

Lower Lakes aquatic and littoral vegetation

Biodiversity | Inland waters



South Australia's environmental trend and condition report cards 2023



Trend
Getting better



Condition
Good



Reliability
Very good

STATE

Trend

Aquatic and littoral vegetation condition in the Lower Lakes is getting better, however, there is a long-term decline in temporary wetlands condition.

Lower Lakes aquatic and littoral vegetation refers to vegetation communities growing in environments that are inundated or undergo wetting and drying cycles. The condition of Lower Lakes aquatic and littoral vegetation is represented by a whole of icon site score, which combines habitat scores from Lake Alexandrina, Lake Albert, Goolwa Channel, and permanent and temporary wetlands.

The trend for Lower Lakes aquatic and littoral vegetation was assessed from 2008 to 2022 using the whole of icon site scores and habitat scores. The whole of icon site score was found to be getting better (top figure) and this was underpinned by improving trends in Lake Alexandrina, Lake Albert, Goolwa Channel and permanent wetlands. The long-term trend of temporary wetlands is declining in condition despite recent improvements from 2022 (bottom figure).

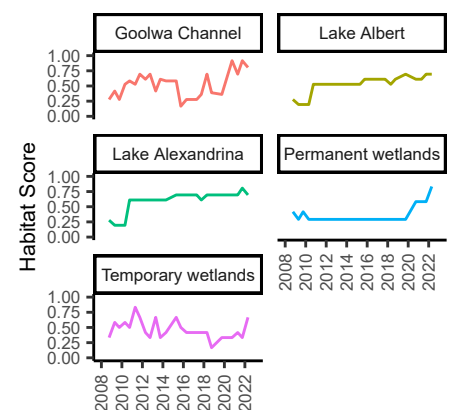
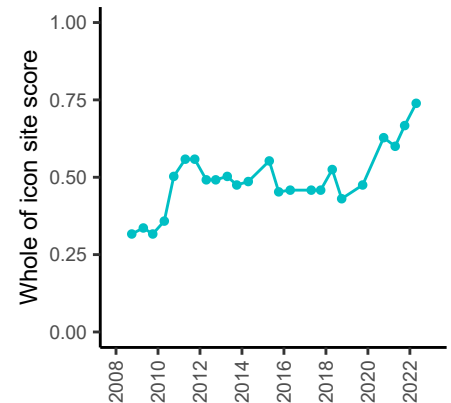
Condition

Overall, aquatic and littoral vegetation in the Lower Lakes is in good condition.

The overall condition of Lower Lakes aquatic and littoral vegetation is considered to be good. Condition varies between habitats (bottom figure) with Goolwa Channel and permanent wetlands in very good condition, while Lake Alexandrina, Lake Albert and temporary wetlands were in good condition.

Whole of icon scores were low during the peak of the Millennium Drought (2007–2010) before improving after the return of freshwater flows in late 2010. Scores were generally stable from 2012 to 2019, and have increased over the past few years (top figure).

Aquatic and littoral vegetation condition in the Lower Lakes is generally good and getting better.



Why is Lower Lakes aquatic and littoral vegetation important?

Lower Lakes aquatic and littoral vegetation plays important ecological roles by sequestering carbon and other nutrients, improving water quality, minimising shoreline erosion, and providing habitat for invertebrates, frogs, fish and birds.

What are the drivers?

Regulation of the River Murray, combined with river operations to support water supply and irrigation, have affected the management of Lower Lakes water levels. These pressures have reduced the inflow of water that supports a diverse aquatic and littoral vegetation community.

The health of Lower Lakes aquatic and littoral vegetation is also affected by changes in water quality (e.g. salinity), which can limit the ability of plants to respond to positive changes in water levels.

What is being done?

The delivery of water, including water for the environment, protects aquatic environments and supports seasonal variation in lake levels that allows for recruitment of desirable native plant species and communities. The improving health of Lower Lakes aquatic and littoral vegetation suggests that the current hydrological regime is supporting the recovery of aquatic and littoral vegetation, particularly since the unprecedented water levels during the Millennium Drought.

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



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