

Caring for our catchment: FITZROY BASIN IN FLOOD



How big is the Fitzroy Basin?

The Fitzroy Basin is the second largest catchment that drains to the coast in Australia, including one of the largest river systems culminating in the mighty Fitzroy River in Rockhampton. It's nearly 150,000 square km in size - that's the size of Tasmania plus 80,000 km² to spare!

The catchment includes several major tributaries:

- **Nogoa River:** starts about 200km south-west of Emerald, fills the Fairbairn Dam and is joined by Theresa Creek from the north.
- **Comet River:** flows through the south-east of the central highlands parallel to Springsure to meet the Nogoa. The system is then called the Mackenzie.
- **Mackenzie:** flows through the middle of the basin from above Blackwater, winds north to Middlemount and is then joined by the Isaac.
- **Isaac River:** source is at the upper reaches of the catchment north of Moranbah, and includes the Connors river flowing from the western side of the range just behind Sarina.
- **Dawson:** around one third of the Fitzroy, the Dawson's source is near Injune at the southern-most reach of the catchment, flows through Taroom, Theodore and Baralaba before meeting the Mackenzie. When the Mackenzie and Dawson come together, the river is called the Fitzroy.

Water that flows through the rivers and streams of the Fitzroy Basin all connect eventually with the Fitzroy River, which flows out to the Great Barrier Reef Lagoon. The map on the opposite page shows the many waterways that make up this massive river system.

Why does the Fitzroy take so long to peak?

All in all, more than 20,850km of waterways wind through the basin to drain into the Fitzroy River. From the headwaters of either the Nogoa or Dawson River to the mouth of the Fitzroy River, water must travel more than 750km across the basin, which means it can take several days for the water to reach Rockhampton.

Why and when does it flood?

The region's rainfall is highly variable. Long dry spells are often followed by intense wet season rainfalls. Due to

its extreme size and fan-like shape, the Fitzroy Basin is capable of producing large flooding. The highest recorded flood occurred in 1918, which was 10.11m. Please see graph at bottom of page for more records.

What does it mean for the environment?

Floods are a natural phenomenon and can have both positive and negative impacts on the environment.

The Fitzroy has one of the most extensive natural coastal floodplains on the east coast of Australia. Floodplains line the major streams, rivers and delta of the Fitzroy Basin and act as sediment sinks.

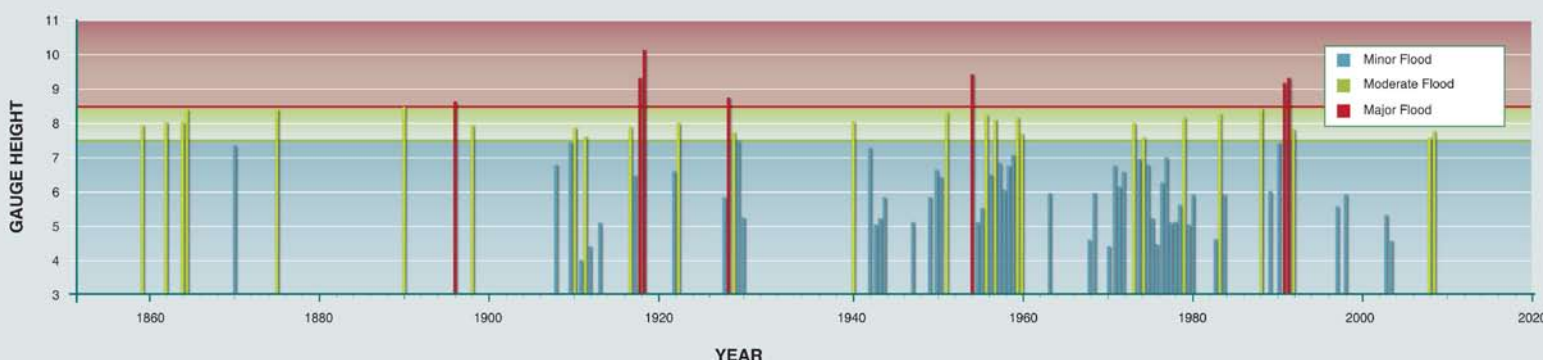
This helps reduce the amount of dirt and contaminants that reach the ocean and delicate reef ecosystems. The Fitzroy River mouth marks the beginning of the Great Barrier Reef World Heritage Area.

Flood plumes discharged from large floods inundate Keppel Bay, which is home to reefs with some of the highest coral cover, and extend east across the Capricorn Bunker Group and north of Townsend Island, covering an area greater than 10,000 square km.

However, fresh water flowing to the ocean is not wasted. The Fitzroy Basin is one of the state's most significant fish nurseries and floods can assist in the spawning of native fish including barramundi. After the 1991 flood, tagged barramundi were found around 1000km of coastline from Hervey Bay to Mackay, showing that infrequent large flows aid in the maintenance of strong genetic diversity for the region's fisheries.



For more information about the Fitzroy Basin and our efforts to ensure a more sustainable future for our region please visit www.fba.org.au.



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| Legend | |
|--------|----------------------------|
| | Major Rivers |
| | Other Rivers & Creeks |
| | Direction of Water Flow |
| | Dams & Weirs (selected) |
| | Monitoring Site (selected) |
| | Cities & Towns |
| | Major Roads |
| | Fitzroy Basin |
| | Other FBA Region Basins |

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For more information about the Fitzroy Basin and our efforts to ensure a more sustainable future for our region please visit www.fba.org.au, or become a fan of 'I believe in a sustainable CQ' on Facebook.