

FACT SHEET

Flood Risk and Overland Flow Overlay

What is a natural hazard?

A natural hazard is a naturally occurring event that may have a negative effect on humans and other animals, or the environment. A natural hazard can adversely impact the economy and damage property or infrastructure.

Planning for natural hazards is important to reduce the risk to people and property and improve community resilience to respond to and recover from natural events.

The draft planning scheme has requirements for development relating to the natural hazards. These hazards include bushfires, flooding and steep topography/landslides which are all listed as state interest matters for the state government. It is a requirement to appropriately reflect these state interest matters into the new Ipswich planning scheme.

Learn more [here](#).

What is a flood?

A flood occurs when water inundates land that is normally dry. Floods are a natural process that can be caused by multiple factors. Floods occur at irregular intervals and no two floods are the same.

Depending on your location, floods can occur suddenly or slowly. Sudden, heavy and intense rainfall can cause flood water to quickly rise in the minutes or hours that follow. These are known as 'flash floods' and are typically associated with relatively small catchment areas. In large catchment areas, floods can occur slowly. Rainfall can build up over hours, days or weeks. The runoff from this rainfall may create significant floods that inundate large areas of land for days, weeks or months.

What is Overland Flow?

Overland flow is water that runs across land after rainfall. It may appear quickly during or immediately after a rain event. It is generally water flowing down from higher to lower ground on its way to a stream. Overland flow is very sensitive to changes in terrain, landscape or new buildings and structures.

Overland flow can impact the safety of people and buildings. Development, earthworks or landscaping can alter overland flow paths, impacting neighbouring properties as well as causing larger environmental impacts on our rivers and creeks.

Flood severity

No two floods are the same. There are variations in the type, extent and nature of flooding. There are several contributing factors:

- **rainfall:** contributes to both the level and duration of flooding and where flooding may occur;
- **rate of rise** (how fast the flood water rises): a flood that rises quickly provides less time for warning and evacuation;
- **flow velocity** (how fast the water is flowing): faster flow causes a higher risk to human life, a risk of erosion and impact to infrastructure;
- **flood duration:** a flood that lasts longer has a greater disruption to transport, business and other networks owing to the increased duration; and
- **extent of flooding:** flooding that affects a larger area often has a greater impact.

What are the consequences of floods?

Floods cause significant impact on individuals, businesses, infrastructure, vital services, agriculture and property. This creates many social, economic and environmental consequences for our community.

How is the chance of a flood described?

The chance of a flood event is commonly described using the term Annual Exceedance Probability (AEP). It is the chance of a flood event of a given size occurring in any one year. The 1% AEP means there is a 1 in 100 likelihood of this event occurring in any given year.

It does not mean the flood event will only occur once every hundred years.

Complex modelling is undertaken to identify the various AEP events and this is translated into a planning scheme. The result of this modelling is also published in the [Ipswich Integrated Catchment Plan \(IICP\)](#).

How is flood risk managed?

Flooding risk management is not just about mapping an area that has been impacted by flooding. Planning needs to consider flood risk, which includes both the chance of an event taking place and its potential impact on existing uses, proposed uses and the community.

There are a range of planning policy responses that can be used including:

- avoiding areas impacted;
- minimising change in areas impacted;
- including requirements to make new development more resilient to flooding; or
- changing the planning expectations to avoid the risk of flooding.

In practice, this involves a balanced consideration of community need, level of flood risk, economic impact and the capacity of our emergency management to act in the event of a flood.

What is the planning scheme's role?

A risk-based approach has been adopted in the preparation of the draft planning scheme **Flood Risk and Overland Flow Overlay**. The approach is consistent with the findings of the Flood Commission of Enquiry, the **Brisbane River Strategic Floodplain Management Plan**, the **Planning Act 2016** and the **State Planning Policy**. The intent is development decisions must be made based upon flood risk.

If development is not compatible with the flood risk, development should be avoided or only be considered if it is appropriately mitigated and managed to a tolerable and acceptable risk level.

How does the planning scheme identify flood risk areas?

Overlay mapping is used to identify flood risk and overland flow areas. Overlays are shown as a series of online maps and are contained in pdf in **Schedule 2** of the draft planning scheme.

The flood risk and overland flow mapping shows coloured bands of flood risk that can trigger specific requirements and assessment for how land can be used and developed in the planning scheme. This is to ensure new development can consider and address flood risk.

These requirements only apply to new development (including extensions and reconstructions) as well as major changes to existing developments.

A number of flood resilient precincts have been identified in the draft planning scheme to show areas important to the function of community and economic vitality critical to the future of our city. In these areas, development is required to be designed and managed under a risk-based approach to addressing flooding impacts.

The overlay mapping acts as a 'trigger' for specific requirements on how land can be used and developed in the planning scheme. An overlay can determine the categories of development and assessment in the draft planning scheme for any proposed development on a land parcel.

The categories of development and assessment identify if a proposed development is 'accepted' or 'assessable' development under the scheme. If proposed development is 'assessable' the **Flood Risk and Overland Flow Overlay Code** will be applicable. The code will outline the specific requirements development must adhere to.

Council has undertaken a review of the zoning across the city. There have been some changes made to reflect the scale of flood risk, particularly in areas of known flood impact, including areas flooded in 2011, 2013 and 2022 as well as those modelled risk areas.



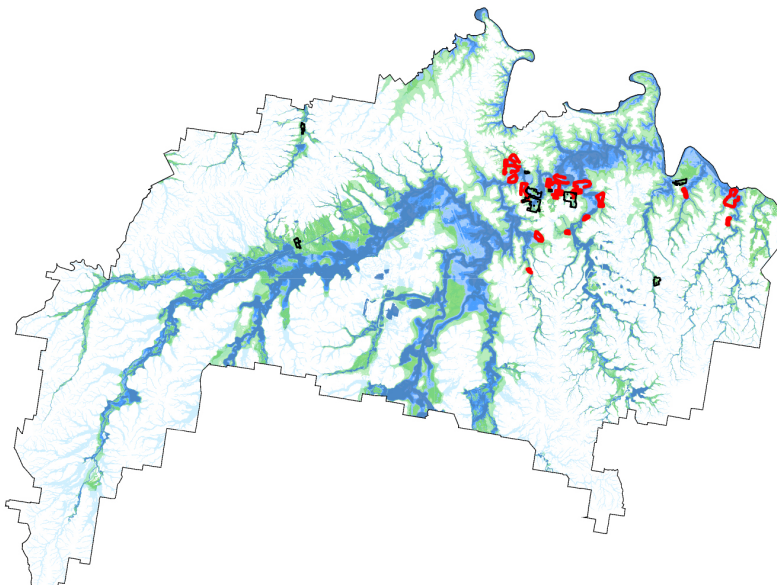
Overlay Map 12 Flood Risk and Overland Flow: Map

Flood & Overland Flow Risk

- Extreme Flood & Overland Flow Risk
- High Flood & Overland Flow Risk
- Medium Flood & Overland Flow Risk
- Low Flood & Overland Flow Risk
- Very Low Flood & Overland Flow Risk

Priority Evacuation Areas

Flood Resilient Precinct



What is shown on the Flood Risk and Overland Flow Overlay?

The overlay mapping provides key information for landholders regarding flood risk at a site. *The mapping does not create more risk on a property, it provides more detailed information for a property owner or occupier to understand existing risk.*

Depending on the location, a flood event may be experienced differently. The location will determine river, creek, overland flow or a combination of several of these types of flood risk. The level of flood risk assists the understanding of flood likelihood (how likely a flood is to occur) and flood hazard (how dangerous the flood water is, depending on how deep and how fast the flow is).

Watch the following [video](#) for more information.

How to find the zoning and overlays affecting a property

The online interactive mapping tool for the draft planning scheme is available at shapeyouripswich.com.au.

In addition, you can search a property address to get a **'Property Report'**. The report will illustrate the draft planning scheme zoning and overlays affecting a property. You can view the chapters of the draft new planning scheme that apply.

Full documents are also available at shapeyouripswich.com.au.

What happens if a property is shown as affected by an overlay?

If your property is mapped within the **Flood Risk and Overland Flow Overlay**, you may be required to lodge a development application for certain works or development on the property.

It may also require additional considerations for building works. This will ensure any potential risk to life, property and the environment is considered and possibly managed.

The **Flood Risk and Overland Flow Overlay map** may have an impact on a property in terms of future development potential or value. Flood risk is also considered by insurance companies in determining claims and setting policies and premiums. It is likely that insurance companies have their own flood assessments for areas to inform this decision making. Council's primary objective is to keep our community safe. To do this we need to provide the best information in a timely manner, and to support responsible and informed decision making. Council must also ensure we consider how we can plan for an emergency response in the unfortunate event of future flooding.

This may mean a specific assessment would be required to address these issues. In some cases, these are by your building certifier or a certified hydrologist or flood engineer.

This fact sheet provides general information and is provided as a guide only to assist the community to understand the draft planning scheme and its mapping. It is encouraged to view the relevant sections of the draft planning scheme and talk to a planner.