Pine/Caboolture

This brochure describes the flood risk and previous flooding in the Pine/Caboolture River catchment, last updated in July 2025.

Flood Risk

The Pine River catchment drains in a generally easterly direction from the steep D'Aguilar Ranges towards the flat coastal plains of Bramble Bay between Sandgate and Redcliffe. The North Pine Dam is located in the middle of the North Pine River catchment and is operated by Seqwater. The North Pine River and South Pine River join some 7 km upstream from the mouth, where the combined system forms an extensive coastal estuary.

The Caboolture River has a total catchment area of 370 square kilometres. It rises in the D'Aguilar Ranges and flows in an easterly direction towards the coast, passing through Caboolture and entering Deception Bay (the northern part of Moreton Bay) near the township of Beachmere. Its major tributaries include Wararba, Sheep Station, King John, Lagoon Creeks and Burpengary Creeks.

Hays Creek sits in between the Pine and Caboolture catchments, draining areas east of Narangba through Rothwell before emptying into Bramble Bay west of Woody Point.

The Pine and Caboolture systems are susceptible to episodes of flash flooding which can cause significant damage to public and private property throughout the catchment. Flash flooding occurs in both river systems along the small tributaries in the upper catchment, impacting towns such as Samford and Dayboro, but also in the middle reaches of the catchment. At the lower end of the Caboolture River at Beachmere flood waters can take a number of days to subside.

The Bureau does not currently provide a flood warning service for the Caboolture River or Pine River.

Previous Flooding

Records dating back to 1967 indicate major floods have occurred in the Pine and Caboolture Rivers. Significant flood events with major flooding were reported in 1972, 1974, 1989, 1991, 2010, 2011, 2013, 2022 and 2024.

In February 2022, significant and widespread flooding was observed about the Pine and Caboolture catchments due to several days of persistent heavy rain, followed by a band of intense rainfall that moved south across South East Queensland, falling in already flooded catchments with 24 hour rainfall totals in excess of 400mm recorded at a number of locations. Significant damage to property and infrastructure was observed, as well as significant disruption to major road and rail routes. Flash flooding significantly impacted a number of communities during this event, including Morayfield and Deception Bay.

In late January 2024, severe thunderstorm activity brought heavy to locally intense rainfall to parts of the catchment region. Localised six hourly rainfall totals of 200 to 300 mm were recorded around Samford and the Caboolture areas and resulted in significant flash flooding.

In March 2025, Tropical Cyclone Alfred brought widespread heavy rainfall across the catchment region, however, the recorded flood peak heights were generally much lower than those observed during the January 2024 and February 2022 flood events.

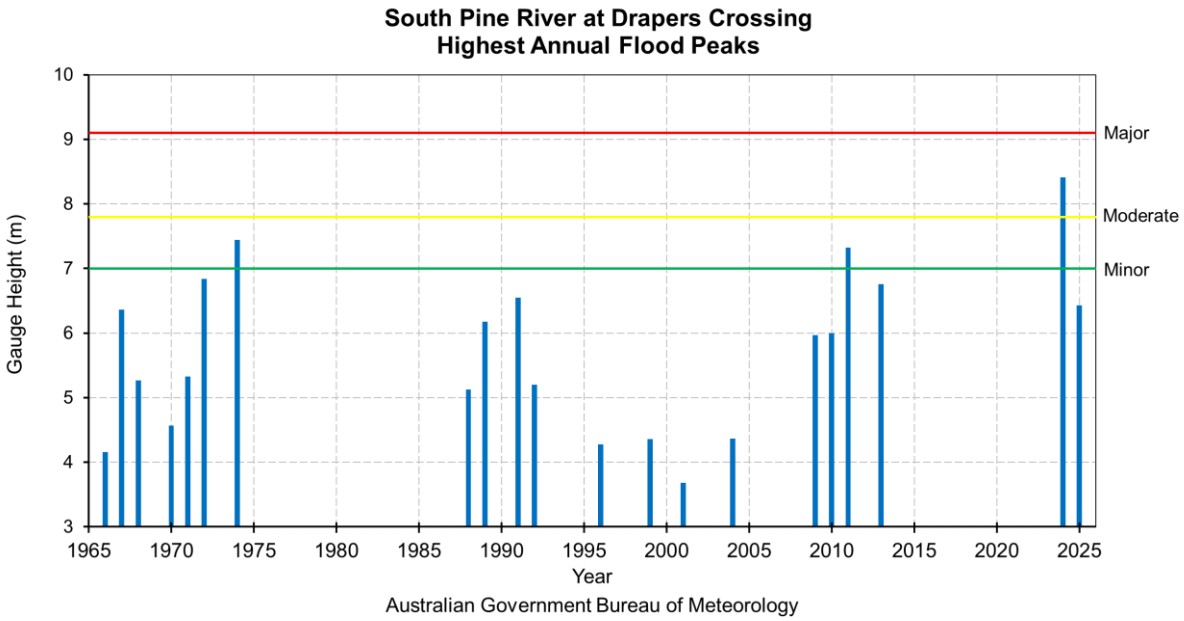
The table below summarises the flood history of the Pine and Caboolture River catchments - it contains the flood gauge heights of the more significant floods.

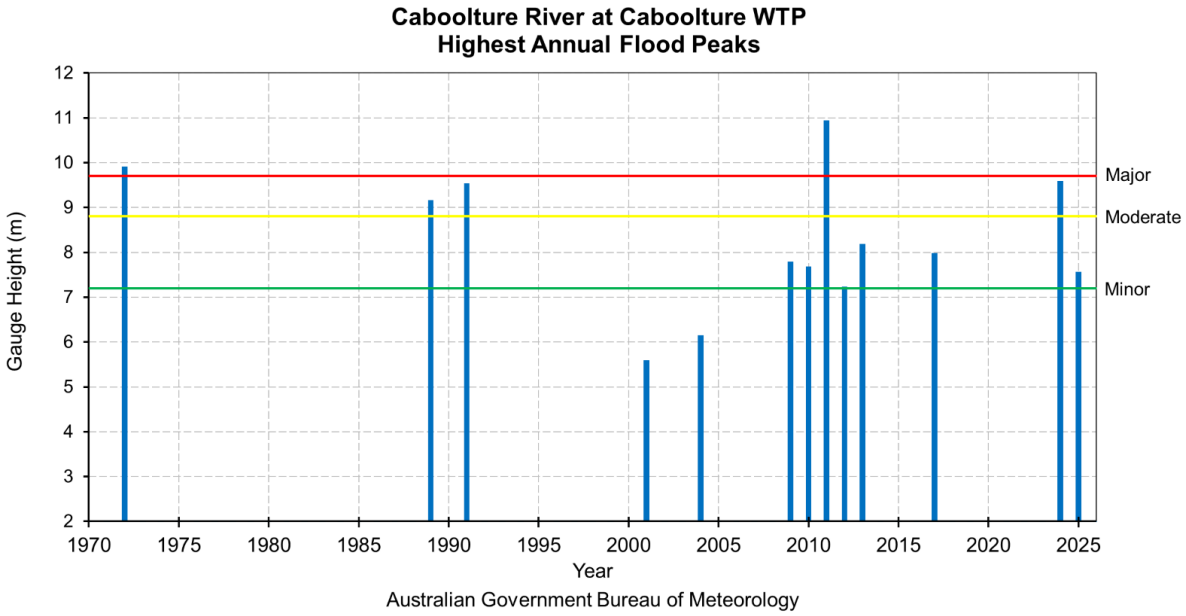
Flood Event	Drapers Crossing	Caboolture	Dayboro (Terrors Creek)	Burpengary (Dale St)	Youngs Crossing
Feb 1972	6.84	9.91*	-	11.15	-
Jan 1974	7.44				
Apr 1989	6.18	9.16*	-	10.81	-
Dec 1991	6.55	9.54*	-	10.45	-
Apr/May 2009	4.97	7.79	-	10.79	4.82
Oct 2010	6.00	7.69	-	9.74	8.27
Jan 2011	7.32	10.94	-	11.19	11.62
Jan 2013	6.76	8.19	-	9.94	7.44
May 2015	5.66	5.29	5.75	9.09	7.34
Mar 2017	3.98	7.99	6.80	9.54	-
Feb 2022	8.66	10.36	7.06	10.84	10.03
Jan 2024	8.41	9.59	6.11	9.84	5.09
^Mar-May 2025	6.43	7.57	-	9.38	7.59

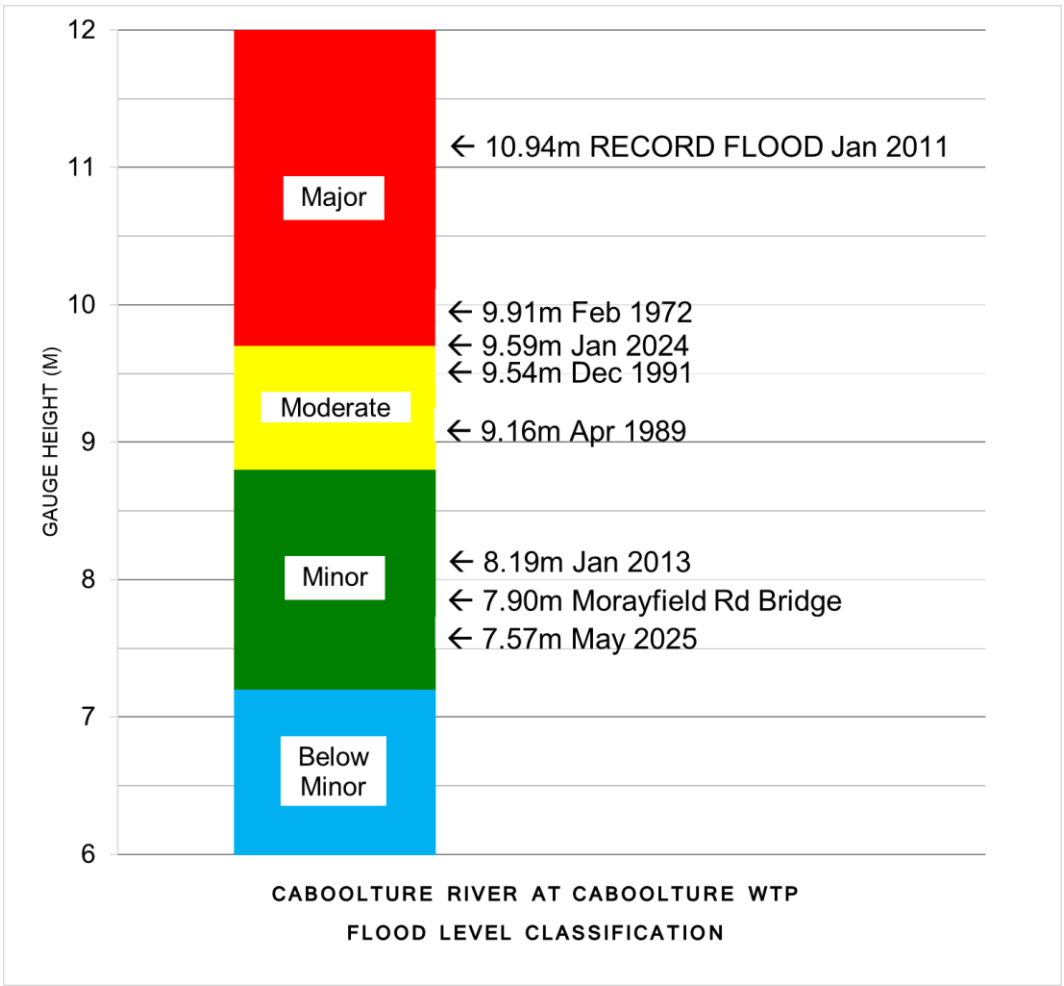
All heights are in metres on flood gauges.

[*] These heights were obtained using surveyed flood marks.

^ Preliminary values subject to verification.




Caboolture River at Caboolture WTP
Highest Annual Flood Peaks
Gauge Height (m)
Year
Major
Moderate
Minor
Australian Government Bureau of Meteorology


GAUGE HEIGHT (M)
Major
Moderate
Minor
Below Minor
← 10.94m RECORD FLOOD Jan 2011
← 9.91m Feb 1972
← 9.59m Jan 2024
← 9.54m Dec 1991
← 9.16m Apr 1989
← 8.19m Jan 2013
← 7.90m Morayfield Rd Bridge
← 7.57m May 2025
CABOOLTURE RIVER AT CABOOLTURE WTP
FLOOD LEVEL CLASSIFICATION

Further Information

- Latest rainfall and river heights
- For information on the flood warning service for the Pine and Caboolture Rivers: Queensland Service Level Specification
- Catchment map: Queensland Caboolture-Pine map
- National Arrangements for Flood Forecasting and Warning