Streamflow

Water | Surface water

South Australia's environmental trend and condition report cards 2023

Trend
Getting worse

Condition
Good

Reliability
Fair

STATE

Trend

The trend in streamflow (surface water quantity) across South Australia is getting worse.

This assessment uses streamflow data from 29 representative monitoring sites across the state and includes prescribed and non-prescribed water resource areas. The assessment covers all landscape regions, except for Alinytjara Wilurara and Green Adelaide, from 1986 to 2021. The River Murray is assessed in separate reports.

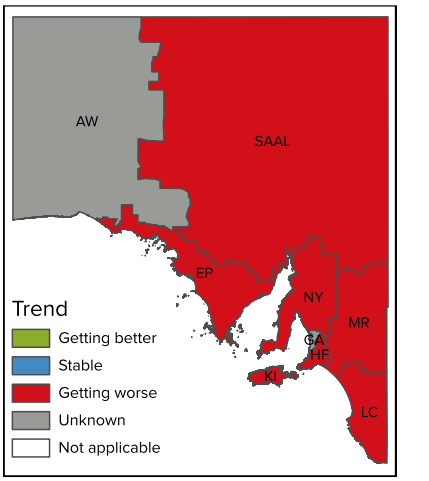
The assessment showed a trend of getting worse for each landscape region (top figure) with declining trends in streamflow observed over the last 3 decades across all the assessed areas. Only one year in the last decade exhibited 'above-average' (i.e. 70–100th percentile) combined streamflow for the prescribed surface water resource areas in the state (bottom figure).

Condition

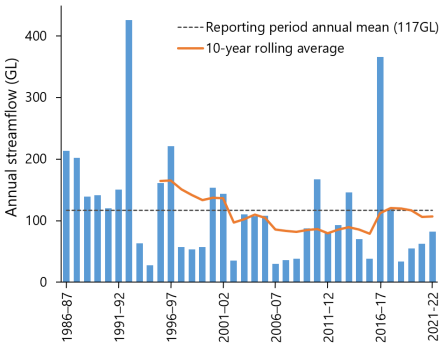
The condition of streamflow (surface water quantity) is considered to be good.

Condition for surface water quantity was variable across South Australia ranging from fair to good with the overall condition for the state classed as good for 2021–22. The generally good conditions have been driven by above average rainfall across much of the state in 2021–22.

Streamflow is declining across South Australia. However, in 2021–22 the overall condition was considered good due to above-average rainfall across much of the state.



Total combined streamflow for all prescribed surface water resource areas (excluding River Murray)



Why is streamflow important?

Streamflow is fundamental for our communities and the environment. In South Australia, the main uses of streamflow are domestic consumption, agriculture and industries.

Sustainable surface water management and planning is vital to our long-term water security, the environment and the economy. Water allocation plans assess the quantity, quality, timing and duration of water needed by the ecosystems that depend on the water resource.

What are the drivers?

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

Changes in climate can influence rainfall patterns and lead to a reduction in surface water runoff to rivers and streams. Reduced availability of surface water can result in adverse impacts on water quality by reducing flows.

Localised pressures from water resource development and water use are another driver affecting these flows.

What is being done?

Key surface water resources in South Australia are managed through water allocation plans under the *Landscape South Australia Act 2019*. These plans are regularly reviewed and updated as necessary.

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

Regional programs aim to reduce the impacts of land management activities on surface water while supporting economic productivity.

For further information see: technical information

Government of South Australia