

2016 State Report Card

Are the water levels and salinity of our prescribed groundwater resources improving?

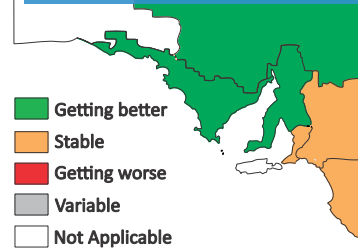
As the largest freshwater resource in South Australia, groundwater is vital for our agriculture, mining and manufacturing industries. It also provides us with town water supplies and sustains a range of ecosystems.

Groundwater is mostly recharged when rainfall percolates down through the soil to the water table. Groundwater levels naturally change in response to seasonal rainfall, droughts and long term variations in rainfall. Excessive use of groundwater can cause levels to fall and salinity to increase, which can impact the communities, industries, culturally important aboriginal sites and ecosystems that are dependent on groundwater, particularly if [climate variability](#) impacts rainfall patterns and reduces the rainfall needed to recharge groundwater.

This report card summarises whether changes in groundwater levels and salinity of [prescribed](#) groundwater resources are within acceptable limits based on the needs of the primary user and the natural variation of each resource. This report card should be read alongside report cards on the sustainable use of [groundwater](#) and [surface water](#) resources.



Regional trends in salinity and water levels for prescribed groundwater resources



State target

Maintain the productive capacity of our natural resources

Trend (2010–15)

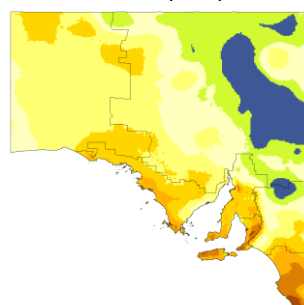
Stable

Salinity and groundwater levels are within acceptable limits in most of our prescribed groundwater resources

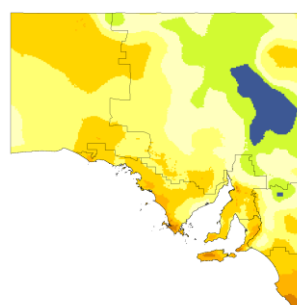
Groundwater levels and salinity are largely driven by rainfall and water use and are therefore locally variable. Rainfall over the 2010–15 period shows declining trends in most areas, with many prescribed areas recording rainfall during 2015 amongst the lowest historically observed (graph on right).

Since 2010, salinity and groundwater levels have varied and in some cases slightly declined, but they are within acceptable limits in all but a couple of our prescribed groundwater resources.

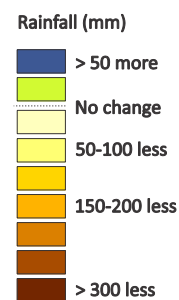
Rainfall anomaly maps:



How rainfall in the last 12 months compares to the last 115 years



How rainfall in the last 12 months compares to the last 10 years



Where we are at (2015)

Good

Most of our groundwater resources are within acceptable limits

There are 35 prescribed groundwater resources (aquifers) within 19 prescribed groundwater areas in South Australia. Based on changes in salinity and water levels from 2010–15, the [status](#) of 94 per cent of our [groundwater resources](#) is stable or improving. Some of the resources have experienced very gradual declines in water levels or slight increases in salinity, but these changes are still within acceptable limits based on the needs of the primary users and natural variation.

The 2015 [status](#) of the Kangaroo Flat groundwater resource in Adelaide and Mount Lofty Ranges [NRM](#) region, based on the trends observed between 2010–15 is considered fair, and it is being monitored closely because it has elevated salinity. Similarly the plains and low lying areas of the Tatiara Prescribed Wells Area in the South East [NRM](#) region are considered fair, as all monitoring wells experienced a declining trend over the period 2010–15, with 48 per cent of monitoring wells recording their lowest groundwater level on record in 2015.

Managing our groundwater resources relies on consistent and timely measurements of groundwater levels, salinity and water use.

Reliability of information



Very good

Further information: [Technical information for this report card](#) and reports on the [Status of South Australian Water Resources](#)

