



Flooding in the City of Logan

Logan and Albert River floods,
March 2017, Photo: Aerial Hotshots 2017



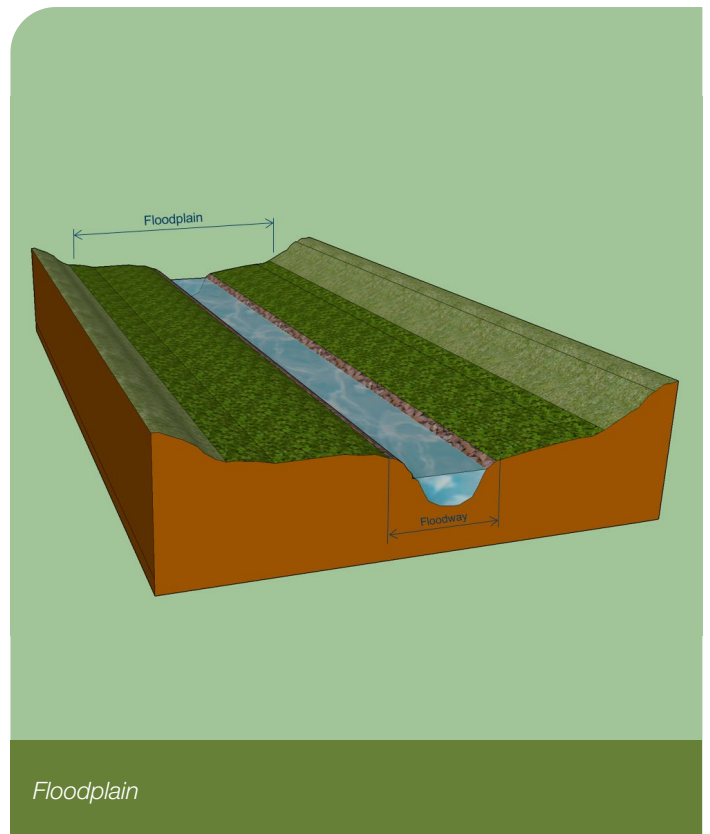
All floods are different, depending on where, and how rain falls.



Albert River flooding at Luscombe Bridge

The City of Logan's subtropical climate and diverse landscape means our city is vulnerable to the threat of natural disasters, such as flooding. Like many cities in southeast Queensland, Logan can experience flooding following significant rainfall events. Flooding occurs when the water levels in our creeks and rivers overtop the banks and spill out into the floodplain areas surrounding the natural waterways.

The City of Logan has two major rivers - the Logan River and the Albert River. In addition to these rivers there are 54 creeks and a further 30 floodplain areas. Flooding may come from rivers and creeks or natural overland flow paths. Whilst river flooding may have more widespread and prolonged impacts than flash flooding, it requires intense rainfall which occurs over several days, which is not as common in Logan.



What are the different types of flooding?

Depending on where you live, flooding may impact you differently. There are several different types of flooding that we refer to, these are river, creek and overland flow flooding. Each of these flooding sources behave differently and can have different impacts, depending on how close you live to a waterway or natural overland flow path. We can help to minimise the impact of flooding by understanding how each type of flooding behaves, and preparing for the impacts that it may have on our home, business or neighbourhood. For example, how you design your building or renovation may reduce the cost associated with insurance or the cost of recovering from a potential flood event.

River Flooding

The Logan and Albert River catchment extends from the top of the McPherson Ranges all the way down to its outlet in southern Moreton Bay. When rare and very significant rain falls, flood waters moving through the catchment may exceed the capacity of the main river channel and can spill out into the floodplain areas surrounding the waterway.

This may result in widespread inundation that lasts for days, with people, property and infrastructure being potentially impacted. Typically, this type of flooding has a relatively longer warning time.



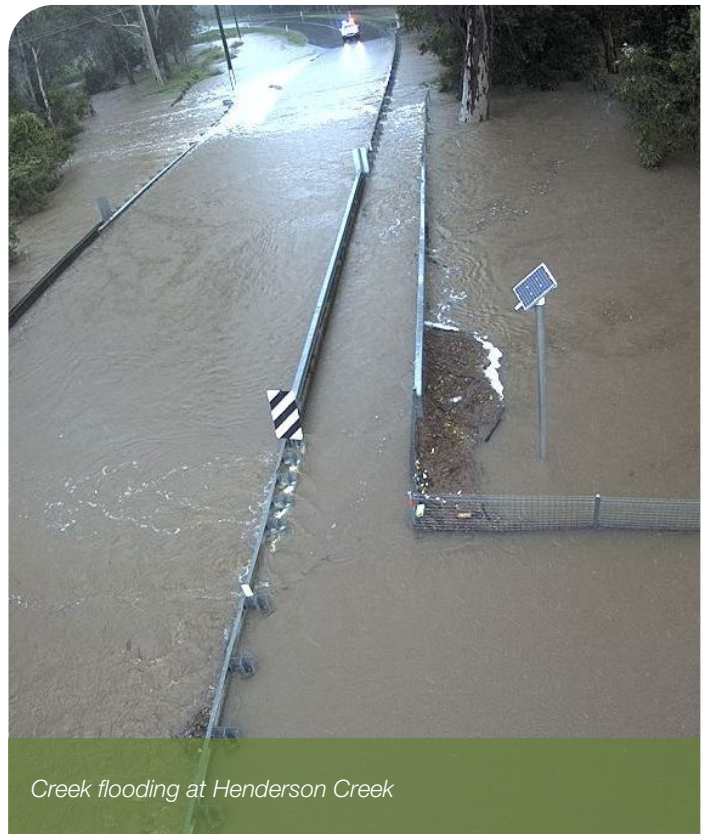
River flooding at Waterford Bridge, Logan River

Creek Flooding

Creek flooding occurs when rainfall runoff makes its way through the defined waterways of our city breaks the banks of the creek channel.

Creek flooding has a relatively shorter warning time and occurs following high intensity and short duration rainfall over a local catchment, such as thunderstorms. Thunderstorms are most common during the summer months - between September and March each year. The short intense rainfall that occurs during a thunderstorm can result in the water levels in our creeks rising quickly or 'flashing' up. Flash flooding may have little warning time and may result in flooding from storm water runoff and creek flooding.

Creek flooding can be deep and fast flowing. Impacts are generally more localised to areas surrounding the waterway and may last for a period of hours.

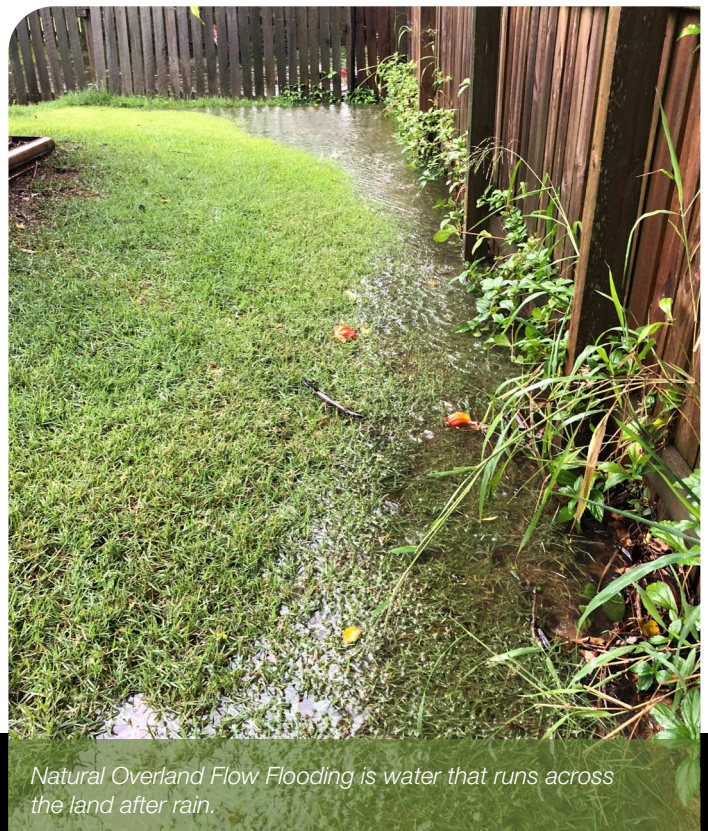


Creek flooding at Henderson Creek

Overland Flow Flooding

Rainfall making its way to local waterways and the river can result in flooding, known as natural overland flow flooding. Overland flow flooding can also occur when the capacity of the stormwater pipes and channels is exceeded.

Impacts of overland flow flooding are relatively localised and occur with limited warning. You should consider how runoff along low-lying areas, along fence lines and around buildings may affected your property.



Natural Overland Flow Flooding is water that runs across the land after rain.

Historical flooding in Logan

Records of large floods in the Logan and Albert Rivers extend back as far as 1887, and since then there have been several major flood events. The flood of March 2017 was the most severe in recent memory, with new record flood levels set along the Logan River at Beaudesert, and Maclean Bridge. Along the Albert River a new record was set at Bromfleet while Beenleigh experienced its highest flood since 1887.

March 2017 Flood Event

Severe Tropical Cyclone (STC) Debbie crossed the Queensland east coast at Airlie Beach as a Category 4 system on Tuesday 28 March 2017. After crossing the coast STC Debbie was downgraded to a low pressure system and continued to move down the coast. On Thursday 30 March Ex-STC Debbie began impacting South-East Queensland, bringing heavy rainfall to the City of Logan. There was widespread rainfall across the catchment for several days, with rainfall totals in excess of 400mm recorded in a 24 hour period.

Localised flooding occurred in creek systems on Thursday 30 March and Friday 31 March. Significant riverine flooding occurred in the Albert River on Friday 31 March, and the Logan River on Saturday 1 April. Many homes and businesses were isolated, inundated or in some cases destroyed.

May 2015 Flood Event

Following significant rainfall associated with ex-Tropical Cyclone Marcia in February of 2015, an East Coast Low developed during 1 May 2015 off the Fraser Coast, delivering 100mm to 250mm of rainfall in less than six hours across the City of Logan. This resulted in major flooding in the Slacks Creek, Scrubby Creek, Quinzeh Creek and Oxley Creek catchments. Numerous homes and businesses were inundated over a period of hours.

The Bureau of Meteorology website contains more detailed information about previous flooding within the City of Logan: bom.gov.au/qld/flood/brochures/logan_albert/logan_albert.shtml.



Historic flood markers in Tully Memorial Park, North Maclean

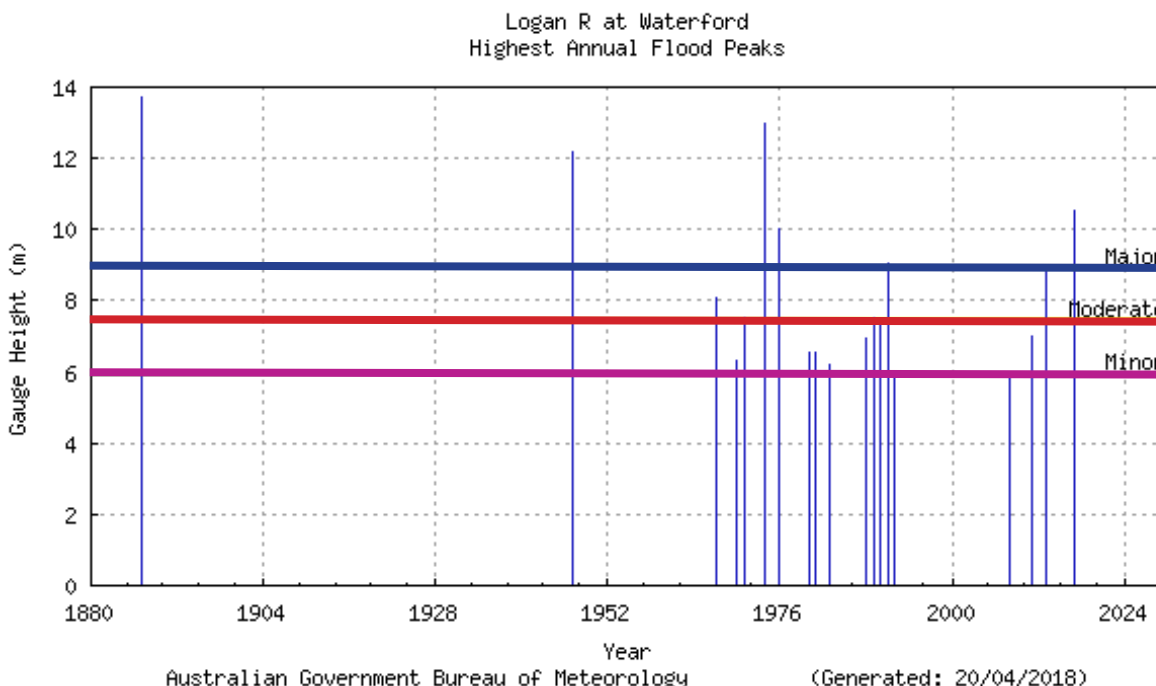


Figure of historical flooding from BoM.

Flood Information and tools

As part of Council's commitment to disaster preparedness for potential hazards, Council provides a range of flood information and tools for the community to assist in flood resilience.

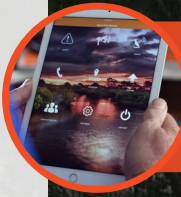
Logan Early Warning provides residents and businesses of the City of Logan with free early warning alerts for potentially severe weather, bushfires and flood notifications for a number of locations across the city. Download the Logan Early Warning app to receive push notifications, or register online to receive email, SMS or text-to-voice for landlines. logan.qld.gov.au/earlywarning

Flood Level Report allows you to view flood hazard mapping for your property and identify areas which may be at risk of flooding from the one percent Annual Exceedance Probability modelled flood event. Download a Flood Level Report from Council's Logan PD Hub loganhub.com.au

Disaster Dashboard provides a wide range of information, including weather warnings, local road hazards, fire incidents, power outages, and much more to keep the community informed and up-to-date in an emergency situation. disaster.logan.qld.gov.au

Flood Watch Cameras shows creek levels at a few key locations across the city and allow the community to better prepare and plan their response to flooding. This includes identifying the need to plan alternative routes to stay safe where there are road closures.

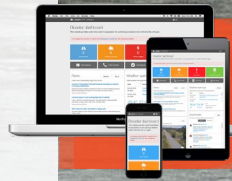
Floods can happen anytime and without warning. To help prepare yourself and property in advance to reduce potential flooding impacts, please visit Council's website at logan.qld.gov.au/getprepared.



Know how to stay informed.



Know your flood risk.



Understand Flood Warnings issued by the Bureau of Meteorology.



Never enter floodwater. This includes driving, riding and walking through floodwaters, and children playing in floodwaters.



Flood preparedness checklist

The flood preparation checklist will help you prepare your property for flooding.

It is important to prepare a plan to help cope with a natural disaster such as flooding. This may help to minimise the impact of flooding and allow you to quickly recover.

Read through this flood preparation checklist and select 'Yes' or 'No' to find out if your property is prepared. You can customise this checklist to include information specific to you by typing into the 'Other considerations for your property' section.

Identified if your property may be at risk of flooding? The Logan PD Hub allows you to view flood hazard overlay mapping for your area of interest: loganhub.com.au .	Yes No
Downloaded a Flood Level Report for your property from the Logan PD Hub: loganhub.com.au ?	Yes No
Registered for the Logan Early Warning Service and downloaded the app to get early alerts for potentially severe weather, bushfires and flood notifications? logan.qld.gov.au/earlywarning	Yes No
Checked if there is a Flood Watch Camera near your property? disaster.logan.qld.gov.au	Yes No
Prepared an emergency plan, including emergency contact numbers and other important phone numbers?	Yes No
Included your pets in your emergency plan and identified where you are going to take your animals if you need to evacuate?	Yes No

Flood preparedness checklist

Checked if you could be cut off by floodwaters, and planned the safest route to leave your property, should you decide to leave?	Yes No
Prepared an emergency kit? logan.qld.gov.au/getprepared	Yes No
Located and packed your critical documentation (e.g. insurance, financial, legal and identification documents) in a portable waterproof container?	Yes No
Identified any objects that would need to be secured or moved to a higher location?	Yes No
Checked whether there is adequate insurance to cover you in the event of a flood, and contacted your insurance company to check if there are any specific preparations you need to make prior to the event?	Yes No
If you live on a rural property, have you considered installing fence lines in such a way that your animals are able to move to higher ground in the event of flooding?	Yes No

Other considerations for your property:

Yes

No

Yes

No

Yes

No