

The Murray Mouth



Days open

South Australia's

Environmental trend and condition report card 2018

STATEWIDE



Trend
Getting better



Condition
Poor



Reliability
Excellent

Trend

The number of days the Murray Mouth is open has been increasing, but this is mostly due to dredging, not natural flows and flushing.

The overarching trend in the percentage of days where the Murray Mouth was considered 'functionally open' is increasing (top figure). Functionally open means that the Murray Mouth is open often enough to maintain connectivity between the river, the Coorong and the Southern Ocean.

Significant dredging efforts, especially during the millennium drought (2001–2009), have been required to keep the Murray Mouth open.

During 2010–2013, and again in 2016, higher natural flows flushed some accumulated sand from the Mouth.

While the trend in the number of days that the Mouth is open is getting better, the condition score will not improve until dredging stops.

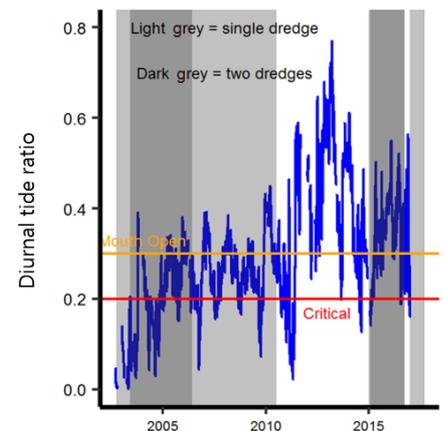
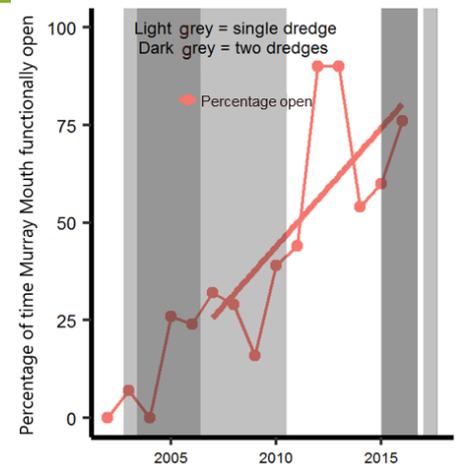
Condition

The condition of the Murray Mouth was classed as poor because the target of the Mouth being open for 95% of the time has not been met since before the millennium drought.

The openness of the Murray Mouth is assessed by a measure of diurnal tide ratio (DTR), which ranges from 0.0 (closed) to 0.3 (functionally open) to 1.0 (fully open). When the DTR falls below 0.2, dredging is required to keep the Murray Mouth open (bottom figure).

In 2016, the Mouth was open for only 76% of the year (top figure). Without the operation of dredges, the Mouth would have been closed for most of that year.

The number of days the Murray Mouth is open is increasing, but remains heavily reliant on dredging



Why is the Murray Mouth important?

An open Murray Mouth provides connection between the river, the Coorong and the ocean.

This connection is important for flushing excess salts (targeted at 2 million tonnes per year) and nutrients from the river system, as well as maintaining the quality of water in the Coorong. It also allows for the passage of recreational and commercial vessels, and native fauna that needs to move between the Coorong and the ocean.

What are the pressures?

Without sufficient flow through the Murray Mouth, sand deposition from the ocean results in the Murray Mouth silting up and closing.

Water resource development throughout the Murray–Darling Basin has heavily reduced the flow that reaches the Murray Mouth, leading to increased sand deposition and a reliance on dredging.

Without dredging, the Murray Mouth will close more often and the benefits of connection between the Coorong and ocean will be lost.

What is being done?

The Murray–Darling Basin Plan seeks to ensure that the Murray Mouth remains open without the need for dredging in at least 95% of years, with flows every year through the Murray Mouth barrages.

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



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