

Aquatic ecosystem condition: EPA condition assessments

Biodiversity | Inland waters



South Australia's environmental trend and condition report cards 2023



Trend
Getting better



Condition
Unknown

☆☆☆ Reliability
☆☆☆ **Poor**

STATE

Trend

The statewide trend in aquatic ecosystem condition is getting better following drought conditions.

Aquatic ecosystems are getting better mainly due to general recovery from drought conditions rather than significant improvements in catchment restoration. Most regions show slight improvement within 'stable' range, except Green Adelaide, which was rated 'getting better' (top figure). Some regions have insufficient data for assessment and were rated 'unknown'.

This assessment is based on the Environmental Protection Authority's (EPA) Aquatic Ecosystem Condition Reports (AECRs). Data from these reports has been collected since 2008, towards the end of the Millennium Drought.

Trend was assessed at 69 sites across the state. These sites have been visited 3 or more times enabling an assessment of trend through time. The AECRs methodology is not appropriate for assessing the River Murray.

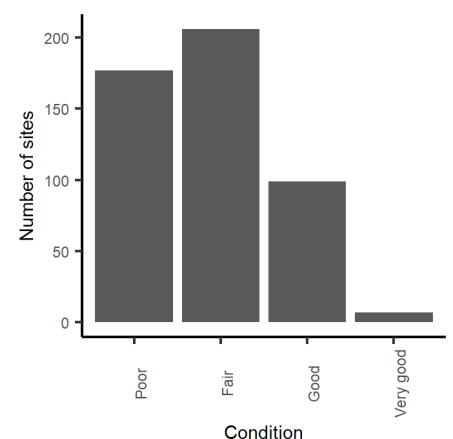
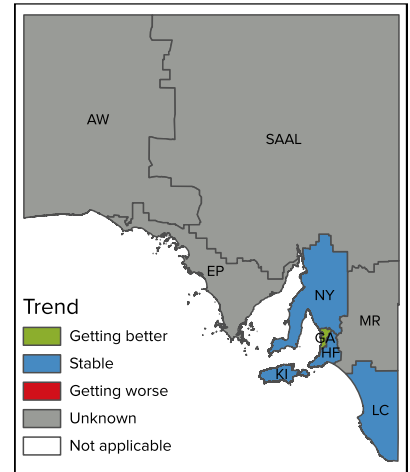
Condition

Condition was not assessed at a state and landscape region scale due to data limitations.

The AECRs process uses a combination of randomly selected and pre-selected sites for its assessment process. The pre-selected sites are chosen based on previous sampling events or the presence of high value habitat. This means that the assessment is not able to provide an unbiased result of condition across the state or regions. Therefore, no overall statewide or regional condition scores are reported.

Based on the most recent sampling event per site, across the state a total of 177 sites were classed as 'poor', 206 sites were classed as 'fair', 99 sites were classed as 'good', and 7 sites were classed as 'very good' (bottom figure).

Aquatic ecosystems in South Australia are recovering from the Millennium Drought.



Why is aquatic ecosystem condition important?

Inland aquatic ecosystems are important for cultural, environmental, social and economic reasons. These ecosystems support high levels of biodiversity, aid improved water quality, absorb pollutants, and prevent erosion. Water from these systems also supports agriculture and industry. Aquatic ecosystems help people connect with nature and provide mental and physical health benefits.

What are the pressures?

Aquatic ecosystems are adversely affected by a range of factors, including land development, land clearance and water taken for productive use.

The result of these impacts is decreased water quality, decreased flow, loss of habitat structure and generally degraded environments, all of which are compounded during dry periods such as the Millennium Drought and the projected conditions under climate change.

Exotic fish and plant species are also a significant threat to many aquatic ecosystems.

What is being done?

Water quantity is managed through water allocation plans and the *Landscape South Australia Act 2019*. Water quality is addressed through managing point source and diffuse pollution, and activities such as fencing out livestock and revegetation projects. Tracking and reporting on aquatic ecosystems is done by the EPA and landscape regions.

Native vegetation legislation protects riverine and wetland habitats from further clearance. Programs are in place to manage aquatic weeds and pest animals.

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



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Government of South Australia