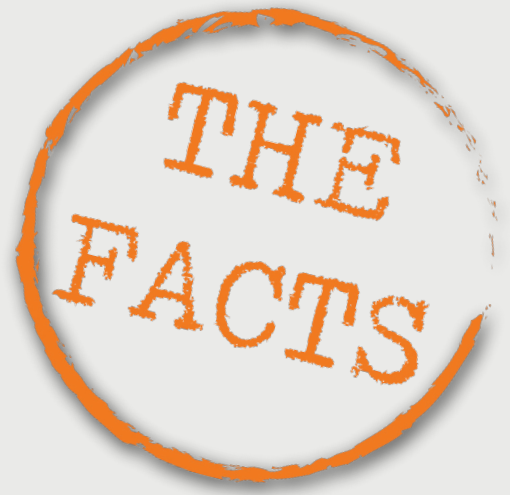


Groundwater



Groundwater is found underground in soil, sand and rock. Groundwater stores, purifies and releases water. Groundwater provides habitat for organisms. Groundwater can be an important water source for springs, aquifers and caves, some rivers and wetlands and some coastal ecosystems. The region's groundwater is used extensively for crop irrigation, stock and domestic use and provides town water supplies. Groundwater from the Great Artesian Basin is mostly used for stock watering.

Pressures

Groundwater levels fluctuate with recharge and discharge of water over time. When extraction of groundwater exceeds the natural recharge rate, water levels or pressures can drop.

Groundwater depletion is an issue in the major alluvial aquifers throughout the region, particularly in the Callide groundwater area.

In some areas, tree clearing or excess irrigation has caused recharge to increase. If water tables rise to near the land surface this can cause salinity in the soil and groundwater. Increased salinity can impact local stock and domestic water supplies, as well as soils and water quality in local streams.

The soil and rock that groundwater flows through can cause it to be naturally poor. Contamination can also occur when material enters the groundwater from land or water management practices.

Coal seam gas extraction produces large volumes of saline groundwater. The water extracted must be disposed of carefully to avoid salinisation of land and water resources. Large open-cut mines may affect local groundwater supplies through 'drawdown' of groundwater levels.



Groundwater is often used for stock watering points as well as crop irrigation and domestic purposes.

CQSS2030

CENTRAL QUEENSLAND
Sustainability Strategy 2030

Trends

Good rainfall in recent years has recharged most of the region's aquifers fully. However, groundwater depletion is expected to continue and levels are likely to fall as extraction exceeds supply in most alluvial aquifers.

Coal seam gas extraction is rapidly expanding in parts of the region, with associated risks to groundwater and surface waters.

Climate cycles are a key determinant of groundwater levels. Extended droughts will reduce salinity risks while water levels in aquifers will decrease. High rainfall years will recharge aquifers and increase the salinity risk.



Regional objectives

Groundwater is a critical part of the water cycle and supports high value ecosystems as well as supplying drinking, stock and irrigation water. Risks from over-extraction, salinity and contamination will continue to put pressure on this resource.

We need to manage groundwater to maintain water levels and pressures.

We need to manage groundwater quality by reducing the risks of contamination.

We need to protect and manage ecosystems that rely on groundwater.

The region's many industries need consistent water supplies and are reliant on groundwater recharge.

Contact us

Fitzroy Basin Association Inc.
80 East Street, Rockhampton
PO Box 139
Rockhampton Qld 4700

Telephone: (07) 4999 2800
Email: admin@fba.org.au
Website: www.fba.org.au



Australian Government

