Rivers and wetlands

Declines in river and wetland health are reducing biodiversity of water-dependent plants and animals, including waterbirds, fish, frogs and turtles.

Rivers and wetlands are lifelines for both ecosystems and human societies. They serve important roles as freshwater sources, biodiversity hotspots and natural flood buffers. For Aboriginal peoples, water is a living thing and intrinsic to culture.

NSW rivers are generally in fair condition. As the climate becomes hotter and drier, wetlands and the species that depend on them will continue to be negatively impacted.

Water quality indicators are getting worse for inland rivers and wetlands, significantly affecting fish and waterbird communities.

At a glance

How NSW is tracking

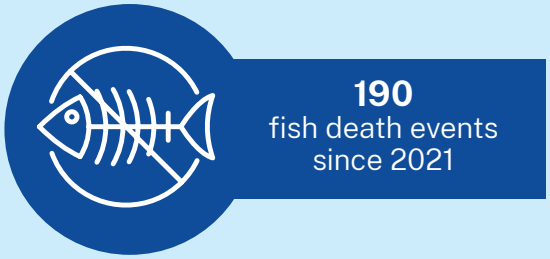
- Many areas of the Murray–Darling Basin have poor to very poor river condition. Coastal rivers are generally in better condition, particularly on the southern coasts.
- Loss of river connectivity and access to water significantly impacts Aboriginal communities' mental and physical health.
- Good rainfall in the past three years has helped improve outcomes in some areas but has also contributed to an increase in the number of sites exceeding nitrogen and phosphorus targets compared to 2018–20.
- More fish kill events have occurred in the past five years, with an average of 69 per year between 2019–23, up from an average of 21 between 2009–18.

The big picture

- This topic's 'nitrogen and phosphorous levels' indicator aligns to the 'modification of biochemical flows' planetary boundary. Globally, this boundary has been crossed.
- This topic's 'river condition index for NSW rivers', 'health of fish communities', 'wetland extent', 'wetland condition' and 'waterbird abundance and breeding' indicators align to the 'biosphere integrity' planetary boundary. Globally, this boundary has been crossed.

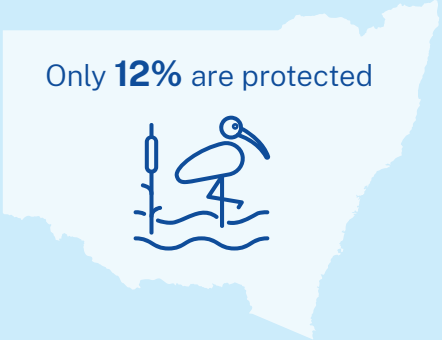
Fish death events

The NSW Government has investigated **190 fish death events** since 2021.



Inland wetlands

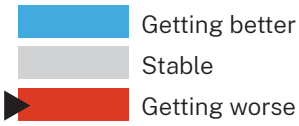
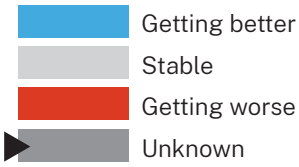
Only **12%** of inland wetlands in NSW are **protected**.



Rivers and wetlands

Rivers and wetlands indicators

This topic adopts four indicators to assess the status and trends of rivers and three indicators to assess the status and trends of wetlands.

Indicator	Environmental status	Environmental trend	Information reliability
River condition index for NSW rivers	 MODERATE	 Getting better, Stable, Getting worse	 Reasonable
Nitrogen and phosphorus levels	 MODERATE	 Getting better, Stable, Getting worse	 Reasonable
Salinity	 GOOD	 Getting better, Stable, Getting worse	 Reasonable
Health of fish communities	 POOR	 Getting better, Stable, Getting worse, Unknown	 Reasonable
Wetland extent	 MODERATE	 Getting better, Stable, Getting worse	 Limited
Wetland condition	 MODERATE	 Getting better, Stable, Getting worse	 Limited
Waterbird abundance and breeding	 POOR	 Getting better, Stable, Getting worse	 Good

Indicator table scales

- **Environmental status:** Good, moderate, poor, unknown
- **Environmental trend:** Getting worse, stable, getting better, unknown
- **Information reliability:** Good Reasonable Limited