

8.2.2 Bushfire hazard overlay code

Note - Land shown on the bushfire hazard overlay map is designated as the bushfire prone area for the purposes of section 12 of the Building Regulations 2006. The bushfire hazard area (bushfire prone area) includes land covered by the high and medium hazard areas as well as the buffer area category on the overlay map.

8.2.2.1 Application

- (1) This code applies to assessing a material change of use, reconfiguring a lot, operational works or building work in the Bushfire hazard overlay, if:
 - (a) self-assessable or assessable where the code is identified as being applicable in the Assessment criteria for the Overlay Codes contained in the Levels of Assessment Tables in section 5.6;
 - (b) impact assessable development.
- (2) Land in the Bushfire hazard overlay is identified on the Bushfire hazard overlay map in Schedule 2 and includes the following sub-categories:
 - (a) Medium bushfire risk sub-category;
 - (b) High bushfire risk sub-category;
 - (c) Very high bushfire risk sub-category;
 - (d) Potential impact buffer sub-category.
- (3) When using this code, reference should be made to Part 5.

8.2.2.2 Purpose

- (1) The purpose of the Bushfire overlay code is to:
 - (a) implement the policy direction in the Strategic Framework, in particular:
 - (i) Theme 1 Settlement pattern: Element 3.4.7 Mitigation of hazards;
 - (ii) Theme 6 Infrastructure and transport: Element 3.9.2 Energy.
 - (b) enable an assessment of whether development is suitable on land within the Bushfire risk overlay sub-categories.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) development avoids the establishment or intensification of vulnerable activities within or near areas that are subject to bushfire hazard;
 - (b) development is designed and located to minimise risks to people and property from bushfires;
 - (c) bushfire risk mitigation treatments are accommodated in a manner that avoids or minimises impacts on the natural environment and ecological processes;
 - (d) development involving the manufacture or storage of hazardous materials does not increase the risk to public safety or the environment in a bushfire event;
 - (e) development contributes to effective and efficient disaster management response and recovery capabilities.

Note - A site based assessment may ground-truth the extent of hazardous vegetation and extent and nature of the bushfire hazard area (bushfire prone area). Such assessments should be undertaken using the methodology set out in Planning scheme policy SC6.9 - Natural Hazards.



8.2.2.3 Criteria for assessment

Table 8.2.2.3.a – Bushfire hazard overlay code –assessable development

Performance outcomes	Acceptable outcomes
For self-assessable and assessable development	
Compatible development	
<p>PO1 A vulnerable use is not established or materially intensified within a bushfire hazard area (bushfire prone area) unless there is an overriding need or other exceptional circumstances.</p> <p>Note - See the end of this code for examples of vulnerable uses.</p>	<p>AO1 Vulnerable uses are not established or expanded.</p> <p>Note – Where, following site inspection and consultation with Council, it is clear that the mapping is in error in identifying a premises as being subject to a medium, high, very high bushfire hazard or potential impact buffer sub-category, Council may supply a letter exempting the need for a Bushfire Management Plan.</p> <p>Note – Where the assessment manager has not previously approved a Bushfire Management Plan (either by condition of a previous development approval), the development proponent will be expected to prepare such a plan.</p> <p>Note – Planning scheme policy SC6.9 - Natural hazards, provides a guide to the preparation of a Bushfire Management Plan.</p>
<p>PO2 Emergency services and uses providing community support services are able to function effectively during and immediately after a bushfire hazard event.</p>	<p>AO2 Emergency Services and uses providing community support services are not located in a bushfire hazard sub-category and have direct access to low hazard evacuation routes.</p>
<p>PO3 Development involving hazardous materials manufactured or stored in bulk is not located in bushfire hazard sub-category.</p>	<p>AO3 The manufacture or storage of hazardous material in bulk does not occur within bushfire hazard sub-category.</p>
Development design and separation from bushfire hazard – reconfiguration of lots	
<p>PO4.1 Where reconfiguration is undertaken in an urban area or is for urban purposes or smaller scale rural residential purposes, a separation distance from hazardous vegetation is provided to achieve a radiant heat flux level of 29kW/m² at the edge of the proposed lot(s).</p> <p>Note - “Urban purposes” and “urban area” are defined in the <i>Sustainable Planning Regulations 2009</i>. Reconfiguration will be taken to be for rural residential purposes where proposed lots are between 2000m² and 2ha in area. “Smaller scale” rural residential purposes will be taken to be where the average proposed lot size is 6000m² or less.</p> <p>Note - The radiant heat levels and separation distances are to be established in accordance with method 2 set out in AS3959-2009.</p> <p>PO4.2 Where reconfiguration is undertaken for other purposes, a building envelope of reasonable dimensions is provided on each lot which achieves radiant heat flux level of 29kW/m² at any point.</p>	<p>AO4.1 No new lots are created within a bushfire hazard sub-category.</p> <p>or</p> <p>AO4.2 Lots are separated from hazardous vegetation by a distance that:</p> <p>(a) achieves radiant heat flux level of 29kW/m² at all boundaries; and</p> <p>(b) is contained wholly within the development site.</p> <p>Note - Where a separation distance is proposed to be achieved by utilising existing cleared developed areas external to the site, certainty must be established (through tenure or other means) that the land will remain cleared of hazardous vegetation.</p> <p>For staged developments, temporary separation distances, perimeter roads or fire trails may be absorbed as part of subsequent stages.</p> <p>Note - The achievement of a cleared separation distance may not be achievable where other provisions within the planning scheme require protection of certain ecological, slope, visual or character features or functions.</p>



Performance outcomes	Acceptable outcomes
<p>PO5</p> <p>Where reconfiguration is undertaken in an urban area or is for urban purposes, a constructed perimeter road with reticulated water supply is established between the lots and the hazardous vegetation and is readily accessible at all times for urban fire fighting vehicles.</p> <p>The access is available for both fire fighting and maintenance/defensive works.</p>	<p>A05.1</p> <p>Lot boundaries are separated from hazardous vegetation by a public road which:</p> <ul style="list-style-type: none"> (a) has a two lane sealed carriageway; (b) contains a reticulated water supply; (c) is connected to other public roads at both ends and at intervals of no more than 500m; (d) accommodates geometry and turning radii in accordance with Queensland Fire and Emergency Services' Fire Hydrant and Vehicle Access Guidelines; (e) has a minimum of 4.8m vertical clearance above the road; (f) is designed to ensure hydrants and water access points are not located within parking bay allocations; and (g) incorporates roll-over kerbing. <p>A05.2</p> <p>Fire hydrants are designed and installed in accordance with AS2419.1 2005, unless otherwise specified by the relevant water entity.</p> <p>Note - Applicants should have regard to the relevant standards set out in the reconfiguration of a lot code and works codes in this planning scheme.</p>
<p>PO6</p> <p>Where reconfiguration is undertaken for smaller scale rural residential purposes, either a constructed perimeter road or a formed, all weather fire trail is established between the lots and the hazardous vegetation and is readily accessible at all times for the type of fire fighting vehicles servicing the area.</p> <p>The access is available for both fire fighting and maintenance/hazard reduction works.</p>	<p>A06</p> <p>Lot boundaries are separated from hazardous vegetation by a public road or fire trail which has:</p> <ul style="list-style-type: none"> (a) a reserve or easement width of at least 20m; (b) a minimum trafficable (cleared and formed) width of 4m capable of accommodating a 15 tonne vehicle and which is at least 6m clear of vegetation; (c) no cut or fill embankments or retaining walls adjacent to the 4m wide trafficable path; (d) a minimum of 4.8m vertical clearance; (e) turning areas for fire-fighting appliances in accordance with Queensland Fire and Emergency Services' Fire Hydrant and Vehicle Access Guidelines; (f) a maximum gradient of 12.5%; (g) a cross fall of no greater than 10 degrees; (h) drainage and erosion control devices in accordance with the standards prescribed in a planning scheme policy; (i) vehicular access at each end which is connected to the public road network at intervals of no more than 500m; (j) designated fire trail signage; (k) if used, has gates locked with a system authorised by Queensland Fire and Emergency Services; and (l) if a fire trail, has an access easement that is granted in favour of Council and Queensland Fire and Emergency Services.



Performance outcomes	Acceptable outcomes
<p>PO7</p> <p>Where reconfiguration is undertaken for other purposes, a formed, all weather fire trail is provided between the hazardous vegetation and either the lot boundary or building envelope, and is readily accessible at all times for the type of fire fighting vehicles servicing the area.</p> <p>However, a fire trail will not be required where it would not serve a practical fire management purpose.</p>	<p>A07</p> <p>Lot boundaries are separated from hazardous vegetation by a public road or fire trail which has:</p> <ul style="list-style-type: none"> (a) a reserve or easement width of at least 20m; (b) a minimum trafficable (cleared and formed) width of 4m capable of accommodating a 15 tonne vehicle and which is at least 6m clear of vegetation; (c) no cut or fill embankments or retaining walls adjacent to the 4m wide trafficable path; (d) a minimum of 4.8m vertical clearance; (e) turning areas for fire-fighting appliances in accordance with Queensland Fire and Emergency Services' Fire Hydrant and Vehicle Access Guidelines; (f) a maximum gradient of 12.5%; (g) a cross fall of no greater than 10 degrees; (h) drainage and erosion control devices in accordance with the standards prescribed in a planning scheme policy; (i) vehicular access at each end which is connected to the public road network; (j) designated fire trail signage; (k) if used, has gates locked with a system authorised by Queensland Fire and Emergency Services; and (l) if a fire trail, has an access easement that is granted in favour of Council and Queensland Fire and Emergency Services.
<p>PO8</p> <p>The development design responds to the potential threat of bushfire and establishes clear evacuation routes which demonstrate an acceptable or tolerable risk to people.</p>	<p>A08</p> <p>The lot layout:</p> <ul style="list-style-type: none"> (a) minimises the length of the development perimeter exposed to, or adjoining hazardous vegetation; (b) avoids the creation of potential bottle-neck points in the movement network; (c) establishes direct access to a safe assembly /evacuation area in the event of an approaching bushfire; and (d) ensures roads likely to be used in the event of a fire are designed to minimise traffic congestion. <p>Note - For example, developments should avoid finger-like or hour-glass subdivision patterns or substantive vegetated corridors between lots.</p> <p>In order to demonstrate compliance with the performance outcome, a bushfire management plan prepared by a suitably qualified person may be required. The bushfire management plan should be developed in accordance with the Public Safety Business Agency (PSBA) guideline entitled "Undertaking a Bushfire Protection Plan.</p> <p>Advice from the Queensland Fire and Emergency Services (QFES) should be sought as appropriate</p>
<p>PO9</p> <p>Critical infrastructure does not increase the potential bushfire hazard.</p>	<p>A09</p> <p>Critical or potentially hazardous infrastructure such as water supply, electricity, gas and telecommunications are placed underground.</p>



Performance outcomes	Acceptable outcomes
Development design and separation from bushfire hazard – material change of use	
<p>PO10</p> <p>Development is located and designed to ensure proposed buildings or building envelopes achieve a radiant heat flux level at any point on the building or envelope respectively, of:</p> <p>(a) 10kW/m² where involving a vulnerable use; or</p> <p>(b) 29kW/m² otherwise.</p> <p>The radiant heat flux level is achieved by separation unless this is not practically achievable.</p> <p>Note - The radiant heat levels and separation distances are to be established in accordance with method 2 set out in AS3959-2009.</p>	<p>AO10</p> <p>Buildings or building envelopes are separated from hazardous vegetation by a distance that:</p> <p>(a) achieves a radiant heat flux level of at any point on the building or envelope respectively, of 10kW/m² for a vulnerable use or 29kW/m² otherwise; and</p> <p>(b) is contained wholly within the development site.</p> <p>Note - Where a separation distance is proposed to be achieved by utilising existing cleared developed areas external to the site, certainty must be established (through tenure or other means) that the land will remain cleared of hazardous vegetation.</p> <p>For staged developments, temporary separation distances, perimeter roads or fire trails may be absorbed as part of subsequent stages.</p> <p>Note - The achievement of a cleared separation distance may not be achievable where other provisions within the planning scheme require protection of certain ecological, slope, visual or character features or functions.</p>
<p>PO11</p> <p>A formed, all weather fire trail is provided between the hazardous vegetation and the site boundary or building envelope, and is readily accessible at all times for the type of fire fighting vehicles servicing the area.</p> <p>However, a fire trail will not be required where it would not serve a practical fire management purpose.</p> <p>Note - Fire trails are unlikely to be required where a development site involves less than 2.5ha</p>	<p>AO11</p> <p>Development sites are separated from hazardous vegetation by a public road or fire trail which has:</p> <p>(a) a reserve or easement width of at least 20m;</p> <p>(b) a minimum trafficable (cleared and formed) width of 4m capable of accommodating a 15 tonne vehicle and which is at least 6m clear of vegetation;</p> <p>(c) no cut or fill embankments or retaining walls adjacent to the 4m wide trafficable path;</p> <p>(d) a minimum of 4.8m vertical clearance;</p> <p>(e) turning areas for fire-fighting appliances in accordance with Queensland Fire and Emergency Services' Fire Hydrant and Vehicle Access Guidelines;</p> <p>(f) a maximum gradient of 12.5%;</p> <p>(g) a cross fall of no greater than 10 degrees;</p> <p>(h) drainage and erosion control devices in accordance with the standards prescribed in a planning scheme policy;</p> <p>(i) vehicular access at each end which is connected to the public road network which is connected to the public road network at intervals of no more than 500m;</p> <p>(j) designated fire trail signage;</p> <p>(k) if used, has gates locked with a system authorised by Queensland Fire and Emergency Services; and</p> <p>(l) if a fire trail, has an access easement that is granted in favour of Council and Queensland Fire and Emergency Services.</p>



Performance outcomes	Acceptable outcomes
All development	
PO12 All premises are provided with vehicular access that enables safe evacuation for occupants and easy access by fire fighting appliances.	AO12 Private driveways: <ul style="list-style-type: none"> (a) do not exceed a length of 60m from the street to the building; (b) do not exceed a gradient of 12.5%; (c) have a minimum width of 3.5m; (d) have a minimum of 4.8m vertical clearance; (e) accommodate turning areas for fire-fighting appliances in accordance with Queensland Fire and Emergency Services' Fire Hydrant and Vehicle Access Guidelines; and (f) serve no more than 3 dwellings or buildings.
PO13 Development outside reticulated water supply areas includes a dedicated static supply that is available solely for fire fighting purposes and can be accessed by fire fighting appliances.	AO13 A water tank is provided within 10m of each building (other than a class 10 building) which: <ul style="list-style-type: none"> (a) is either below ground level or of non-flammable construction; (b) has a take off connection at a level that allows the following dedicated, static water supply to be left available for access by fire fighters: <ul style="list-style-type: none"> (i) 10,000l for residential buildings <p>Note – A minimum of 7,500l is required in a tank and the extra 2,500l may be in the form of accessible swimming pools or dams.</p> <ul style="list-style-type: none"> (ii) 45,000l for industrial buildings; and (iii) 20,000l for other buildings; (c) includes shielding of tanks and pumps in accordance with the relevant standards; (d) includes a hardstand area allowing medium rigid vehicle (15 tonne fire appliance) access within 6m of the tank; (e) is provided with fire brigade tank fittings – 50mm ball valve and male camlock coupling and, if underground, an access hole of 200mm (minimum) to accommodate suction lines; and (f) is clearly identified by directional signage provided at the street frontage.
PO14 Landscaping does not increase the potential bushfire risk.	AO14 Landscaping uses species that are less likely to exacerbate a bushfire event, and does not increase fuel loads within separation areas.
PO15 The risk of bushfire and the need to mitigate that risk is balanced against other factors (such as but not limited to, biodiversity or scenic amenity).	AO15 Bushfire risk mitigation treatments do not have a significant impact on the natural environment or landscape character of the locality where this has value.

Note – 'Vulnerable activities' are those involving:

- (1) the accommodation or congregation of vulnerable sectors of the community such as child care centres, community care centre, educational establishments, detention facilities, hospitals, rooming accommodation, retirement facilities or residential care facilities; or
- (2) the provision of essential services including community uses, emergency services, utility installation, telecommunications facility, substations and major electricity infrastructure.