

8.2.5 Flood hazard overlay code

8.2.5.1 Application

This code applies to assessable development and accepted development subject to requirements:

- a) subject to the Flood hazard overlay shown on the overlay maps contained within Schedule 2: Mapping;
- b) identified as a Level 1 Flood hazard area in the Queensland floodplain mapping in the SPP interactive mapping system (plan making); and/or
- c) identified as requiring assessment against the Flood hazard overlay code by the tables of assessment in Part 5 (Tables of assessment).

8.2.5.2 Purpose

The purpose of the Flood hazard overlay code is to ensure that development (carried out under all categories of development or assessment) successfully mitigates the potential impacts of riparian flooding on property, and ensures the safety of people during flood events to the greatest extent possible. 'Property' includes all adjoining and all potentially affected property. The code, through the control of further development in known flood-affected areas, also seeks to:

- preserve the existing levels of economic activity during and after flood events in affected towns;
- protect the environment from flood-related erosion and pollution; and
- protect emergency services personnel from unnecessary risk during flood events.

8.2.5.3 Overall Outcomes

The purpose of the code will be achieved through the following overall outcomes:

Development in the Significant, High and Extreme flood hazard areas shown on the Flood hazard overlay maps:

- maintains and enhances the hydrological function of the land;
- does not involve filling (earthworks) or changes to an existing landform or drainage lines that result in a loss of the flood conveyance and flood storage capacity of the land;
- does not include further subdivision;
- is limited to:
 - a) floodproofed Recreation activities;
 - b) rural activities for animal husbandry, cropping, and permanent plantation;
 - c) floodproofed local utility installations;
 - d) conservation and natural area management; and
 - e) replacement of existing lawful development, including Accommodation activities where habitable rooms are elevated above the Defined flood level.

Development in the Low flood hazard areas shown on the Flood hazard overlay maps:

- minimises risk to life and property;

- elevates habitable rooms for all Accommodation activities above the Defined flood level; and
- elevates the minimum floor level for all buildings housing uses other than Accommodation activities above the Defined flood level.

8.2.5.4 Assessment benchmarks

Table 8.2.5.4.1: Benchmarks for accepted development subject to requirements and assessable development

FLOOD HAZARD OVERLAY CODE	
for areas within the defined flood area, or mapped as flood prone in the SPP online mapping:	
PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES
PLANNING	
<i>Use, density and built form</i>	
PO 1 Scale The scale of development within the Defined flood area does not increase.	
PO 2 Location Premises are located to: <ul style="list-style-type: none"> (a) avoid flooding; (b) protect life and property; and (c) avoid changing the extent and magnitude of flooding. 	AO 2.1 Where the development site is in any part, within the defined flood area: Development is sited on areas within the site that would not be subject to flooding during a Defined flood event; or
Note: Where no local flood hazard map is available, assessment of potential flooding impacts will take account of the Level 1 Flood hazard area in the Queensland floodplain mapping in the SPP interactive mapping system online (plan making).	AO 2.2 Development conforms to the Performance Outcomes within this code. AO 2.3 Where outside the Defined flood area, but mapped as flood prone in the SPP online mapping: Development maintains personal safety at all times; and is resilient to flood events by avoiding the potential risk of flooding.
PO 3 Density and site coverage The number of people requiring assistance during flood events is minimised.	AO 3.1 There is no increase in people living or working within the significant, high and extreme flood hazard areas. AO 3.2 Within the low flood hazard areas, increases in population are minimal, and uses are of a low density, and AO 3.3 In rural areas subject to flooding, occupied uses are located outside flood affected areas. Note: The Reconfiguring a Lot Code also prevents any additional lots being created within the Defined flood area.

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES
Amenity	
<p>PO 4 General amenity Surrounding land does not suffer a reduction in use value as a result of development within the floodplain.</p> <p>Note: Where any alteration of patterns of flooding is expected, a flood assessment report will be necessary to demonstrate compliance to the satisfaction of the assessment manager. This flood assessment report should include an assessment of the proposal against these outcomes and may require specific hydraulic and hydrologic investigation to be undertaken by a suitably qualified professional engineer.</p>	<p>AO 4.1 For rural areas: Areas mapped as flood areas within this scheme, or by the SPP online mapping, may not be physically altered by any works, including vegetation clearing.</p> <p>AO 4.2 For urban areas: Works do not involve any physical alteration to a watercourse or floodway, including vegetation clearing, and involve no net filling exceeding 50 m³ of fill; or</p> <p>AO 4.3 For urban areas: The development complies with any applicable development criteria set out in a floodplain management plan; or</p> <p>AO 4.4 For urban areas: If a floodplain management plan does not exist, the proposed works either: <ul style="list-style-type: none"> (a) avoid any reductions of on-site flood storage capacity and contain within the subject site any changes to depth/duration/velocity of floodwaters of all floods up to and including a Defined flood event; or (b) do not change the flood characteristic at the Defined flood event flood level outside the subject site in ways that would result in: <ul style="list-style-type: none"> (i) loss of flood storage; (ii) loss of or changes to flow paths; (iii) acceleration or retardation of flows; or (iv) any reduction in flood warning times. </p>

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES
<p>PO 5 Building standards Buildings are designed to be resilient to flooding.</p> <p>Note: The relevant building assessment provisions under the <i>Building Act 1975</i>, including QDC MP 3.5 – Construction of buildings in flood hazard areas, apply to building work within a flood hazard area.</p>	<p>AO 5.1 Buildings meet the requirements of <i>Queensland Development Code MP 3.5 – Construction of buildings in flood hazard areas</i>.</p> <p>AO 5.2 Dwellings are sited so that the base of the bearers of floors of all habitable rooms can be located at least 300 mm above the defined flood event; or</p> <p>AO 5.3 Where involving an extension to an existing dwelling house with a finished floor level below the Defined flood event flood level:</p> <ul style="list-style-type: none"> (a) the extension must not be for the purpose of adding a secondary dwelling; and (b) the extension must not have a finished floor level that is lower than the finished floor level of the existing dwelling.
<p>PO 6 Building materials and techniques Where construction is below the Defined flood level, materials and building techniques are used that minimise the need for repair after a flood event.</p>	<p>AO 6.1 Building materials and surface treatments used under the Defined flood level are resistant to water damage and do not include wall cavities that would collect water and sediment during a flood event.</p>
<p>PO 7 Essential community infrastructure Essential community infrastructure maintains functionality during and after a Defined flood event.</p>	<p>AO 7.1 Essential community infrastructure is not located within the Defined flood area.</p> <p>Note: Essential community infrastructure includes emergency services and emergency shelters, police facilities, and hospitals and associated facilities.</p>
ENGINEERING	
Floodwater	
<p>PO 8 Flood storage capacity and the Defined flood area Development does not directly, indirectly or cumulatively change flood characteristics in a manner that may cause adverse impacts external to the development site.</p> <p>Note: Where any alteration of patterns of flooding is expected, a flood assessment report will be necessary to demonstrate compliance to the satisfaction of the assessment manager. This flood assessment report should include an assessment of the proposal against these outcomes and may require specific hydraulic and hydrologic investigation to be undertaken by a suitably qualified professional engineer.</p>	<p>AO 8.1 Development within the Defined flood area does not result in a reduction in flood storage capacity.</p> <p>AO 8.2 Development does not increase the duration of flooding or the depth and velocity of floodwaters external to the development site.</p>

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES
Access and parking	
PO 9 Access An escape/safety route is identified and maintained for all development within the Defined flood area.	AO 9.1 For all development within the Defined flood area, a direct route passing only through areas of lower hazard ratings and suitable for the predicted warning time is defined and maintained.
PO 10 Parking and manoeuvring Vehicle parking and service vehicle provision maybe provided within the Defined flood area where the vehicles can be removed before flooding occurs.	AO 10.1 A direct access route suitable for the stored vehicles passing only through areas of lower hazard ratings and suitable for the predicted warning time is defined and maintained. AO 10.2 All car parking, access and manoeuvring areas are to be sealed with an impervious surface.
ENVIRONMENTAL	
PO 11 Water quality The environment and so too public safety are not affected by the detrimental impacts of hazardous materials released to the environment during a flood event.	AO 11.1 The manufacture, storage and use of hazardous materials: (a) takes place above the Defined flood level; or (b) takes place in a structure that is designed to exclude floodwater intrusion.
SAFETY AND RESILIENCE TO HAZARDS	
PO 12 Personal safety Development maintains the safety of people during all floods up to and including a Defined Flood Event. Note: Where no local flood hazard map is available, assessment of potential flooding impacts will take account of the Level 1 Flood hazard area in the Queensland floodplain mapping in the SPP interactive mapping system online (plan making).	
PO 13 Temporary or movable structures For development involving temporary or movable residential structures, clear escape from flooding is available, identified and maintained.	AO 13.1 There is at least one evacuation route that remains passable for emergency evacuations during all floods up to and including a Defined flood event; and AO 13.2 A flood evacuation management plan is made available to all occupants of the site; and AO 13.3 The premises are located in an area where there is sufficient flood warning time to enable safe evacuation or safe refuge is available within the site.

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES
<p>PO 14 Protection of essential services Essential services infrastructure maintains functionality during and after a Defined flood event.</p> <p>Note: Essential services infrastructure includes, but is not limited to, on-site electricity, gas, water supply, sewerage and telecommunications services.</p>	<p>AO 14.1 Components of infrastructure that are likely to fail to function or may result in contamination when inundated by floodwater (eg. electrical switchgear and motors, water supply pipeline airvalves) are:</p> <ul style="list-style-type: none"> (a) located above the Defined flood level; or (b) designed and constructed to exclude flood water intrusion and/or infiltration, and to resist hydrostatic and hydrodynamic forces as a result of inundation by a Defined flood event.