seawater is treated to remove salts to create water suitable for drinking. This method provides a rainfall-independent source of water.
Secure yield	This is the amount of water we can expect the community will need during a severe drought with only moderate restrictions imposed. Secure yield is measured annually. Exceeding secure yield means that the amount of water expected to be supplied during a drought is more than what a water source can provide in a year.
Stormwater harvesting and reuse	Collecting, storing and treating stormwater from urban areas for reuse, typically for non-drinking purposes. Stormwater harvesting schemes provide multiple benefits to communities, including improving environmental and social benefits through green open space and healthier waterways.
Surface water	Surface water is any freshwater above ground in our rivers, creeks, streams, lakes, floodplains, wetlands and reservoirs. Rainfall, runoff, and in some cases groundwater, feed surface water. Rous currently has three surface water sources: Rocky Creek Dam, Emigrant Creek Dam and the Wilsons River (upstream of Lismore).
Turbidity	The amount of solid particles that are suspended in water and that cause light rays shining through the water to scatter. Thus, turbidity makes the water cloudy or even opaque in extreme cases.
Unplanned reuse / de facto	Unplanned reuse of wastewater occurs when treated wastewater is discharged into a river or other large waterbody and is extracted further downstream for water supply purposes. This treated wastewater, mixed with a high proportion of river flows, forms part of the water supply for towns further downstream. Unplanned reuse of wastewater is common around the world in river systems that are home to multiple communities and cities, but it only represents a very small portion of the source water that supplies Sydney now. When extracted downstream the water is treated to drinking water standards before being used for water supply.
Wastewater	Water that has been used in homes (showers, toilets, sinks, laundries), industries, and businesses that is not for reuse unless it is treated.
Water efficiency	Any measure that reduces the amount of water used per unit of given activity, without compromising the achievement of the value expected from that activity.
Water loss / Conveyance loss	Water that is lost in transit from a pipe, canal, conduit, or ditch by leakage or evaporation. Generally, the water is not available for further use; however leakage from an irrigation ditch, for example, may percolate to a ground-water source and be available for further use.
Water restrictions	Mandatory or enforceable controls on the way we use water during times of drought.
Water security	The capacity to safeguard the sustainable availability of, access to, and safe use of a reliable and resilient water supply that supports health, livelihoods, ecosystems and productive economies.
Water sharing between regions	Pipelines, canals and rivers connecting two or more major water sources to transport water from one catchment to another. This allows water supply in a region to be optimised by moving water between catchments to communities with less water.
Water table	The boundary between the unsaturated zone on the top (surface of the earth) and the saturated zone underground (aquifer). Below the water table, groundwater fills any spaces between sediments and within rock.