

Background

Marlo Inlet, commonly referred to as the Snowy River estuary, is located southeast of Orbost at the interface between the mouth of the Snowy River and the open coast of Bass Strait. Marlo Inlet is part of the Snowy River catchment, which covers an area of 15,869 km². The estuary sits behind a narrow semi-vegetated sand spit which extends approximately 3 km. The central basin has largely infilled with sediment, with the largest section of open water area located at Lake Corringle. The mouth width is temporally variable and can be larger or smaller in size depending on flow conditions from the tributaries and offshore wave and wind conditions. Marlo Inlet is fed by the Snowy River and the much smaller Brodribb River. The two rivers meet in an alluvial deltaic plain.

The Marlo Inlet Estuary, is subject to periodic closures depending on river flow and climatic conditions. In 1965, the Snowy Mountains Hydro-electric Scheme (SMHS) commenced diversion of water from parts of the upper catchment of the Snowy River. Marlo Inlet has undergone significant historical changes from its natural state because of hydrological changes to the Snowy River due to the SMHS.

An assessment of Marlo Inlet Estuary's opening and closure trends has shown the estuary is open 97% of the time, or 355 days per year on average (from 1987 to 2023). Openings typically persist for multiple years at a time. Closures, while infrequent and brief, are typically associated with periods of reduced upstream rainfall in the Snowy River catchment.

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 Marlo Inlet, before attempting an artificially opening, is 0.8m AHD.

Note that the EGCMA may decide to open the estuary at Marlo 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

17/08/1987

10/11/2023

Time open during data period

97

Percent

Average days of the year open

355

Days

Mean open duration

2146

Days

Number of closures across data period

5 Closures

Mean duration of closure

70

Map of historical artificial estuary openings in Marlo Inlet estuary.

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

