

Lake Tyers Estuary Opening Fact Sheet



Background

Lake Tyers is located approximately 8 km east of Lakes Entrance and extends from Lake Tyers Beach Township to Nowa Nowa. It is an area of environmental significance as part of the Gippsland Lakes Ramsar Site. The estuary has formed behind a long (approximately 800 m) sand barrier. It has a branching basin morphology with two arms, the Nowa Nowa arm to the west and the Toorloo Arm to the east. Just landward of the estuary's mouth is the large flood-tidal delta which was built by sand deposition from waves and the incoming tide. The estuary has a catchment area of approximately 470 km² and total water area of approximately 25 km². The Main Lake occupies an area of 7 km² and is comparatively shallow with an average water depth of three to four meters. Two small creeks, Stony Creek and Boggy Creek, primarily contribute flows into the estuary from the north.

The Lake Tyers Estuary is subject to long closures due to its small catchment size relative to its surface area. Westerly waves and winds play a large role in driving sediment transport and building the sand barrier in front of Lake Tyers Estuary, disconnecting the estuary from Bass Strait. With its relatively small catchment, high rainfall and river flows are needed to trigger a natural opening and sustain an artificial opening at Lake Tyers.

An assessment of Lake Tyers Estuary's opening and closure trends has shown the estuary is open 22% of the time, or 82 days per year on average (from 1987 to 2023). Due to the long periods of closure, the site is also more likely to be susceptible to water quality issues.

As mentioned within the **East Gippsland Estuary Opening Fact Sheet**, the EGCMA prefers natural openings, as they most often result in better entrance scour and a longer-lasting open entrance. However sometimes artificial openings need to occur. In addition to considering environmental, social, economic and cultural factors, the indicator water level that should be reached at Lake Tyers, before attempting an artificially opening, is 2.3m AHD.

Note that the EGCMA may decide to open the estuary at Lake Tyers at a different estuary water level height after balancing the risks to the community and the environment.

Estuary Opening and Closure Data

Estuary Data period	Time open during data period	Average days of the year open	Mean open duration	Number of closures across data period	Mean duration of closure
28/05/1987 ▼ 10/11/2023	22 Percent	82 Days	104 Days	31 Closures	312 Days

Map of historical artificial estuary openings in Lake Tyers estuary.

This map shows the extent of the estuary and contains information on where artificial openings have taken place over time.

