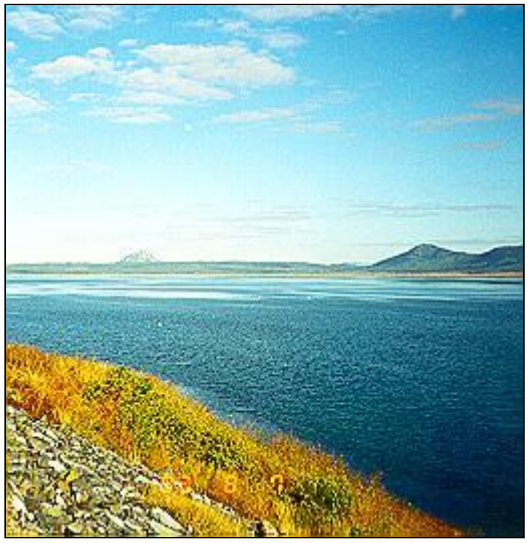
FLOOD WARNING SYSTEM for the PROSERPINE RIVER

This brochure describes the flood warning system operated by the Australian Government, Bureau of Meteorology for the Proserpine River. It includes reference information which will be useful for understanding Flood Warnings and River Height Bulletins issued by the Bureau's Flood Warning Centre during periods of high rainfall and flooding.



Peter Faust Dam

Contained in this document is information about:
(Last updated September 2019)

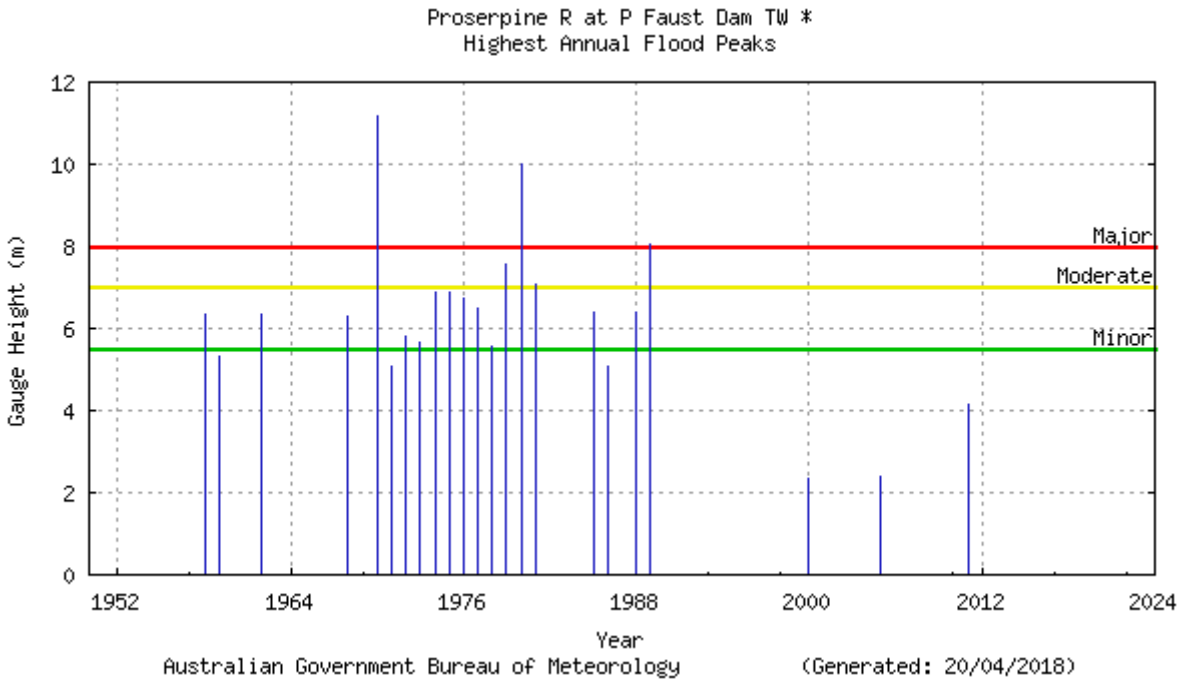
Flood Risk

The Proserpine River has a total catchment area of approximately 470 square kilometres. Originally levee banks were constructed by landholders along the river to protect valuable cane lands, but subsequent overtopping and breaching of the levees in major flood events led to the planning and construction of a flood mitigation dam on the river.

Peter Faust Dam is an earth and rockfill embankment 50 metres high, located on the Proserpine River about 27 kilometres upstream of Proserpine. The Dam, was commissioned in the early 1990s, and commands approximately 75% of the catchment area and operates as a flood mitigation dam. It has significantly reduced the frequency and severity of floods in the Proserpine River.

Previous Flooding

The figure below shows the annual peak heights which have occurred at the tailwater gauge of the Peter Faust Dam since records began in 1956. The highest recorded flood of 11.16 metres was the result of Cyclone Ada which occurred in January 1970.



Flood Forecasting

Due to recent changes in the flood monitoring network no formal forecast products are now issued for the Proserpine community during flood events.

The Bureau's Flood Warning Centre will still continue to issue River Height Bulletins for the Proserpine River during flood events.

Local Information

The Whitsunday Regional Council is able to provide further information on flooding in your area of the Proserpine River catchment.

River Height Bulletins

The Bureau of Meteorology issues River Height Bulletins for the Proserpine River catchment regularly during floods. They are sent to radio stations for broadcast, and to local Councils, emergency services and a large number of other agencies involved in managing flood response activities. River Height Bulletins are available via :

Radio
Radio stations, particularly the local ABC, and local commercial stations, broadcast Flood Warnings and River Height Bulletins soon after issue.

Local response organisations
These include the Councils, Police, and State Emergency Services in the local area.

Internet/World Wide Web
Flood Warnings, River Height Bulletins and other weather related data is available on the Bureau's Web page at http://www.bom.gov.au . The Queensland Flood Warning Centre website is http://www.bom.gov.au/qld/flood .

Telephone Weather
Flood Warnings are available through a recorded voice retrieval system, along with a wide range of other weather related and climate information.

Main Directory Phone 1900 955 360

Interpreting River Height Bulletins

Flood Warnings and River Height Bulletins contain observed river heights for a selection of the river height monitoring locations. The time at which the river reading has been taken is given together with its tendency (e.g. rising, falling, steady or at its peak). The Flood Warnings may also contain predictions in the form of minor, moderate or major flooding for a period in the future. River Height Bulletins also give the height above or below the road bridge or causeway for each river station located near a road crossing.

One of the simplest ways of understanding what the actual or predicted river height means is to compare the height given in the Warning or Bulletin with the height of previous floods at that location.

The table below summarises the flood history of the Proserpine River catchment - it contains the flood gauge heights of the more significant recent floods.

River height station	Peter Faust Dam (Headwater)	Peter Faust Dam (Tailwater)	Crystal Brook	Proserpine
Mar 1985	-	6.41	-	-
Feb 1988	-	5.36	-	-
Mar 1988	-	6.40	-	-
Apr 1989	-	8.04	-	-
Feb 2000	-	2.33	-	3.96
Jan 2005	-	2.37	4.57	4.57
Mar 2011	1.44	4.15	4.25	4.25

All heights are in metres on flood gauges.
No significant floods (above minor) have been recorded since the Peter Faust Dam (Headwater) and Proserpine stations were installed in 1990.

Historical flood heights for all river stations in the Proserpine River catchment Floodwarning network, as shown on the map, are available from the Bureau of Meteorology upon request.

PROSERPINE RIVER CATCHMENT - ASSESSMENT OF THE FLOOD POTENTIAL

Major flooding requires a large scale rainfall situation over the Proserpine River catchment. However, the Peter Faust Dam has a significantly reduced the effect of major flooding in the lower reaches. The following can be used as a rough guide to the likelihood of flooding in the catchment:

Average catchment rainfalls in excess 200mm in 24 hours, may result in stream rises and the possibility of moderate to major flooding and local traffic disabilities in the lower reaches of the Proserpine River below the Peter Faust Dam and extending downstream to Proserpine.

Average catchment rainfalls in excess 300mm in 24 hours, may result in significant stream rises and the possibility of major flooding and local traffic disabilities in the lower reaches of the Proserpine River below the Peter Faust Dam and extending downstream to Proserpine.

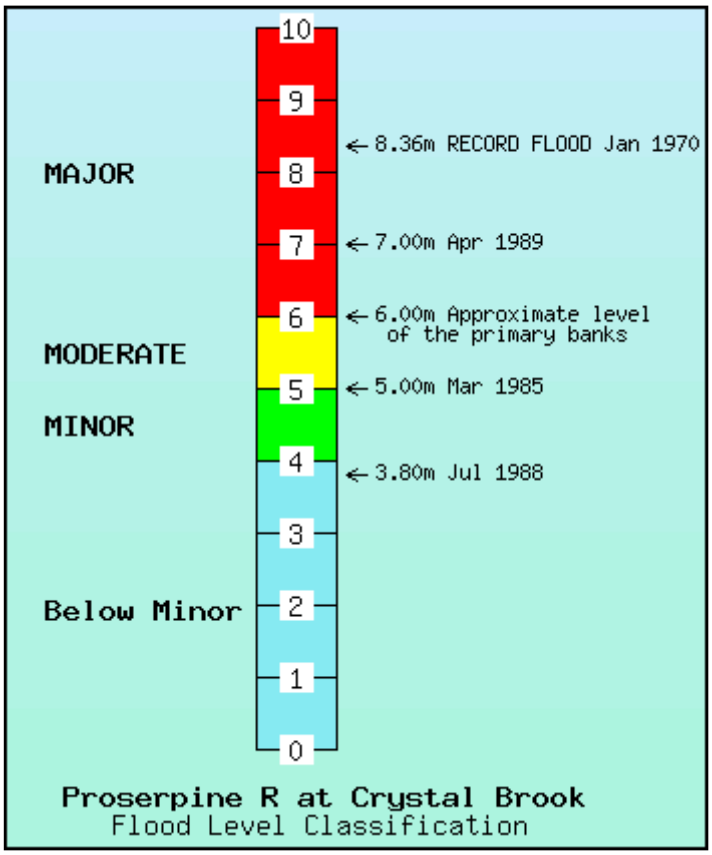
Flood Classifications

At each flood warning river height station, the severity of flooding is described as minor, moderate or major according to the effects caused in the local area or in nearby downstream areas. Terms used in Flood Warnings are based on the following definitions.

Minor Flooding : Causes inconvenience. Low-lying areas next to watercourses are inundated. Minor roads may be closed and low-level bridges submerged. In urban areas inundation may affect some backyards and buildings below the floor level as well as bicycle and pedestrian paths. In rural areas removal of stock and equipment may be required.

Moderate Flooding : In addition to the above, the area of inundation is more substantial. Main traffic routes may be affected. Some buildings may be affected above the floor level. Evacuation of flood affected areas may be required. In rural areas removal of stock is required.

Major Flooding : In addition to the above, extensive rural areas and/or urban areas are inundated. Many buildings may be affected above the floor level. Properties and towns are likely to be isolated and major rail and traffic routes closed. Evacuation of flood affected areas may be required. Utility services may be impacted.



Each river height station has a pre-determined flood classification which details heights on gauges at which minor, moderate and major flooding commences. Other flood heights may also be defined which indicate at what height the local road crossing or town becomes affected by floodwaters.

The table below shows the flood classifications for selected river height stations in the Proserpine River catchment.

River Height Station	First Report Height	Crossing Height	Minor Flood Level	Crops & Grazing	Moderate Flood Level	Towns and Houses	Major Flood Level
Peter Faust Dam (Headwater)	0.0	0.0 (S)	3.5	-	6.0	-	8.0
Peter Faust Dam (Tailwater)	-	-	5.5	-	7.0	-	8.0
Crystal Brook	3.0	-	4.0	-	5.0	-	6.0

All heights are in metres on flood gauges. (S) = Spillway

The above details are correct at the time of preparing this document. Up-to-date flood classifications and other details for all flood warning stations in the network are at:

Flood gauge information

For the latest rainfall and river height conditions please use the following link:

Latest rainfall and river heights

For the latest rainfall and river height network map please use the following link:

Network maps

For further information, contact:
The Flood Services Manager, Bureau of Meteorology, GPO Box 413, Brisbane QLD 4001
