Managing flood risk

Projects to improve flood mitigation in Brisbane and the surrounding areas have been discussed since European settlement and have included dredging and removal of a bar at the mouth of the river.

Dams have an important role to play in water storage and flood mitigation in the Brisbane River catchment. Somerset and Wivenhoe Dams are the two main dams in the Brisbane River catchment. In addition to providing major water supply, they also play a role in reducing the impact of flood events. However due to the complexities of the catchment area such as its size and the amount of rainfall downstream of dams, total flood prevention is not possible.

Flood Study

We can't prevent future floods. However, there are ways we can increase our level of preparedness and resilience to flood events across the Brisbane River floodplain. The Queensland Government and local governments are working on a long-term plan to manage the impact of future floods and improve community safety and resilience.

The Flood Study was completed in early 2017 and provides the most up-to-date flood information about the probabilities of flooding, extents of flooding and flood hazards. The Flood Study has increased our level of understanding and confidence about flood behaviour to better predict the likely impact of flood events as they develop.

Strategic Floodplain Management Plan

Information from the Flood Study will be used to develop a Strategic Floodplain Management Plan that will focus on how we can prepare for and manage a range of possible flood events with greater efficiency and coordination across the Brisbane River floodplain. The plan will focus on mitigation measures including land use planning, building controls, disaster management, community resilience and the prioritisation of flood related infrastructure.

Following the development of the Strategic Floodplain Management Plan, local floodplain management plans will be developed to help prioritise flood-related infrastructure and other investment opportunities.

More information

- Visit **www.qra.qld.gov.au/BRCFS** for more information about the Flood Study
- Visit **www.getready.qld.gov.au** for information on preparing for a flood
- Contact your local council for flood risk information specific to your property

Brisbane River Catchment Flood Studies

A history of living with flooding

Living with flooding is a part of life in the Brisbane River catchment and as a community we need to be informed, ready and resilient. The Queensland Government and local councils have partnered to deliver the Brisbane River Catchment Flood Study (Flood Study), to investigate regional scale flooding across the Brisbane River floodplain that is caused by substantial rainfall across the Brisbane River catchment. Knowledge gained from historical flood events was critical to the development of the Flood Study, which provides valuable information about the varying size and frequency of potential floods across the floodplain to better assess the likely impact of flood events in the future.

An important step in building our preparedness and resilience to floods is to understand the history of flooding within the region.

Historical flood events

The Brisbane River has an extensive documented history of floods, with records dating back to the early exploration of the river by John Oxley in 1824.

The largest recorded flood event occurred in 1841, however oral history shared by the local Jagera and Turrbal clans indicate that a flood, much larger than that of 1841, occurred up to a century before.

The Flood Study focusses on flooding downstream of Wivenhoe Dam including the Brisbane River and major waterways such as Lockyer Creek and the Bremer River system.

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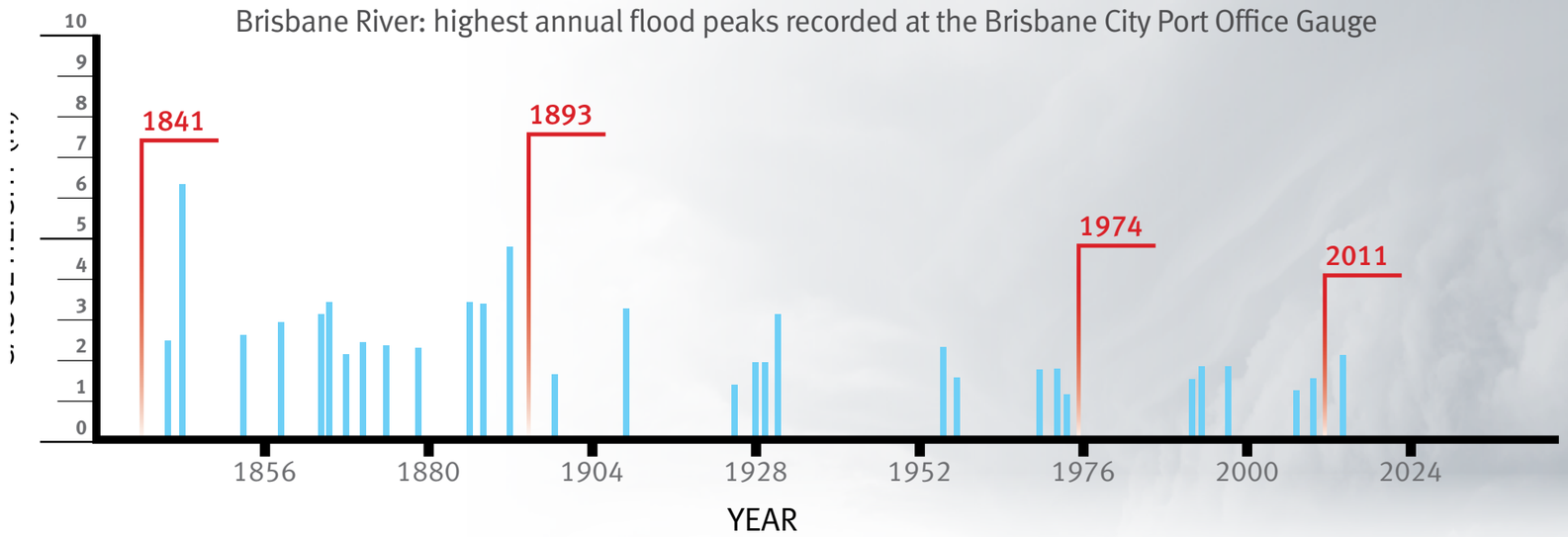
Historical timeline of flood events

Flood records for Brisbane City extend back to the 1840s and highlight the range and frequency of flood events that have occurred since official records were captured. Our flood history illustrates how no two flood events are exactly the same.

The chart shows the highest annual flood heights recorded at the Brisbane River City Gauge since the 1840s. These historical records demonstrate that the larger the flood, the less likely it is to occur. History also shows us that the occurrence of a major flood does not prevent other major or moderate floods from occuring soon after.



1893

The Great Flood of February 1893 saw the Brisbane River flood the city as a result of a tropical cyclone. The water rose seven metres above ordinary levels causing inner city South Brisbane to be completely submerged. Critical infrastructure was damaged with flood waters destroying part of the Victoria Bridge and causing the railway bridge at Indooroopilly to be washed away. In Ipswich, houses were swept away and seven men drowned when the Eclipse Colliery Mine in North Ipswich was flooded.

It was after the 1893 flood that discussions first began about the creation of Somerset Dam. Construction of the dam commenced in 1935 and was completed in 1959.

Brisbane City, Queen Street – 1893 flood

1974

The flood that occurred in late January 1974 was the largest flood to affect Brisbane City in the 20th century. The spring of 1973 had been extremely wet and the catchment was saturated. Tropical Cyclone Wanda hit the region and by 29 January 1974, 900 millimetres of rainfall was recorded. More than 500 millimetres of rainfall was recorded in the space of 24 hours in Brisbane alone. As captured at the Brisbane City gauge, the flood waters peaked at 5.45 metres impacting tens of thousands of homes. In Ipswich, 41 houses were washed away and 1800 residential and commercial properties were partially or totally inundated. Sixteen lives were lost in Brisbane and Ipswich.

Following the 1974 flood, the Wivenhoe Dam was built with construction completed in 1985.

North Ipswich – 1974 flood

2011

In December 2010, Queensland experienced prolonged rainfall that caused extensive flooding and resulted in the majority of the state being declared a natural disaster area. Approximately 29,000 homes and businesses were inundated and more than 30 lives were lost, with the greatest loss of life occurring in the Lockyer Valley, especially the township of Grantham.

On 12 January 2011, the Bremer River in Ipswich peaked at 19.4 metres. Less than two days later the Brisbane River peaked at 4.46 metres at the city gauge, one metre less than during the 1974 flood.

The Queensland Floods Commission of Inquiry was subsequently established and recommended a number of changes to how state and local governments manage flooding, including the development of a catchment flood study for the Brisbane River.

Somerset, Lowood – 2011 flood

2013

During the Australia Day long-weekend in January 2013, ex-Tropical Cyclone Oswald caused widespread damage across Queensland and the northern parts of New South Wales. As the low pressure system moved slowly south it brought strong winds, large surf and heavy rains, with up to 700 millimetres recorded in some areas. South East Queensland experienced widespread flooding with flood waters peaking at 14 metres in Ipswich. The Lockyer Valley, still recovering from the disastrous summer of 2010-11, was again severely affected.

In 2016, a Catchment Action Plan was developed specifically for the Lockyer Valley region called the Lockyer Catchment Action Plan 2015-2018.

Lockyer Valley, Thornton School Bridge – 2013 flood