

## Part 8 Overlays

### 8.1 Preliminary

- (1) Overlays identify areas in the planning scheme that reflect state and local level interests and that have one or more of the following characteristics:
  - (a) there is a particular sensitivity to the effects of development
  - (b) there is a constraint on land use or development outcomes
  - (c) there is the presence of valuable resources
  - (d) there are particular opportunities for development.
- (2) Overlays are mapped and included in **Schedule 2 (Mapping)** or the State Planning Policy (SPP) interactive mapping system (plan making).

Editor's note—**Section 5.9 (Levels of assessment – Overlays)** and each overlay code in this part identifies where the elements for each overlay are mapped.

- (3) The changed category of assessment, if applicable, for development affected by an overlay is identified in **Part 5 (Tables of assessment)**.
- (4) Some overlays may be included for information purposes only. Where development is subject to an overlay for information purposes only, this should not result in a change to the category of assessment or any additional assessment benchmarks or requirements being applicable.
- (5) Assessment benchmarks or requirements for an overlay may be contained in one or more of the following:
  - (a) a map for an overlay
  - (b) a code for an overlay
  - (c) a zone code
  - (d) a development code
- (6) Where development is proposed on premises partly affected by an overlay, the assessment benchmarks or requirements for the overlay only relate to the part of the premises affected by the overlay.
- (7) The overlays for the planning scheme are:
  - (a) Biodiversity areas overlay
  - (b) Bushfire hazard overlay
  - (c) Flood hazard overlay
  - (d) Heritage overlay
  - (e) Infrastructure overlay
  - (f) Natural resources overlay, comprising the following elements:
    - (i) Key resource areas
    - (ii) Agricultural land
    - (iii) Water resource catchment areas.

## 8.2 Overlay codes

### 8.2.1 Biodiversity areas overlay code <sup>1 2</sup>

#### 8.2.1.1 Application

This code applies to a material change of use, operational work or reconfiguring a lot on premises subject to matters of environmental significance identified in the SPP interactive mapping system (plan making) or on premises otherwise determined to contain matters of environmental significance.

When using this code, reference should be made to section 5.3.2 and, where applicable, section 5.3.3 located in **Part 5 (Tables of assessment)**.

#### 8.2.1.2 Purpose

- (1) The purpose of the Biodiversity areas overlay code is to ensure that matters of environmental significance are identified and protected.
- (2) The purpose of the code will be achieved through the following overall outcomes:
  - (a) development protects matters of State environmental significance (MSES) to maintain ecological integrity;
  - (b) development manages impacts on matters of State environmental significance (MSES) to avoid adverse impacts on environmental values;
  - (c) development enhances the health and resilience of ecological systems and supports ecological connectivity.

#### 8.2.1.3 Assessment benchmarks and requirements

### Part A – Assessment benchmarks for assessable development and requirements for accepted development

**Table 8.2.1.1—Accepted development and assessable development**

Performance outcomes	Acceptable outcomes
<b>Management of impacts on matters of State environmental significance (MSES)</b>	
<b>PO1</b> Development is designed and constructed to avoid significant adverse impacts on areas of environmental significance.	<b>AO1.1</b> The development site does not contain any matters of environmental significance.  <b>OR</b>  The design, layout and operation of development minimises adverse impacts on areas of environmental significance by: <ol style="list-style-type: none"> <li>(a) focusing development in cleared areas to protect existing habitat;</li> <li>(b) utilising urban design to consolidate density and preserve existing habitat and native vegetation;</li> <li>(c) aligning new property boundaries to maintain ecologically important areas;</li> <li>(d) ensuring that alterations to natural landforms, hydrology and drainage patterns on the development site do</li> </ol>

<sup>1</sup> Editor's note—Biodiversity areas are identified as matters of state environmental significance (MSES) in the SPP interactive mapping system (plan making) under the 'Environment and heritage' theme, subsection 'Biodiversity', and for the purposes of the planning scheme include protected areas, wildlife habitat, regulated vegetation, legally secured offset areas, wetlands, watercourses and associated buffer areas.

<sup>2</sup> Editor's note—Buffer areas for MSES are not identified in the SPP interactive mapping system (plan making), but are identified as areas within a specified distance from a mapped wetland or watercourse.

Performance outcomes	Acceptable outcomes
	<p>not negatively affect ecologically important areas;</p> <p>(e) ensuring that significant fauna habitat are protected in their environmental context; and</p> <p>(f) incorporating measures that allow for the safe movement of fauna through the site.</p> <p>Editor's note—a report certified by an appropriately qualified person may be required to demonstrate:</p> <p>(a) that the development will not result in significant impacts on relevant environmental values;</p> <p>(b) that the development site does not contain any matters of environmental significance, or that the extent of the area of environmental significance is different to that mapped;</p> <p>(c) how the proposed development mitigates impacts, including on water quality, hydrology and biological processes.</p> <p><b>AO1.2</b> For residual adverse impacts, an environmental offset is provided that is consistent with the <i>Environmental Offsets Act 2014</i>.</p>
<p><b>PO2</b> An adequate buffer to areas of environmental significance is provided and maintained.</p>	<p><b>AO2</b> A buffer for an area of environmental significance is applied and maintained, the width of which is supported by an evaluation of the environmental values, including the function and threats to matters of environmental significance.</p>
<b>Protection and buffering of wetlands and watercourses</b>	
<p><b>PO3</b> The design, layout and operation of development minimises adverse impacts on MSES by:</p> <p>(a) providing and maintaining adequate vegetated buffers and setbacks to wetlands and watercourses to assist in the maintenance of water quality, existing hydrological processes and ecological functioning; and</p> <p>(b) maintaining an appropriate extent of public access to watercourses and minimises edge effects.</p>	<p><b>AO3.1</b> A buffer is provided and maintained to a wetland which has a minimum width of:</p> <p>(a) 50 metres where the area is located within an <i>urban area</i> or land included in the Rural residential zone; and</p> <p>(b) 200 metres where the area is located outside an <i>urban area</i> or land included in the Rural residential zone.</p> <p><b>AO3.2</b> Development in an urban or rural residential area is setback a minimum of 50m from a waterway<sup>3</sup> on or adjacent to the site.</p> <p>OR</p> <p>Development not in an urban or rural residential area is setback a minimum of 100m from a waterway on or adjacent to the site.</p>

<sup>3</sup> Editor's note—for the purpose of the overlay, waterways are those waterways identified in the SPP interactive mapping system as MSES – Regulated vegetation (intersecting a watercourse)

Performance outcomes	Acceptable outcomes
	<p>Note—The above setback distances are to be measured from the top of the high bank of the watercourse.</p> <p><b>AO3.3</b> Cleared, degraded or disturbed watercourses and watercourse buffers within the development site are rehabilitated in accordance with an approved rehabilitation plan.</p> <p><b>AO3.4</b> Reconfiguring a lot adjacent to a watercourse provides that:-</p> <ul style="list-style-type: none"> <li>(a) no new lots directly back onto the riparian area;</li> <li>(b) any new roads are located between the watercourse buffer and proposed lots.</li> </ul>

## 8.2.2 Bushfire hazard overlay code<sup>4</sup>

### 8.2.2.1 Application

This code applies to a material change of use, or reconfiguring a lot within a bushfire hazard area identified in the SPP interactive mapping system (plan making).

When using this code, reference should be made to section 5.3.2 and, where applicable, section 5.3.3 located in **Part 5 (Tables of assessment)**.

Note—The Building Code of Australia (BCA) and the Queensland Development Code (QDC) contain provisions applying to Class 1, 2, 3 and associated Class 10a buildings in bushfire prone areas. “Designated bushfire prone areas” for the purposes of the *Building Regulation 2006* (section 12), the BCA and QDC are identified as medium hazard, high hazard or very high hazard areas in the SPP interactive mapping system (plan making).

### 8.2.2.2 Purpose

- (1) The purpose of the Bushfire hazard overlay code is to ensure that risk to life, property and the environment as a result of bushfire is mitigated to an acceptable or tolerable level.
- (2) The purpose of the code will be achieved through the following overall outcomes:
  - (a) development in areas at risk from bushfire hazard is compatible with the nature of the hazard;
  - (b) the risk to people, property and the natural environment from bushfire hazard is minimised;
  - (c) development does not result in a material increase in the extent, duration or severity of bushfire hazard.

### 8.2.2.3 Assessment benchmarks and requirements

#### Part A—Assessment benchmarks for assessable development and requirements for accepted development

**Table 8.2.2.1 — Accepted development and assessable development**

Performance outcomes	Acceptable outcomes
<b>For accepted development and assessable development</b>	
<b>Safety of people and property</b>	
<b>PO1</b> Potential bushfire hazards are appropriately mitigated to reflect the hazard level of the site in regard to; <ol style="list-style-type: none"> <li>(a) vegetation type and proximity;</li> <li>(b) slope and aspect;</li> <li>(c) bushfire history;</li> <li>(d) on-site environmental values;</li> <li>(e) ease of maintenance; and</li> <li>(f) any specific implications of the development.</li> </ol>	<b>AO1.1</b> A site specific assessment of the subject site by a suitably qualified bushfire hazard specialist confirms that the site is not subject to bushfire hazard.  OR  The proposed development complies with an approved Bushfire Hazard Management Plan prepared by a suitably qualified person.  OR  The development complies with an existing approved Bushfire Hazard Management

<sup>4</sup> Editor’s note— medium, high and very high bushfire hazard areas are identified in the SPP interactive mapping system (plan making) under the ‘Hazards and safety’ theme, subsection ‘Natural hazards’.

Performance outcomes	Acceptable outcomes
	Plan associated with a lawful and current approval over the subject site.
<b>Lot Layout</b>	
<b>PO2</b> The lot layout of new development is designed and oriented to: (a) mitigate any potential bushfire hazard; (b) provide safe building sites.	<b>AO2.1</b> Residential lots are designed and oriented to allow for efficient emergency access to buildings and structures for fire service and emergency vehicles by avoiding battle-axe or hatchet lots or long narrow lots.  <b>AO2.2</b> Residential lots are designed to provide for a building envelope that is not located within a bushfire hazard area or on the area of lowest hazard within the lot.  <b>AO2.3</b> No new residential lots are created within an area identified as a very high bushfire hazard area.
<b>Vulnerable uses</b>	
<b>PO3</b> Development that is particularly vulnerable to the adverse impacts of bushfire is not established or materially intensified within a bushfire hazard area unless there is an overriding need or other exceptional circumstances.	<b>AO3</b> The following activities are not established or materially intensified within a confirmed medium, high, or very high bushfire hazard area: (a) uses involving the accommodation or congregation of vulnerable sectors of the community such as a <i>child care centre, community care centre, educational establishment, detention facility, hospital, rooming accommodation, retirement facility or residential care facility</i> ; or (b) essential services including <i>community uses, emergency services, utility installation, telecommunications facility, substation and major electricity infrastructure</i> .
<b>Community infrastructure</b>	
<b>PO4</b> Community infrastructure is able to function effectively during and immediately after bushfire events.	<b>AO4</b> Community infrastructure is not located with a confirmed medium, high, or very high bushfire hazard area.  OR  Where community infrastructure cannot practicably be located in an area not subject to medium, high, or very high bushfire hazard, the community infrastructure is designed and operated to function effectively during and after bushfire events in accordance with a bushfire hazard

Performance outcomes	Acceptable outcomes
	assessment and management plan prepared by a suitably qualified person.
<b>Hazardous materials manufactured or stored in bulk</b>	
<b>PO5</b> Public safety and the environment are not adversely affected by the detrimental impacts of bushfire on hazardous materials manufactured or stored in bulk.	<b>AO5</b> Development involving the manufacture or storage of hazardous materials in bulk is not located within a confirmed medium, high or very high bushfire hazard area.
<b>Access and evacuation routes</b>	
<b>PO6</b> Vehicular access is designed to mitigate against bushfire hazard by: <ul style="list-style-type: none"> <li>(a) ensuring adequate access for fire fighting and other emergency vehicles;</li> <li>(b) ensuring adequate access for the evacuation of residents and emergency personnel in an emergency situation, including alternative safe access routes should access in one direction be blocked in the event of a fire;</li> <li>(c) providing for the separation of developed areas and adjacent bushland.</li> </ul> <p>Note—Where it is not practicable to provide firebreaks in accordance with <b>AO6.3</b>, fire maintenance trails are provided in accordance with the following:</p> <ul style="list-style-type: none"> <li>i. located as close as possible to the boundaries of the lot and the adjoining hazardous vegetation;</li> <li>ii. the minimum cleared width not less than 6 metres;</li> <li>iii. the formed width is not less than 2.5 metres;</li> <li>iv. the formed gradient is not greater than 15%;</li> <li>v. vehicular access is provided at both ends;</li> <li>vi. passing bays and turning areas are provided for fire-fighting appliances either located on public land or in an access easement that is granted in favour of the Local Government and QFRS.</li> </ul>	<b>AO6.1</b> The road layout provides for “through roads” and avoids culs-de-sac and “dead end” roads (except where a perimeter road isolates the development from hazardous vegetation or the cul-de-sacs are provided with an alternative access linking the cul-de-sac to other through roads). <p><b>AO6.2</b>  Roads have a maximum gradient of 12.5%.</p> <p><b>AO6.3</b>  Where development involves the creation of a new road, fire breaking trails are:-</p> <ul style="list-style-type: none"> <li>(a) provided along a minimum 20m of cleared road reserve;</li> <li>(b) a maximum gradient of 12.5%;</li> <li>(c) located between the development site and hazardous vegetation.</li> </ul> <p><b>OR</b></p> <p>Where development does not involve the creation of a new road, fire breaking trails are provided between the development site and hazardous vegetation and such trails:-</p> <ul style="list-style-type: none"> <li>(a) have a cleared minimum width of 6m;</li> <li>(b) have a maximum gradient of 12.5%;</li> <li>(c) provide continuous access for fire fighting vehicles;</li> <li>(d) allow for vehicle access every 200m;</li> <li>(e) provide passing bays and turning areas every 200m.</li> </ul> <p>Note – Road design is in accordance with <b>SC6.2 – Planning Scheme Policy 1 – land development Standards</b>.</p>
<b>Water supply for fire fighting purposes</b>	
<b>PO7</b> Development provides an adequate and reliable water supply for fire fighting purposes which is safely located and has sufficient flow and pressure characteristics.	<b>Where within a water supply service area:</b> <b>AO7.1</b> The on-site water supply has flow and pressure characteristics of 10 litres a second at 200 kPa.

Performance outcomes	Acceptable outcomes
	<p><b>Where outside a water supply service area:</b></p> <p><b>AO7.2</b></p> <p>A water tank is provided within 10m of each building (other than a class 10 building) which:</p> <ul style="list-style-type: none"> <li>(a) is either below ground level or of non flammable construction ;</li> <li>(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"> <li>I. 10,000l for residential buildings;</li> <li>II. 45,000l for industrial buildings; and</li> <li>III. 20,000l for other buildings;</li> </ul> </li> <li>(c) includes a hardstand area allowing medium rigid vehicle (15 tonne fire appliance) access within 6m of the tank;</li> <li>(d) 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</li> <li>(e) is clearly identified by directional signage provided at the street frontage.</li> </ul>
<b>Landscaping</b>	
<p><b>PO8</b></p> <p>Landscaping does not increase the potential bushfire risk of development within a bushfire hazard area.</p>	<p><b>AO8</b></p> <p>Landscaping does not include species that will exacerbate a bushfire event and does not increase fuel loads within separation areas.</p>

## 8.2.3 Flood hazard overlay code

### 8.2.3.1 Application

This code applies to a material change of use, reconfiguring a lot or operational work on premises subject to the flood hazard overlay as identified on the overlay maps contained in **Schedule 2 (Mapping)** or on premises otherwise determined to be subject flooding.

When using this code, reference should be made to section 5.3.2 and, where applicable, section 5.3.3 located in **Part 5 (Tables of assessment)**.

Note—the *Building Regulation 2006* contains provisions applying to building work in a natural hazard management area (flood) and the Queensland Development Code (QDC) MP3.5 is triggered by a flood hazard area. “Natural hazard management area (flood)” for the purposes of the *Building Regulation 2006* (Part 2A and Part 3) and “flood hazard area” for the purposes of QDC MP3.5 – Construction of Building in Flood Hazard Areas are identified as the flood hazard area on the flood hazard area overlay maps in **Schedule 2 (Mapping)**.

### 8.2.3.2 Purpose

- (1) The purpose of the Flood hazard overlay code is to:
  - (a) manage development outcomes in flood hazard areas to ensure that risk to life, property, community, economic activity and the environment during flood events is minimised;
  - (b) ensure that development does not materially increase the potential for flood damage on-site or to other property; and
  - (c) ensure that development undertaken near a levee bank does not affect the structural integrity of the levee bank.
- (2) The purpose of the code will be achieved through the following overall outcomes:
  - (a) the siting and layout of development and the provision of access responds to the risk of flooding and minimises risk to personal safety;
  - (b) development is resilient to flood events by ensuring that siting and design accounts for the potential risks of flood hazard to property;
  - (c) development supports, and does not unduly burden disaster management response or recovery capacity and capabilities;
  - (d) essential community infrastructure required to support the safety and wellbeing of the community is, wherever practical, located and designed to function effectively during and immediately after a flood event;
  - (e) development avoids an unacceptable increase in severity of flood hazards and does not significantly increase the potential for damage on the site or to other properties;
  - (f) development avoids the release of hazardous materials as a result of a flood event;
  - (g) natural processes and the protective function of landforms and/or vegetation are maintained in flood hazard areas;

### 8.2.3.3 Assessment benchmarks and requirements

#### Part A— Assessment benchmarks for assessable development and requirements for accepted development

Table 8.2.3.1— Accepted development and assessable development

Performance outcomes	Acceptable outcomes
<b>For accepted development and assessable development</b>	
<b>Development siting and design</b>	
<b>PO1</b> Development is resilient to flood events by ensuring design and built form appropriately responds to the potential risks of flooding.	<b>AO1.1</b> Development is located on the highest part of the site practicable.
	<b>AO1.2</b>

Performance outcomes	Acceptable outcomes
	<p>Finished surface levels for reconfiguring a lot and finished floor levels for habitable rooms are a minimum of 300mm above the defined flood event (DFE).</p> <p>OR</p> <p>Where involving an extension to an existing dwelling house that is situated below the DFE:-</p> <ul style="list-style-type: none"> <li>(a) the extension has a gross floor area not exceeding 50m<sup>2</sup>; and</li> <li>(b) the finished floor level of all habitable rooms is not less than the floor level of existing habitable rooms.</li> </ul> <p><b>AO1.3</b> Non-habitable floor areas are designed and constructed to be resilient to the effects of flood, up to and including the DFE.</p> <p><b>AO1.4</b> A safe evacuation route that remains passable with sufficient flood warning time to enable people to progressively evacuate to a gathering point above the DFE in the face of advancing flood waters is available.</p>
Flood impacts	
<p><b>PO2</b> Development directly, indirectly and cumulatively avoids any increase in water flow velocity or flood level, and does not increase the potential for flood damage either on-site or on other properties.</p>	<p><b>AO2.1</b> Development in an urban area does not involve works that:</p> <ul style="list-style-type: none"> <li>(a) physically alter a watercourse or floodway, including vegetation clearing;</li> <li>(b) result in a reduction in flood storage capacity; or</li> <li>(c) change stormwater flows, velocities or levels external to the development site.</li> </ul> <p><b>AO2.2</b> Development (including buildings and earthworks) in non-urban areas provides for:</p> <ul style="list-style-type: none"> <li>(a) any changes to the depth, duration, or velocity of flood waters to be contained to the development site;</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>(b) does not change flood characteristics outside the development site in ways that result in: <ul style="list-style-type: none"> <li>(i) loss of flood storage;</li> <li>(ii) loss of or changes to flow paths;</li> <li>(iii) acceleration or retardation of flows or any reduction in flood warning times elsewhere on the floodplain.</li> </ul> </li> </ul>

Performance outcomes	Acceptable outcomes
<b>Community infrastructure or uses</b>	
<b>PO3</b> Development involving community infrastructure or uses essential to the health, safety or wellbeing of the community: <ul style="list-style-type: none"> <li>(a) remains functional to serve community need during and immediately after a flood event;</li> <li>(b) is designed, sited and operated to avoid adverse impacts on the community or the environment due to the impacts of flooding on infrastructure, facilities or access and egress routes;</li> <li>(c) retains essential site access during a flood event; and</li> <li>(d) is able to remain functional even when other infrastructure or services may be compromised in a flood event.</li> </ul>	<b>AO3.1</b> Any components of infrastructure that are likely to fail to function or may result in contamination when inundated by flood, such as electrical switch gear and motors, telecommunications connections, or water supply pipeline air valves are: <ul style="list-style-type: none"> <li>(a) located above the DFE or the highest known flood level for the premises; or</li> <li>(b) designed and constructed to exclude floodwater intrusion/infiltration.</li> </ul> <b>AO3.2</b> Community infrastructure is located in accordance with the recommended flood level (RFL) for that infrastructure specified in <b>Table 8.2.3.2 (Recommended flood levels for community infrastructure)</b> .
<b>Hazardous materials</b>	
<b>PO4</b> Development avoids the release of hazardous materials into floodwaters.	<b>AO4</b> Buildings or structures used for the manufacture or storage of hazardous materials are: <ul style="list-style-type: none"> <li>(a) located above the DFE or highest known flood level; or</li> <li>(b) designed to prevent the intrusion of floodwaters.</li> </ul>
<b>Additional Criteria for Development in Goondiwindi</b>	
<b>High flood hazard area</b>	
<b>PO5</b> Development within the High flood hazard area is appropriate for the level of risk having regard to:- <ul style="list-style-type: none"> <li>(a) the likelihood and frequency of flooding;</li> <li>(b) the vulnerability of persons associated with the use; and</li> <li>(c) associated consequences of flooding in regard to impacts on proposed buildings, structures and supporting infrastructure.</li> </ul>	<b>AO5.1</b> Uses within the following activity groups are not located within a High flood hazard area: <ul style="list-style-type: none"> <li>(a) Accommodation activities;</li> <li>(b) Business activities;</li> <li>(c) Community activities;</li> <li>(d) Entertainment activities;</li> <li>(e) Industry activities;</li> <li>(f) Rural activities, except where involving animal husbandry, cropping, or permanent plantation.</li> </ul> <b>AO5.2</b> Recreation activities are not located within an High flood hazard area except where for: <ul style="list-style-type: none"> <li>(a) Environment facility;</li> <li>(b) Park;</li> <li>(c) Outdoor sport and recreation (excluding the provision of ancillary facilities or amenities conducted within a building)</li> </ul>

Performance outcomes	Acceptable outcomes
<b>PO6</b> Development does not increase the number of people or properties at risk from flooding.	<b>AO6.1</b> Development does not increase the number of lots in an area identified as a High flood hazard area except for the purposes of public open space.  <b>AO6.2</b> There is no intensification of residential uses on premises within the High flood hazard area including the development of dual occupancy and multiple residential uses.
<b>Medium flood hazard area</b>	
<b>PO7</b> Development within a Medium flood hazard area is appropriate for the level of risk having regard to:- <ul style="list-style-type: none"> <li>(a) the likelihood and frequency of flooding;</li> <li>(b) the flood risk acceptability of development;</li> <li>(c) the vulnerability of persons associated with the use; and</li> <li>(d) associated consequences of flooding in regard to impacts on proposed buildings, structures and supporting infrastructure.</li> </ul>	<b>AO7</b> No acceptable outcome provided.  Note-The following uses are not located within a Medium flood hazard area; <ul style="list-style-type: none"> <li>(a) Residential care facility;</li> <li>(b) Retirement facility;</li> <li>(c) Child care centre;</li> <li>(d) Hospital; or</li> <li>(e) Community use.</li> </ul>
<b>Additional criteria for development in Inglewood, Texas, and Yelarbon</b>	
<b>Extreme flood hazard area</b>	
<b>PO8</b> Development within the Extreme flood hazard area is appropriate for the level of risk having regard to:- <ul style="list-style-type: none"> <li>(d) the likelihood and frequency of flooding;</li> <li>(e) the vulnerability of persons associated with the use; and</li> <li>(f) associated consequences of flooding in regard to impacts on proposed buildings, structures and supporting infrastructure.</li> </ul>	<b>AO8.1</b> Uses within the following activity groups are not located within the Extreme flood hazard area: <ul style="list-style-type: none"> <li>(a) Accommodation activities;</li> <li>(b) Business activities;</li> <li>(c) Community activities;</li> <li>(d) Entertainment activities;</li> <li>(e) Industry activities;</li> <li>(f) Rural activities, except where involving animal husbandry, cropping, or permanent plantation.</li> </ul> <b>AO8.2</b> Recreation activities are not located within the Extreme flood hazard area except where for: <ul style="list-style-type: none"> <li>(a) Environment facility;</li> <li>(b) Park;</li> <li>(c) Outdoor sport and recreation (excluding the provision of ancillary facilities or amenities conducted within a building)</li> </ul>
<b>PO9</b> Development does not increase the number of people or properties at risk from flooding.	<b>AO9.1</b> Development does not increase the number of lots in an area identified as an Extreme flood hazard area except for the purposes of public open space.

Performance outcomes	Acceptable outcomes
	<b>AO9.2</b> There is no intensification of residential uses on premises within the Extreme flood hazard area including the development of dual occupancy and multiple residential uses.
<b>High flood hazard area</b>	
<b>PO10</b> Development within a High flood hazard area is appropriate for the level of risk having regard to:- <ul style="list-style-type: none"> <li>(a) the likelihood and frequency of flooding;</li> <li>(b) the flood risk acceptability of development;</li> <li>(c) the vulnerability of persons associated with the use; and</li> <li>(d) associated consequences of flooding in regard to impacts on proposed buildings, structures and supporting infrastructure.</li> </ul>	<b>AO10.1</b> Uses within the following activity groups are not located within a High flood hazard area: <ul style="list-style-type: none"> <li>(a) Accommodation activities except where for a Dwelling house on an existing lot on land within a Residential zone or Centre zone;</li> <li>(b) Community activities;</li> <li>(c) Entertainment activities;</li> <li>(d) Industry activities;</li> <li>(e) Rural activities, except where involving animal husbandry, cropping, or permanent plantation.</li> </ul> <b>AO10.2</b> Recreation activities are not located within a High flood hazard area except where for: <ul style="list-style-type: none"> <li>(a) Environment facility;</li> <li>(b) Park;</li> <li>(c) Outdoor sport and recreation (excluding the provision of ancillary facilities or amenities conducted within a building)</li> </ul>
<b>PO11</b> Development does not increase the number of people or properties at risk from flooding.	<b>AO11.1</b> Development does not increase the number of lots in an area identified as a High flood hazard area except for the purposes of public open space.  <b>AO11.2</b> There is no intensification of residential uses on premises within the High flood hazard area, including the development of dual occupancy and multiple residential uses.
<b>Significant flood hazard area</b>	
<b>PO12</b> Development within a Significant flood hazard area is appropriate for the level of risk having regard to:- <ul style="list-style-type: none"> <li>(e) the likelihood and frequency of flooding;</li> <li>(f) the flood risk acceptability of development;</li> <li>(g) the vulnerability of persons associated with the use; and</li> <li>(h) associated consequences of flooding in regard to impacts on proposed buildings, structures and supporting infrastructure.</li> </ul>	<b>AO12</b> No acceptable outcome provided  Note-The following uses are not located within a Significant flood hazard area: <ul style="list-style-type: none"> <li>(a) Residential care facility;</li> <li>(b) Retirement facility;</li> <li>(c) Child care centre;</li> <li>(d) Hospital; or</li> <li>(e) Community use.</li> </ul>

**Table 8.2.3.2 Recommended flood levels for community infrastructure**

Type of community infrastructure	Recommended Flood Level
Air services	0.5% AEP
Community use incorporating the storage of valuable records or items of historic or cultural significance (e.g. art galleries, libraries, museums, archives)	Where practicable above the PMF  OR 0.5% AEP
Child care centre	0.5% AEP
Educational establishment	0.2% AEP if used for evacuation 0.5% AEP otherwise
Emergency services	0.2% AEP (0.5% for police stations and fire stations)
Substation	0.5% AEP
Utility installation (sewage treatment plant)	0.5% AEP
Utility installation (water treatment plant)	0.5% AEP
Utility installation (telephone exchange)	0.1% AEP

## 8.2.4 Heritage overlay code <sup>5</sup>

### 8.2.4.1 Application

This code applies to a material change of use, reconfiguring a lot, building work or operational works on a local heritage place identified on the overlay maps contained in **Schedule 2 (Mapping)** and described in **SC6.3 Planning Scheme Policy 2—Local Heritage Register**<sup>6</sup>.

When using this code, reference should be made to section 5.3.2 and, where applicable, section 5.3.3 located in **Part 5 (Tables of assessment)**.

### 8.2.4.2 Purpose

- (1) The purpose of the Heritage overlay code is to ensure that development on a heritage place is compatible with the cultural heritage significance of the place.
- (2) The purpose of the code will be achieved through the following overall outcomes:
  - (a) the heritage significance of individual sites and places is conserved<sup>7</sup>;
  - (b) development on a local heritage place remains compatible with the heritage significance of the place by:
    - (i) retaining the local heritage place, unless there is no prudent and feasible alternative to its demolition or removal<sup>8</sup>;
    - (ii) maintaining or encouraging, as far as practicable, the appropriate use (including adaptive reuse) of the local heritage place while protecting the amenity of adjacent uses;
    - (iii) protecting, as far as practicable, the context and setting of the local heritage place;
    - (iv) ensuring, as far as practicable, development on the local heritage place is compatible with the cultural heritage significance of the place.

### 8.2.4.3 Assessment benchmarks

#### Assessment benchmarks for assessable development

**Table 8.2.4.1—Assessable development**

Performance outcomes	Acceptable outcomes
<b>For assessable development</b>	
<b>For all development</b>	
<b>PO1</b> Development: <ol style="list-style-type: none"> <li>(a) avoids or minimises to the greatest extent possible any detrimental impacts on the cultural heritage significance of the place or area;</li> <li>(b) is compatible with the conservation and/or management of the cultural heritage significance of the local heritage place;</li> </ol>	<b>AO1</b> Development is undertaken in accordance with <i>The Burra charter: The Australian International Council on Monuments and Sites (ICOMOS) charter for places of cultural heritage significance</i> .

<sup>5</sup> Editor's note—the elements referred to in this code include:-

(a) Queensland heritage places identified in the SPP interactive mapping system (plan making) under the 'Environment and heritage' theme, subsection 'Cultural heritage'; and

(b) local heritage places identified on the Heritage overlay maps in **Schedule 2 (Mapping)**.

<sup>6</sup> Editor's note—This code does not apply to indigenous cultural heritage which is protected under the *Aboriginal Cultural Heritage Act 2003*. In accordance with this legislation, a person who carries out an activity must take all reasonable and practicable measures to ensure the activity does not harm Aboriginal cultural heritage ("the cultural heritage duty of care").

<sup>7</sup> Editor's note—Development on State heritage places is regulated by the *Queensland Heritage Act 1992*.

<sup>8</sup> Note—In considering whether there is no prudent and feasible alternative to the demolition or removal of a local heritage place, the Council will have regard to:

(a) safety, health and economic considerations; and  
 (b) any other matters the Council considers relevant.

Performance outcomes	Acceptable outcomes
<p>(c) does not reduce public access to the local heritage place; and</p> <p>(d) does not obscure or destroy any of the following elements relating to the local heritage place:</p> <ul style="list-style-type: none"> <li>(i) pattern of historic subdivision;</li> <li>(ii) the landscape setting;</li> <li>(iii) public views to the heritage place; or</li> <li>(iv) the scale and consistency of the urban fabric.</li> </ul>	
<p><b>PO2</b></p> <p>Development does not adversely affect the character, setting or appearance of the local heritage place, including removal of vegetation, that contributes to the cultural heritage significance of the place.</p> <p>Editor's note—To demonstrate compliance with this performance outcome, a Heritage Impact Assessment Report may need to be prepared by appropriately qualified person that demonstrates to Council's satisfaction that the development does not detract from, or diminish the cultural heritage significance of the local heritage place.</p>	<p><b>AO2.1</b></p> <p>The scale, location and design of the development are compatible with the character, setting and appearance of the local heritage place.</p> <p><b>AO2.2</b></p> <p>Existing vegetation specifically identified in the <i>Goondiwindi Regional Council: Heritage Survey</i> (Blake, 2011) that forms part of the local heritage place is retained and incorporated into the design and layout of development.</p>
<b>Where for building work involving a local heritage place</b>	
<p><b>PO3</b></p> <p>Development conserves and is subservient to the features and values of the local heritage place that contribute to its cultural heritage significance.</p>	<p><b>AO3</b></p> <p>Development:</p> <ul style="list-style-type: none"> <li>(a) does not alter, remove or conceal significant features of the Local heritage place; or</li> <li>(b) is minor and necessary to maintain the ongoing use of the local heritage place.</li> </ul>
<p><b>PO4</b></p> <p>Changes to a local heritage place are appropriately managed and documented.</p>	<p><b>AO4.1</b></p> <p>Development is compatible with a conservation management plan prepared in accordance with <i>The Burra charter: The Australian International Council on Monuments and Sites (ICOMOS) charter for places of cultural heritage significance</i>.</p> <p><b>AO4.2</b></p> <p>An archival quality photographic record is made of the features of the place that are destroyed because of the development that meets the standards outlined in the Department of Environment and Heritage Protection Guideline: <i>Archival recording of heritage registered places</i>.</p>

## 8.2.5 Infrastructure overlay code<sup>9 10</sup>

### 8.2.5.1 Application

This code applies to:-

- (1) a material change of use or reconfiguring a lot on premises subject to the infrastructure overlay identified on the overlay maps contained in **Schedule 2 (Mapping)** or infrastructure identified in the SPP interactive mapping system (plan making); and
- (2) a material change of use on premises subject to the aviation facilities identified in the SPP interactive mapping system (plan making).

When using this code, reference should be made to section 5.3.2 and, where applicable, section 5.3.3 located in **Part 5 (Tables of assessment)**.

### 8.2.5.2 Purpose

- (1) The purpose of the Infrastructure overlay code is to ensure that development is compatible with, and does not adversely affect the viability, integrity, operation and maintenance of existing and planned infrastructure within the Goondiwindi Region, including the following:
  - (a) major electricity infrastructure and electricity substations;
  - (b) sewage treatment plants;
  - (c) state controlled roads and railway corridors;
  - (d) aviation facilities; and
  - (e) stock routes.
- (2) The purpose of the code will be achieved through the following overall outcomes:
  - (a) existing and planned infrastructure facilities, networks and corridors are protected from incompatible development;
  - (b) aviation facilities including navigation, surveillance and communications facilities are protected from incompatible development to maintain their efficient functioning; and
  - (c) development in proximity to existing and planned infrastructure facilities, networks and corridors is appropriately located, designed, constructed and operated to:
    - (i) avoid compromising the integrity, operational efficiency and maintenance of infrastructure; and
    - (ii) protect the amenity, health and safety of people and property.

<sup>9</sup> Editor's note—infrastructure elements referred to in this code include:

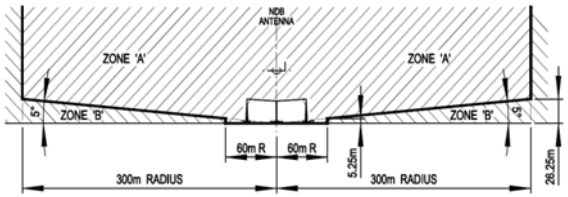
- (a) major electricity infrastructure and electricity substations identified in the SPP interactive mapping system (plan making) under the 'Infrastructure' theme, subsection 'Energy and water supply – major electricity infrastructure';
- (b) State controlled road and railway corridors identified in the SPP interactive mapping system (plan making) under the 'Infrastructure' theme, subsection 'State transport infrastructure';
- (c) stock routes identified in the SPP interactive mapping system (plan making) under the 'Economic growth' theme, subsection 'Agriculture';
- (d) aviation facilities identified in the SPP interactive mapping system (plan making) under the 'Infrastructure' theme, subsection 'Strategic airports and aviation facilities';
- (e) wastewater treatment plants and associated buffers identified on the Infrastructure overlay maps in **Schedule 2 (Mapping)**.

<sup>10</sup> Editor's note—buffer areas for major electricity infrastructure, electricity substations, state controlled roads and railways are not identified in the SPP interactive mapping system (plan making), but are identified as areas within a specified distance from mapped infrastructure.

## 8.2.5.3 Assessment benchmarks and requirements

**Assessment benchmarks for assessable development and requirements for accepted development****Table 8.2.5.1 – Accepted development and assessable development**

Performance outcomes	Acceptable outcomes
<b>For accepted development and assessable development</b>	
<b>Major electricity infrastructure and electricity substations</b>	
<b>PO1</b> Development: (a) maintains the efficiency and integrity of major electricity infrastructure networks; and (b) ensures that access requirements of major electricity infrastructure and electricity substations are maintained.	<b>AO1.1</b> Urban residential lots and buildings and structures are not located within an easement for, or an area otherwise affected by, major electricity infrastructure.
<b>PO2</b> Development involving a <i>sensitive land use</i> is sufficiently separated from major electricity infrastructure or electricity substations to minimise the likelihood of nuisance or complaint.	<b>AO2</b> <i>Sensitive land uses</i> maintain the following separation distances from the easement for major electricity infrastructure or electricity substation: (c) 20 metres for transmission lines up to 132kV; (d) 30 metres for transmission lines between 133kV and 275kV; and (e) 40 metres for transmission lines exceeding 275kV.
<b>Sewage treatment plants</b>	
<b>PO3</b> Sewage treatment plants: (a) are not compromised by the encroachment of <i>sensitive land uses</i> ; and (b) are appropriately separated from <i>sensitive land uses</i> to protect public health and safety.	<b>AO3.1</b> <i>Accommodation activities</i> are not established or intensified within a sewage treatment plant buffer.  <b>AO3.2</b> A <i>sensitive land use</i> (other than <i>accommodation activities</i> ) located within a sewage treatment plant buffer demonstrates that occupants and users will not be adversely affected by odour emissions from activities associated with the sewage treatment plant.  <b>AO3.3</b> Reconfiguring a lot within a sewage treatment plant buffer: (a) does not result in the creation of additional lots used or capable of being used for residential purposes; and (b) where rearranging boundaries, does not worsen the existing situation with respect to the distance between available dwelling sites and the sewage treatment plant.

Performance outcomes	Acceptable outcomes
<b>Aviation facilities</b>	
<p><b>PO4</b>  <i>Development</i> does not interfere with the safe and continued functioning of <i>aviation facilities</i> through the:</p> <ul style="list-style-type: none"> <li>(a) temporary or permanent intrusion of physical <i>structures</i> that enter an aviation facility's sensitive area;</li> <li>(b) introduction of <i>structures</i> or devices that emit electrical or electromagnetic radiation or incorporate reflective surfaces that adversely impact on the functioning of navigation or communication facilities;</li> <li>(c) restriction of the future operational requirements of the airport.</li> </ul>	<p><b>AO4.1</b>  <i>Buildings, structures</i> (both freestanding and attached to buildings including signs, masts or antennae) and vegetation at its mature height where within the building restricted area of the Goondiwindi Airport non-directional beacon (NDB) aviation facility:-</p> <ul style="list-style-type: none"> <li>(a) do not penetrate into 'Zone A' as identified in the figure below; and</li> <li>(b) are wholly contained within 'Zone B' as identified in the figure below.</li> </ul> 
<b>Stock routes</b>	
<p><b>PO5</b>  The stock route network is protected from development (both on the stock route itself and areas adjacent) that would compromise the network's primary use or capacity for stock movement and other values, including conservation and recreational values.</p>	<p><b>AO5.1</b>  Where possible, development that may compromise the use of the stock route by travelling stock is not located on or adjacent to the stock route, particularly if the stock route has a record of frequent use.</p> <p><b>OR</b></p> <p>Where adverse development or land use impacts on a stock route cannot be avoided:</p> <ul style="list-style-type: none"> <li>(a) alternate watered stock route access is provided;</li> <li>(b) where railways, haul roads or other transport infrastructure crosses the stock route, grade separation is considered; and</li> <li>(c) consider revocation of the stock route declaration if a suitable alternative stock route exists.</li> </ul> <p><b>AO5.2</b>  All new access points from a road servicing a stock route incorporate a grid or effective gate to prevent stock entry into adjoining premises.</p>

## 8.2.6 Natural resources overlay code<sup>11 12 13</sup>

### 8.2.6.1 Application

This code applies to a material change of use or reconfiguring a lot on premises subject to:

- (a) a key resource area identified in the SPP interactive mapping system (plan making);
- (b) agricultural land classification (ALC) Class A and Class B land identified in the SPP interactive mapping system (plan making);
- (c) a water resource catchment area identified on the Natural resources overlay map (OM004) in **Schedule 2 (Mapping)**.

When using this code, reference should be made to section 5.3.2 and, where applicable, section 5.3.3 located in **Part 5 (Tables of assessment)**.

### 8.2.6.2 Purpose

- (1) The purpose of the Natural resources overlay code is to ensure that the natural resources in Goondiwindi Region are protected from inappropriate development that may adversely impact on the productive use of natural resources by present and future generations.
- (2) The purpose of the code will be achieved through the following overall outcomes:
  - Key resource areas
    - (a) development occurring within or adjacent to key resource areas does not adversely affect or prejudice the ability of existing or future extractive industries to viably win the resource;
    - (b) development occurring within or adjacent to key resource area transport routes or transport route separation areas does not constrain or otherwise conflict with the safe and efficient transportation of the extractive resource;
    - (c) the impacts of extractive industries on *sensitive land uses* within or adjacent to key resource areas and associated transport routes and transport route separation areas are mitigated to maintain high levels of safety and amenity;
  - Agricultural land
    - (d) the ongoing productive use of agricultural land classification (ALC) Class A and Class B land for agricultural purposes is maintained and protected by ensuring that:
      - (i) ALC Class A and Class B land is only used for appropriate rural uses and complementary uses;
      - (ii) conflict between farming activities and sensitive land uses is avoided;
      - (iii) further fragmentation of ALC Class A and Class B land as a result of reconfiguring a lot is avoided;
      - (iv) development avoids adverse impacts on ALC Class A and Class B land from land degradation and stormwater run-off;
  - Water resource catchment areas
    - (e) the quality of surface water and groundwater in water resource catchment areas is protected from potential contamination by inappropriate land use and development;
    - (f) development does not adversely affect, either directly or indirectly, local and regional water supply storages and catchment areas;
    - (g) development promotes sustainable land use practices within water resource catchment areas; and
    - (h) development protects and, where possible, enhances natural systems, vegetation and land stability within water resource catchment areas.

<sup>11</sup> Editor's note—The following key resource area elements referred to in this code are identified in the SPP interactive mapping system (plan making) under the 'Economic growth' theme, subsection 'Mining and extractive resources':-

- (a) resource/processing area;
- (b) separation area; and
- (c) transport route and transport route separation area.

<sup>12</sup> Editor's note—Agricultural land classification (ALC) Class A and Class B land referred to in this code is identified in the SPP interactive mapping system (plan making) under the 'Economic growth' theme, subsection 'Agriculture'.

<sup>13</sup> Editor's note—Water resource catchment areas referred to in this code are identified on the relevant overlay map contained in **Schedule 2 (Mapping)**.

### 8.2.6.3 Assessment benchmarks and requirements

#### Assessment benchmarks for assessable development and requirements for accepted development

Table 8.2.6.1— Accepted development and assessable development

Performance outcomes	Acceptable outcomes
For accepted development and assessable development	
Key resource areas	
<b>PO1</b> Development within a resource/processing area does not prevent or constrain the current or future viability and efficient winning and/or processing of extractive resources.	<b>AO1</b> Development within a resource/processing area is for an <i>extractive industry</i> or activities directly associated with an <i>extractive industry</i> .
<b>PO2</b> Development for an <i>extractive industry</i> within the separation area for a resource/processing area does not compromise the function of the separation area in providing a buffer between extractive and processing operations and any incompatible uses or <i>sensitive land uses</i> located outside of the separation area.	<b>AO2</b> Development for an <i>extractive industry</i> is not located within the separation area for a resource/processing area, unless it is demonstrated that <i>extractive industry</i> operations within the separation area will not adversely impact on people or on the use of premises outside of the separation area.  Note— <b>AO2</b> does not apply to the transportation of extractive resources undertaken on an identified transport route.
<b>PO3</b> <i>Sensitive land uses</i> are sited so as not to prevent or constrain the efficient winning or processing of mineral or extractive resources from the Resource processing area, and are designed to manage the impacts of <i>Extractive industry</i> operations having regard to: <ul style="list-style-type: none"> <li>(a) the acoustic amenity of sensitive land uses, in particular noise emissions associated with blasting, crushing, screening, and haulage operations;</li> <li>(b) air quality, and in particular particulate emissions associated with extractive industry and mining operations;</li> <li>(c) wellbeing, health and safety of the occupants of sensitive land uses;</li> <li>(d) lighting impacts associated with night operations; and</li> <li>(e) vibration impacts associated with blasting operations.</li> </ul> Note—to demonstrate compliance with this outcome, applicants may need to supply adequate information to demonstrate that the proposed uses would not be subject to adverse impacts from existing and/or future extractive operations by:	<b>AO3.1</b> <i>Sensitive land uses</i> are not established or materially intensified within resource/processing areas, separation areas for a resource/processing area or a transport route separation area as identified in the SPP interactive mapping system (plan making).  <b>Where for reconfiguring a lot</b> <b>AO3.2</b> Reconfiguring a lot does not result in the creation of a new lot wholly within a separation area for a resource/processing area.  <b>AO3.3</b> Where reconfiguring a lot results in the creation of a lot partly within a separation area for a resource/processing area, <i>sensitive land uses</i> are excluded from that part of the lot within the separation area.

Performance outcomes	Acceptable outcomes
<ul style="list-style-type: none"> <li>(a) locating buildings and structures the greatest distance practicable from the resource/processing area and associated transport route; and</li> <li>(b) designing buildings so the areas where people live, work or congregate (e.g. habitable rooms) are furthestmost from the resource/processing area and associated transport route; and</li> <li>(c) minimising openings in walls closest to these effects; and</li> <li>(d) providing mechanical ventilation to habitable rooms; and</li> <li>(e) using appropriate construction methods and materials including insulation and glazing materials; and</li> <li>(f) providing private outdoor recreation space adjacent to a building façade shielded from the <i>extractive industry</i> operations or potential <i>extractive industry</i> operations.</li> </ul>	
<b>PO4</b> Vehicular accesses on identified transport routes do not adversely affect the safe and efficient operation of vehicles using the transport route for the conveyance of extractive materials to market.	<b>A04</b> No new vehicular accesses are created on identified transport routes.
<b>Agricultural land</b>	
<b>PO5</b> Development on ALC Class A and Class B land is limited to: <ul style="list-style-type: none"> <li>(a) rural activities that make use of and rely upon the quality of the agricultural land resource; and</li> <li>(b) complementary uses that are essential to on-site farming practice.</li> </ul>	<b>A05</b> No acceptable outcome provided.
<b>PO6</b> Where realigning the boundaries of a lot on, or adjacent to, ALC Class A or Class B land, the realignment: <ul style="list-style-type: none"> <li>(a) results in a more productive use and management of ALC Class A or Class B land and water for agricultural uses, and</li> <li>(b) does not lead to increased fragmentation of ALC Class A or Class B land, and does not increase the potential conflict between agricultural and non-agricultural land uses.</li> </ul>	<b>A06</b> No acceptable outcome provided.
<b>PO7</b> Development for <i>accommodation activities</i> and other <i>sensitive land uses</i> in proximity to ALC Class A and Class B land is located and designed in a manner that: <ul style="list-style-type: none"> <li>(a) avoids land use conflicts;</li> <li>(b) avoids the alienation of the resource;</li> </ul>	<b>A07</b> No acceptable outcome provided.  Note—to demonstrate compliance with this performance outcome, an assessment of appropriate separation areas and buffers between the proposed development and areas of ALC Class A and Class B land may need to be undertaken by a suitably qualified person. <i>State planning policy—state interest</i>

Performance outcomes	Acceptable outcomes
<p>(c) mitigates adverse impacts from agricultural activities, including chemical spray drift, odour, noise, dust, smoke and ash; and</p> <p>(d) does not adversely affect public health, safety and amenity.</p>	<p><i>guideline—Agriculture</i> provides guidance on the provision of separation areas between agriculture and non-agricultural land uses.</p>
<p><b>PO8</b> Development for non-agricultural purposes is located, designed and constructed to minimise adverse impacts of sediment and stormwater run-off on ALC Class A and Class B land.</p>	<p><b>AO8</b> No acceptable outcome provided.</p>
<b>Water resource catchment area</b>	
<p><b>PO9</b> Development in the Lake Coolmunda water resource catchment area protects and enhances the water quality values of the waterbody.</p>	<p><b>AO9.1</b> The following activities are not located within a water resource catchment area:</p> <ul style="list-style-type: none"> <li>(a) <i>Animal keeping</i>;</li> <li>(b) <i>Aquaculture</i>;</li> <li>(c) <i>Cemetery</i>;</li> <li>(d) <i>Intensive animal industry</i>;</li> <li>(e) <i>Intensive horticulture</i>;</li> <li>(f) <i>Rural industry</i>;</li> <li>(g) <i>Industry activities</i>.</li> </ul> <p><b>AO9.2</b> <i>Buildings, structures</i> and effluent treatment and disposal areas have a minimum separation distance of 50 metres from the full supply level of Lake Coolmunda.</p>