

Groundwater

Water level and salinity

South Australia's

Environmental trend and condition report card 2018



STATEWIDE



Trend
Stable



Condition
Good



Reliability
Very good

Trend

The statewide trends in groundwater levels and salinity are generally stable, for the period 2013–2017.

Rainfall patterns can be highly variable and localised. They have a strong influence on the groundwater levels and salinity of most of South Australia's groundwater resources.

Across the state, the average annual rainfall during 2013 to 2017 was above the long-term average (1900–2016). As a result, 12 of the 17 actively managed groundwater resources showed stable or rising trends in water levels, and/or stable or decreasing groundwater salinity (top figure, blue areas). This followed a period when many resources experienced declines to historical low levels due to reduced winter rainfall recharge.

Declining water levels and/or increasing salinity at some groundwater management areas are believed to be associated with lower aquifer recharge and / or more intense use (extraction) of groundwater (top figure, red areas).

Condition

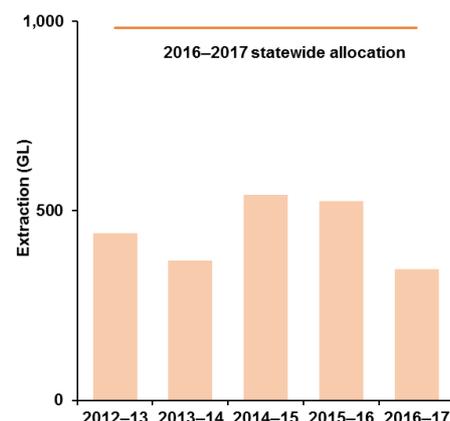
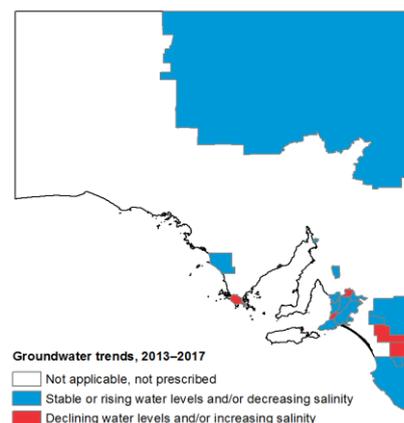
The condition of most groundwater resources is good.

This assessment of condition is based on observations of long-term groundwater levels, salinity and metered use.

Water allocation is adjusted over time so that in the future water use will reach targetted management levels. In some years, while these adjustments are made groundwater use can be above these target levels in some areas.

Across the state in 2016–17 the metered use was 35% of the allocated volume (bottom figure). In individual regions metered use ranged from 14% to 71% of the allocated volume.

The quality and quantity of South Australian groundwater is generally stable



Why is groundwater important?

Groundwater resources are fundamental for our industries, environment, health and way of life. The main uses of groundwater across the state are for domestic consumption, agriculture and industries.

Groundwater is a limited resource in South Australia. Sustainable water management and planning, in terms of both quality and quantity, is vital to our long term water security, the environment and the economy of the state.

What are the pressures?

The state's groundwater resources are impacted by water-use patterns and weather changes, particularly short-term rainfall changes, climate variability (e.g. drought) and the long-term influence of climate change.

Areas of localised declines in water levels or increases in salinity due to excessive extractions risk making the groundwater unsuitable for existing purposes, with economic, social and environmental loss.

What is being done?

Key groundwater resources in South Australia are managed through water allocation plans under natural resources management legislation.

The quality and quantity of water resources across the state are regularly monitored and annually assessed.

Science supporting water allocation plans is reviewed and updated as required.

For further information see: [technical information](#)



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