

# 2016 State Report Card

## Are our groundwater resources being used within sustainable limits?

As the largest freshwater resource in South Australia, groundwater is vital for our agricultural, mining and manufacturing industries. Groundwater provides us with town water supplies and sustains a range of ecosystems. Water dependent ecosystems exist where groundwater naturally discharges at the surface. These places can also have cultural significance for Aboriginal people as well as provide connection to Country.

Excessive use of groundwater can cause water levels to drop and salinity to increase, which can impact industries and degrade water-dependent ecosystems, particularly if [climate variability](#) impacts on rainfall patterns and reduces the rainfall needed to refresh groundwater aquifers in the future. The groundwater resources we rely on the most and those that were at the greatest risk of degradation are now [prescribed](#) with sustainable use limits defined in [water allocation plans](#). These plans ensure water resources will be able to provide for us in the future. There are 19 prescribed groundwater management areas (map below), which are made up of 55 separate groundwater resources (aquifers), 49 of which have sustainable limits for water use.

This report card assesses if groundwater resources are used within their sustainable limits, based on metered extraction in relation to the sustainable limit defined in the water allocation plan or elsewhere. The water planning objective is to have an allocation plan that is effective in managing the risks to the water resource. The water levels and salinity of groundwater are reported [here](#).



Regional trends in the sustainable use of prescribed groundwater resources



### State target

Maintain the productive capacity of our natural resources

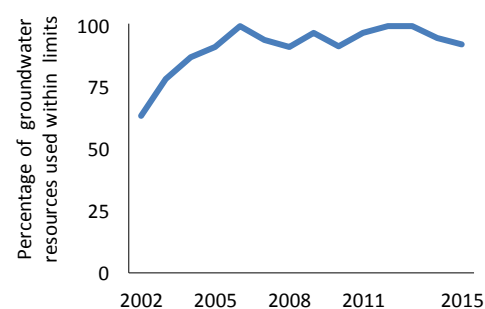
### Trend (2010–15)

Stable

More than 92 per cent of groundwater resources have been used within sustainable limits since 2010

Not all groundwater resources have water use and sustainable limit data available. For the resources where this information is available, more than 92 per cent of our prescribed groundwater resources have been used within sustainable limits since 2010 (graph on right).

Our ability to report on other groundwater resources is influenced by data availability, and whether a sustainability limit has been set (i.e. The Eastern and Western Mount Lofty Ranges, Clare Valley, Northern Adelaide Plains, Barossa and Central Adelaide prescribed areas). The Far North Prescribed Wells Area (PWA) does not have a sustainable limit, but provides an indicative water allocation volume which is managed through maintaining pressure levels, currently it appears that the resource is in a natural state of decline.



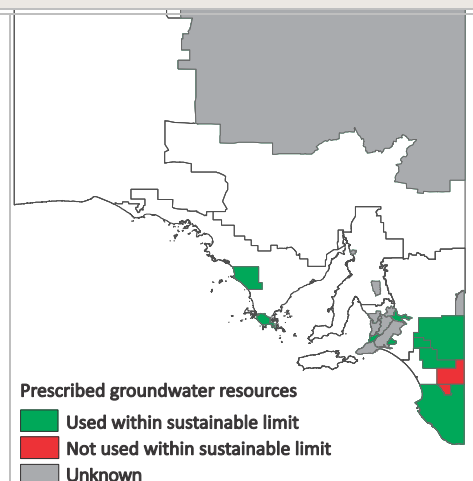
### Where we are at (2015)

Good

93 per cent of prescribed groundwater resources were used within sustainable limits

In 2015, 93 per cent of our groundwater resources which have use and sustainable limit data available, were used within their sustainable limit in 2015. Licensed use of water in these areas ranged from 0.07 ML (less than 1 per cent) in the Lincoln D West lens of the Southern Basins PWA (Eyre Peninsula NRM region), to 112 per cent of the sustainable limit in the Tatiara unconfined aquifer (South East NRM region). Whilst the use in Tatiara, and also in Padthaway (100.8 per cent of sustainable limit), was above the sustainable limit, extraction remained within the allocation limits for the prescribed areas which are undergoing staged allocation reductions to bring allocation back to the sustainable limit over time.

Groundwater use in the Central Adelaide, Clare Valley, Barossa, Baroota, Eastern and Western Mount Lofty Ranges and Far North prescribed areas is unknown as there are some information gaps in these areas - either sustainable limits have not been established or water use data are not available for all users. Managing our prescribed groundwater resources within their sustainable limits relies on consistent and timely measurements of rainfall, water 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](#)

