How to interpret a Flood Check Property Report

This document should be read in conjunction with the guidance and information provided in Flood Check Fact Sheet 1: Things to know about flood maps.

The Flood Check Property Report informs you of the potential flood and storm tide conditions anticipated for a property, considering a range of different sized events. An explanation of the likelihood of these events is described in Flood Check Fact Sheet 5: Understanding the likelihood of floods.

When to request a Report

We recommend that a Flood Check Property Report be obtained before purchasing a property and periodically thereafter to ensure that you have the latest and most up to date information. Council encourages parties interested in a property to download a free report from our website to understand the risks of flooding that currently exist for the property.

Also interested parties should review either: the Suburb Flood maps; or the online Flood Explorer Interactive Mapping tool to gain an understanding of the potential flooding conditions for the general area of interest.

What a Report will tell you

The Summary

Flood
Flooding occurs when heavy rainfall causes the water levels in a river, creek or urban drainage system to rise and overflow the capacity of the main channel or pipe network.

Overland Flow
Overland flow represents the inundation of gardens and depressions where runoff may flow on its way to a watercourse.

Tidal Inundation
Tidal inundation can occur on low lying coastal land where sea levels fluctuate based on the position of the sun and the moon.

Storm Tide
Storm Tide inundation occurs on coastal land when extreme weather conditions raise sea levels above the normal tide level.

Parts of this property are within the extent of the:

- 1% AEP Flood event
  - This property may be affected by other Flood events. See the Technical Summary for further information.

- 1% AEP Storm Tide event
  - This property may be affected by other Storm Tide events. See the Technical Summary for further information.

The Technical Summary

A Technical Summary section is included after the Summary when a property is subject to one or more types of flooding.

The Technical Summary begins with a description of the property ground levels. Minimum, maximum and average ground levels are provided in metres AHD. AHD stands for Australian Height Datum; this is the standard elevation reference for mapping purposes adopted by the National Mapping Council of Australia. As a general guide, 0.0m AHD is approximately equal to mean sea level. Flood heights are also provided in metres AHD.

The Technical Summary then provides more details of the anticipated flooding conditions for each type of flooding affecting the property.

The Technical Summary identifies the information source for the flood and storm tide levels provided in the accompanying tables of data.
The Data Tables

Data tables are included in the Technical Summary and provide minimum and maximum anticipated flood and storm tide levels across the property for a range of flood events.

Flood and storm tide information is provided for a range of event likelihoods. The likelihood of these events occurring is described in terms of their Annual Exceedance Probability or AEP.

AEP describes the likelihood of a flooding event with a given magnitude or greater occurring in any one year, usually expressed as a percentage.

The data tables also indicate the estimated percentage of the property that would be inundated for each of these events.

Finally, the data tables provide a data reliability rating as an indicator of the current level of confidence in the values provided for each flood and storm tide event. Data tables are not provided for overland flow or tidal inundation.

Data Reliability Ratings

The flooding information presented via Council’s Flood Check web site is the best available information, endorsed by Council, and reflected in the Planning Scheme. The information has been compiled from numerous sources and studies. The quality of the information available may not be uniform across the catchment and the findings of some studies may be considered to have been derived from more reliable information than others. No flood or storm tide investigation or related flooding information should ever be considered to be perfect.

To communicate the potential difference between sources of flood information, and to infer the degree of confidence held in the data provided, the report includes a data reliability rating for each item of available flood and storm tide data. Users are encouraged to consider the reliability of the data when interpreting the information in the report. A description of each data reliability rating is provided in the table below.

<table>
<thead>
<tr>
<th>Data Reliability Rating</th>
<th>Council’s Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>The flood data used in this report is based on recent flood investigations and topographical information. It is therefore considered the most reliable flood information held in Council’s Regional Floodplain Database.</td>
</tr>
<tr>
<td>B</td>
<td>The flood data used in this report is based on the most current, but not recent, flood investigations and topographical information held in the Council’s Regional Floodplain Database. Changes to the predicted level and extent of inundation could be possible in the near future.</td>
</tr>
<tr>
<td>C</td>
<td>Council has commenced review of this flood data and will update this information once the review is completed.</td>
</tr>
<tr>
<td>D</td>
<td>Council has commenced review of this flood data and will update this information once the review is completed. The data is considered to be low quality but an extent has been provided to give an indication of the areas that may be inundated.</td>
</tr>
</tbody>
</table>

Over time Council will continue to upgrade lower rating data sources through information collection and further flood and storm tide investigations.
How to interpret flooding information in the Report

When interpreting the information provided in the report you should consider the overall risk from all types of flooding and their likelihoods.

If you have not done so already, you should also view the Suburb Flood maps, Storm Tide maps and/or the Flood Explorer Interactive Mapping tool to gain an appreciation of the potential flooding conditions in the area.

Once you have understood the potential flooding conditions for the property you should consider the potential consequences that may arise from similar sized flood events actually occurring: Which areas of the property could be flooded? Will flooding result in any damage to these areas? Will flooding affect my ability to travel to work/school?

Once you have understood the potential consequences, consider the likelihood of a similar sized flood event occurring. Please refer to Fact Sheet 5: Understanding the likelihood of floods.

The overall risk of loss or damage from each flood event is a combination of the consequence and likelihood. For example, if an area is affected by shallow flooding during a low likelihood 0.1% AEP flood event, then the potential consequences are likely to be small; the chance of it happening are low; and therefore the flood risks for this area will be very small.

Consider what actions you would need to take to manage the consequences of potential flooding on the property. The actions should reflect the overall degree of risk to you, your family, your business and employees, and the home and assets.

When purchasing a property

When purchasing a property you should use the information in the Flood Check Property Report to provide you with a better understanding of the potential flooding conditions for the property.

Your willingness and ability to undertake the necessary actions to manage these flood conditions should be considered when assessing the suitability of the property to your needs and lifestyle.

Before making any decisions please review the limitations of the report presented on page 4 of this Fact Sheet. If you have any concerns or are uncertain about how to interpret the information, please contact Council or consult with a qualified professional engineer.

When making a Flood Emergency Plan

The information contained in the report can help you to understand the likelihood and potential consequences of flooding at your place of residence or work. If you live in a flood prone area it is important to prepare a Flood Emergency Plan to plan for your safety during floods.

For more information on making an emergency plan, preparing an emergency kit, getting your home ready, tuning into warnings, or preparing for a cyclone, severe storm, tsunami or flood, see the guide available at: www.disaster.qld.gov.au/getready

For building and development

If planning new building or development works on this property, please refer to:

Flood Check Development Report

Moreton Bay Regional Council’s Planning Scheme
www.moretonbay.qld.gov.au/mbrcplanningscheme
Limitations of the Report

The flood and storm tide mapping information produced by Council is generated on a regional scale. The flooding information currently utilises the ground level elevations generated from an Aerial Laser Survey performed in 2014 to predict the extent of flooding for the region. Individual property ground level details could vary from the aerial laser survey results where, for example, there is an elevated house pad underneath a building. This level of detail is beyond the resolution of the mapping provided by Council.

The survey data used to determine the extent and depth of potential inundation is captured and updated periodically, but may not accurately represent flood behaviour on land that has recently been modified, such as a new subdivision. Over time future updates are undertaken to rectify these differences.

The mapped extent of flooding may not be accurate where the depth of inundation is very shallow.

This report only provides information about the inundation caused by peak water levels. It does not give any guidance on the duration of the inundation.

From time to time Council may become aware of flood data that has a potential reliability problem. When this occurs a note is added to the Flood Check Property Reports for these affected properties. The areas of reduced data reliability are also shown with shading on the Flood Check Property Report maps. Flood model refinements will be included in a future model update and may change the flooding information provided.

Need more information?

If you would like more information on potential flooding conditions you may wish to try Council’s Flood Explorer Interactive Mapping tool.

Please refer to Flood Check Fact Sheet 3: How to interpret the Flood Explorer Interactive Mapping tool.

Feedback

If you believe the mapping information provided in the Flood Check Property Report is not accurate, please access the:


Submit your concerns for consideration against the Flood Check Property Report category.

If you need more information or assistance with interpreting the Flood Check Property Report please contact Council on: 3205 0555

Enquiries can be submitted by e-mail: flood@moretonbay.qld.gov.au

Or addressed in writing to:

Floodplain Management Team
Moreton Bay Regional Council
PO Box 159
Caboolture QLD 4510