

Future Water Story

Glossary

Word	Definition
activated sludge process	A sewage process in which solids are separated from wastewater using bacteria and aeration. Organisms such as bacteria degrade organic material and remove nutrients using oxygen before they are separated from the treated water
aerator	A device for mixing air into the sewage
aerobic	a process which requires oxygen. In sewage air is mixed into the sewage to encourage certain bacteria to help break down the waste
anaerobic	This is a process which does not require oxygen. In this case some bacteria work without oxygen to help clean the waste
aquifers	layers of rock that can store large quantities of water
Biogas	a renewable energy resource produced by micro-organisms such as methanogens
biosolids	a sludge by-product of the sewage treatment process. Some of this is nutrient- rich and can be reused for many purposes including agricultural use or energy production
blue water	fresh surface water and groundwater, such as lakes, rivers and aquifers
brine	a very salty solution
catchment	an area of land where water (from precipitation) is collected by the natural landscape. The water then flows or drains into rivers, creeks, dams, lakes or into a groundwater system
dam	a structure built across a river to control the river's flow and create a reservoir (lake)
desalination	the removal of salts from seawater or other saline (salty) solutions
drainage basin	the area where water collects and moves towards a river and its tributaries (branches of water from the main river; also known as a catchment or river basin)
drought	a prolonged (lengthy) period of below-average rainfall
groundwater	water beneath the Earth's surface that fills pores or tiny spaces in materials such as sand, soil or gravel
green energy	energy (electricity) produced using renewable resources, such as wind or sunlight, without creating greenhouse gases
green water	the precipitation (rainfall) on land that does not run off or become groundwater, but is stored in the soil or temporarily stays on top of the soil or in vegetation

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grey water	water generated from domestic activities such as washing clothes, dishwashing and bathing
heatwaves	short periods (usually no longer than a few days) of well-above-average temperatures
non-potable	water that is not safe to drink but can be used for other purposes
ponds/ lagoons	large ponds for treating the sewage. The sewage flows through the ponds, gradually becoming cleaner as bacteria break down the organic matter in the water
potable	water that is safe to drink
river basin	land that acts as a container for water to flow towards a main river or ocean; also known as a catchment or drainage basin
run-off	the movement of surface water across the land and down slopes
reservoir	a large natural or artificial lake used as a source of water supply
sanitation	the infrastructure related to the collection and disposal of sewage (human waste)
sewage	the wastewater that leaves our kitchens, bathrooms, laundries and toilets, as well as from industry and businesses
sewerage	the network of pipes and pumps that carry away wastewater and human waste from houses and other buildings
stormwater	water from rain or storm events that flows off a house or building
virtual water	the volume of fresh water that is consumed (or polluted) when a product is created
wastewater	water that is discharged from homes and businesses and sent to the treatment plant
water allocation	the amount of water a water user with a water access licence is allocated against their licence in a water year/ A water allocation is an authority to take water, and an entitlement to a share of the available water resource in a catchment
water budget	an account of the water stored in a system, such as a watershed, and the movement of water in and out of that system. The equation used to calculate a water budget broadly includes precipitation, water flow into a system, water flow out of a system, changes in water storage, and evapotranspiration
water cycle	the processes of water passing from and to the Earth's oceans, atmosphere and land
water footprint	the total volume of fresh water used by an individual, a household, a business, a community or a country
water scarcity	a situation in which the demand for water is greater than the amount available
watersheds	the boundaries between catchments
water stress	the negative effect that water scarcity can have on people and environments