

Groundwater

Water level and salinity

SA trend and condition report card 2020



STATEWIDE



Trend
Stable



Condition
Fair



Reliability
Very good

Trend

The statewide trends in groundwater salinity are generally stable for the period 2015–19, with some declines in water levels.

Rainfall patterns can be highly variable and localised. They strongly influence the water levels and salinity of most groundwater resources. Across the state, the average annual rainfall during 2015 to 2019 was below the long-term average (1900–2019).

Although 11 of the 19 actively managed groundwater resources showed stable or rising trends in water levels and/or stable or decreasing groundwater salinity (top figure, blue areas), 8 groundwater resources experienced declining trends in water levels and some recorded historical low levels. Declining water levels and/or increasing salinity at some groundwater management areas are associated with lower aquifer recharge and/or increased use (extraction) of groundwater (top figure, red areas).

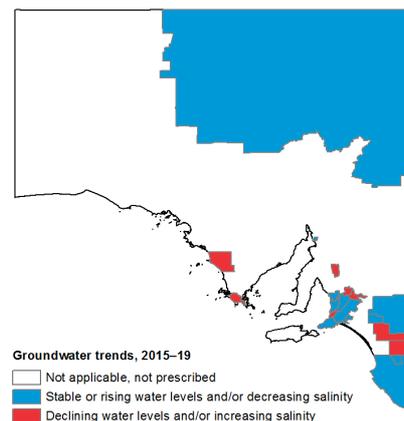
Condition

The overall condition of groundwater resources is fair.

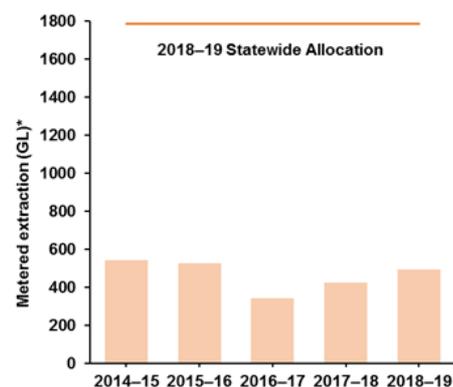
This assessment of condition is based on observations of long-term groundwater levels, salinity and metered use.

Over the past five years, metered groundwater extractions were less than 50% of the volume allocated, particularly in 2016–17, which was a wetter year. In individual regions, metered use ranged from 14% to 61% of the allocated volume in 2018–19 (bottom figure).

The salinity of South Australia's groundwater resources is generally stable, with some declines in water levels.



Groundwater trends, 2015–19
— Not applicable, not prescribed
— Stable or rising water levels and/or decreasing salinity
— Declining water levels and/or increasing salinity



*excludes extraction data for the Far North and Central Adelaide prescribed areas where extraction is not yet fully metered

Why is groundwater important?

Groundwater resources are fundamental for our communities and the environment, with domestic consumption, agriculture and industries the main users.

Sustainable water management and planning is vital to our long-term water security (both quality and quantity), the environment and the economy.

What are the pressures?

The state's groundwater resources are affected 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.

Groundwater resources are affected by climate variability, climate change and water-use demand.

Reduced recharge is leading to declining groundwater levels, with increased extractions due to lower and more variable rainfall. This increases the risk of higher salinity levels.

What is being done?

Key groundwater resources are managed under the *Landscape South Australia Act 2019* through water allocation plans. These plans contain provisions aimed at striking the balance between improving resource condition and permitting extraction for consumptive use; they are regularly reviewed and updated.

In some areas, water allocations are being adjusted so that future water use will reach targeted management levels. In some years and for some areas, groundwater use can be above these target levels as part of an adjustment phase.

For further information, see [Technical information](#)



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