

Johnstone River

This brochure describes the flood risk and previous flooding in the Johnstone River catchment, last updated in June 2025.

Flood Risk

The North and South Johnstone Rivers have a combined catchment area of about 1600 square kilometres. The headwaters of the North Johnstone River are located in high rainfall areas of the tablelands and the South Johnstone River in the western ranges. The rivers flow through steep narrow gorges near Crawford's Lookout to their junction on the coastal plain at Innisfail. Floods are typically generated by high intensity rainfall below the tablelands, on the ranges around Crawford's Lookout and on the coastal plain.

There is a strong rainfall gradient across the catchment with the heaviest rain generally falling along the eastern side of the catchment around Topaz, Crawford's Lookout, and Innisfail. In the western area of the catchment, rainfall totals tend to be significantly less. Heavy localised rainfall along the coastal strip to Crawford's Lookout can cause rapid river rises in the lower reaches of the South and North Johnstone Rivers around Innisfail and Mourilyan, although larger floods tend to be associated with catchment-wide heavy rainfall.

The Johnstone River delta area can be subject to severe flooding and low-lying agricultural and residential areas are susceptible to inundation. Severe flooding of the Johnstone River is often associated with tropical cyclones. The catchment has no reservoirs but is tidally influenced.

Previous Flooding

Severe flooding of the Johnstone River is often associated with tropical cyclones. Significant floods include 1967, 1999, 2009, 2018, and December 2023.

In 2023, Tropical Cyclone Jasper crossed the North Queensland coast as a Category 2 system on Wednesday evening 13 December near Wujal Wujal, bringing widespread heavy rain. Tropical Cyclone Jasper transitioned to a tropical low after making landfall and then moved slowly west over Cape York Peninsula before becoming near stationary over the northern Gulf Country. Linked to ex-Tropical Cyclone Jasper, a coastal trough developed and brought further widespread heavy to locally intense rainfall across the North Queensland coast.

The Johnstone River catchment recorded rainfall totals between 389 mm and 1069 mm for the period 13 to 18 December 2023. The heaviest day of rainfall was December 17, though rainfall totals varied significantly across the catchment. No flood peaks were recorded at Mourilyan Mill or Innisfail Wharf during the December 2023 event due to data issues.

At McAvoy Bridge, a Major flood peak of 7.40 m was recorded at 5:30 pm on 17 December 2023. The highest flood peak recorded is 9.4 m in March 1967.

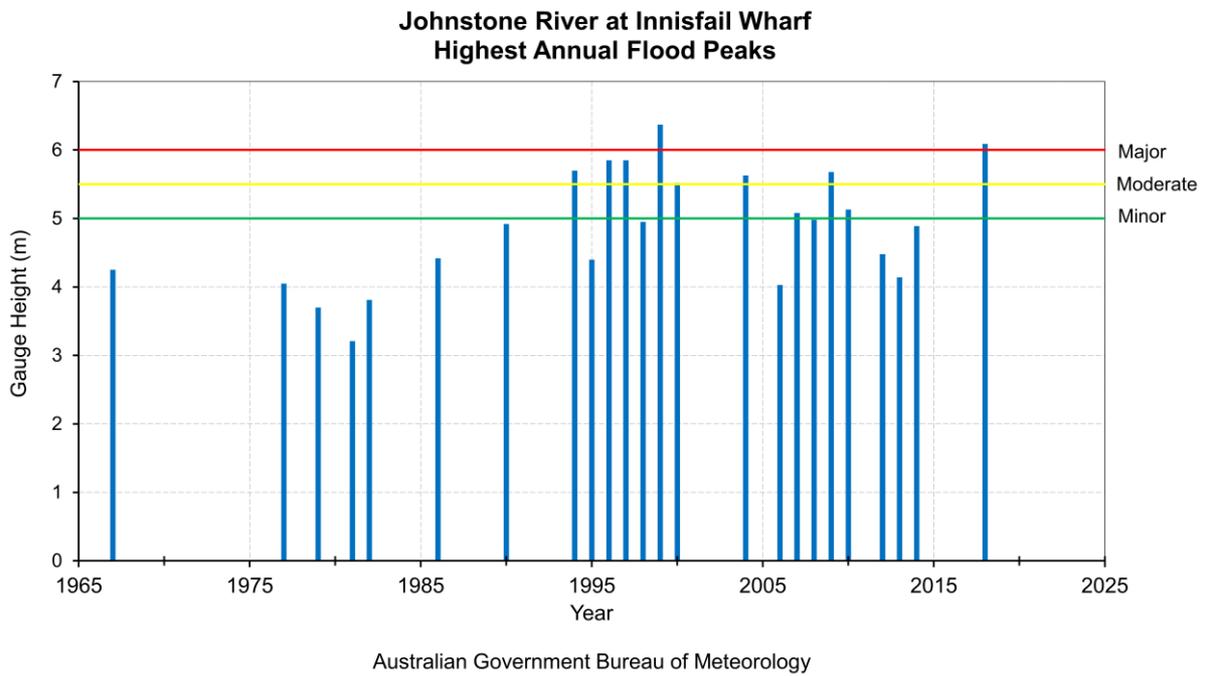
Mourilyan Mill and Innisfail Wharf had no data available during the December 2023 flooding and, as a result, there is no recorded flood peak for either location for the December 2023 event.

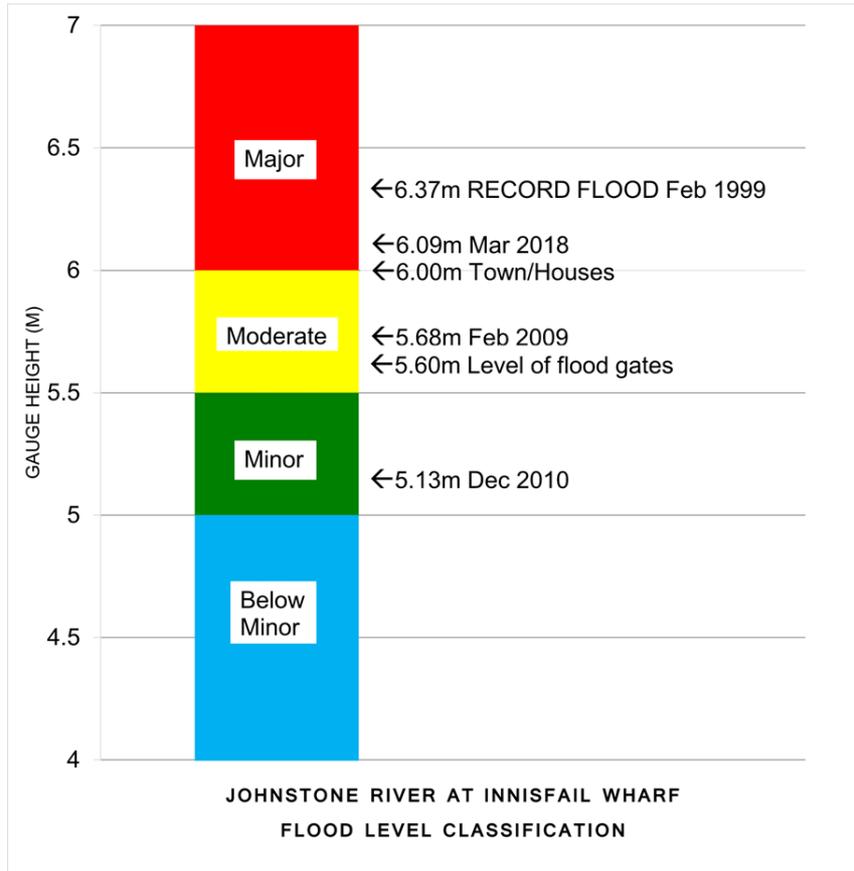
At Mourilyan Mill, the highest flood peak recorded is 11.32 m in February 2009.

At Innisfail Wharf, the river level peaked at 6.09 m in March 2018. The highest recorded flood peak at Innisfail is 6.37 m in February 1999. Historical evidence indicates that a flood peak of around 6.1 m occurred in 1913, and an even higher peak may have occurred in 1878. Note: in the graphs for Innisfail Wharf below, the site location/datum changed after 1986, and corrected heights are used for the period prior.

Flood Event	McAvoy Bridge	Mourilyan Mill	Innisfail Wharf
Mar 1967	9.40	-	4.25
Feb 1999	9.10	-	6.37
Feb 2009	7.25	11.32	5.68
Mar 2018	8.90	10.47	6.09
Dec 2023	7.50	-	-

All heights are in metres on flood gauges.





Further Information

- [Latest rainfall and river heights](#)
- For information on the flood warning service for the Johnstone River: [Queensland Service Level Specification](#)
- Catchment map: [Johnstone, Tully, Murray, Herbert map](#)
- [National Arrangements for Flood Forecasting and Warning](#)