

Background

Sydenham Inlet is characterised as a large, shallow estuary. The shallow and wide morphology of the estuary enables mixing via winds, which helps limit the likelihood of stratification and deoxygenation in the main water body. The estuary is located southeast of Orbost along Ninety Mile Beach. At the heart of the Inlet lies the small township of Bemm River. The estuary has a large catchment area (above 1,100 km²) and has formed behind a long sand barrier. It has a large central basin of 22 km², a depth up to 3 m, and a berm around 600 m in width. Bemm River is the only waterway contributing flows into the Inlet.

An assessment of Sydenham Inlet Estuary's opening and closure trends has shown the estuary is subject to regular closures and rarely reopens naturally. Historically (1987 to 2023), Sydenham Inlet has been open 60% of the time or 220 days per year. Closures of Sydenham Inlet occur more frequently during periods of reduced catchment runoff.

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 Sydenham Inlet, before attempting an artificially opening, is 1.7m AHD.

Note that the EGCMA may decide to open the estuary at Sydenham Inlet 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

04/10/1987

10/11/2023

Time open during data period

60

Percent

Average days of the year open

220

Days

Mean open duration

172

Days

Number of closures across data period

47

Closures

Mean duration of closure

110

Days

Map of historical artificial estuary openings in Sydenham Inlet estuary.

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



