Flood overlay mapping

The City Plan online interactive mapping tool has been updated to include flood planning levels and flood depths for land in the current City Plan Flood overlay maps.

The draft Flood overlay map was developed utilising the latest topographic, land use, technological, hydrological data and the latest State Government and Council policies. The map considers future changes to climate by incorporating the following State Government mandated parameters:

- a projected increase in sea level of 0.8m above present day levels by the year 2100
- 10% increase in storm tide intensity.

A 10% increase in rainfall intensity is also included in line with best practice in flood modelling.

The existing Flood overlay map identifies properties potentially affected by rare flood events.

Properties outside of the mapped area may also be subjected to flooding events (i.e. extremely rare events) or local flooding from stormwater.

Development can occur on land affected by the Flood Overlay Map where that development satisfies the provisions of the City Plan and particularly the Flood overlay code.

The Flood overlay code details the necessary performance criteria development should incorporate to ensure flood risks are effectively mitigated and risks to the landowner and community are managed.

Interactive mapping generally does not provide information as to the treatment of the subject land with respect to flooding and/or coastal hazards under the City Plan. For information as to how the subject land is affected by City Plan, a town planning certificate may be requested under State planning legislation, and professional town planning advice should be sought.

Where development is proposed on land in the Flood overlay map a Flood Search Report should be obtained from Council. Should you require further information on the provisions of the Flood overlay code please contact the City of Gold Coast on (07) 5582 8809.

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Flood depth information

The flood depth shows the difference between the designated flood level (DFL) and the ground level for the site. The ground level used in the map has been derived from Aerial Laser Scan (ALS) data available to the council at the time of developing the map. This level has an inherent degree of uncertainty due to:

- limitations of an Aerial Laser Scan that generally may provide an accuracy of +-15cm
- uncertainty associated with the use of interpolation to derive ground level information, (that is, generally the use of calculated average figures of ALS points for a particular grid area in order to derive ground level for that area). The uncertainty associated with interpolation can be substantial in areas that have high degrees of slope or at the interface of water and land
- any new earthworks that have occurred after conducting ALS will not be accounted for in this level.

The flood depth information in the map is only useful as a guide and should not be used for any design work or purpose that requires accurate ground levels. For design purposes a flood search is necessary to obtain flood level, and to acquire an accurate and up to date ground level a licensed surveyor should be engaged.

What are flood models?

Flood models are used to inform and refine the Flood overlay map. A flood model is a computer simulation of a river or floodplain system to determine:

- the magnitude, extent and depth of flooding
- how fast floodwaters rise
- the implications for flood damage and emergency planning.

What is the difference between local, riverine and regional flooding?

Local flooding: An intense burst of rainfall over a short period of time may cause excessive run-off, that builds up in a confined area and causes localised flooding. Inundation is expected to last only for a limited period of time until the run-off is able to drain away.

Regional flooding: Continuous heavy rainfall across a number of river catchments is likely to cause inundation across an extensive area. It may take a number of days for these floodwaters to subside.

Riverine flooding: Riverine flooding occurs when excessive rainfall over an extended period of time causes a river to exceed its capacity, flood water spill over the river banks and inundate the river floodplain.

During both riverine and regional floods, areas which normally experience local flooding are also likely to experience higher flood levels, compared to those recorded in the main drainage paths such as creeks, canals, lakes.

For more information

P 1300 GOLDCOAST (1300 465 326)
W cityofgoldcoast.com.au

Interactive mapping: http://cityplanmaps.goldcoast.qld.gov.au/CityPlan/index.html

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