

## 8.2.4 Environmental Significance Overlay Code



### 8.2.4.1 Application

This code applies to development:

- (1) within the Environmental Significance Overlay as identified on the overlay maps contained in **Schedule 2 Mapping** which is summarised in **Table 8.2.4.1 Mapping Summary** below; and
- (2) identified as requiring assessment against the Environmental Significance Overlay Code by the tables of assessment in **Part 5 Tables of Assessment**.

*Editor's Note - Applicants should also refer to other state and federal legislation which may require applicants to obtain additional approvals specifically where development impacts on a matter under the Environmental Protection and Biodiversity Conservation Act 1999 (Cth) or the Nature Conservation Act 1992.*

**Table 8.2.4.1 Mapping Summary**

Overlay Map	Mapped area
1. Environmental Significance Overlay Map – Biodiversity OM-04-A	<b>Matters of State Environmental Significance</b> <ul style="list-style-type: none"> <li>Protected Area</li> <li>Regulated Vegetation (includes Regulated Vegetation intersecting a watercourse)</li> </ul>
2. Environmental Significance Overlay Map – Local Biodiversity OM-04-B	<b>Matters of Local Environmental Significance</b> <ul style="list-style-type: none"> <li>Local Ecological</li> </ul>
3. Environmental Significance Overlay Map – Priority Species OM-04-C	<b>Matters of State Environmental Significance</b> <ul style="list-style-type: none"> <li>State Significance Species</li> </ul>
4. Environmental Significance Overlay Map – Wetlands and Waterways OM-04-D	<b>Matters of State Environmental Significance Waterways and Wetlands</b> <ul style="list-style-type: none"> <li>High Ecological Value Waters (Watercourse)</li> <li>High Ecological Value Waters (Wetland)</li> <li>High Ecological Significance Wetlands</li> <li>Waterways and Wetlands Buffer Area</li> </ul>
5. Environmental Significance Overlay Map – Local Watercourses OM-04-E	<b>Matters of Local Environmental Significance Local Watercourses</b> <ul style="list-style-type: none"> <li>Stream Order 2</li> <li>Stream Order 3 and 4</li> <li>Stream Order 5 to 7</li> <li>Watercourse Buffers Area A</li> <li>Watercourse Buffers Area B</li> <li>Watercourse Buffers Area C</li> </ul>
6. Environmental Significance Overlay Map – Vegetation Management Area OM-04-F	<b>Matters of Local Environmental Significance</b> <ul style="list-style-type: none"> <li>Vegetation Management Area</li> </ul>

### 8.2.4.2 Purpose and Overall Outcomes

- (1) The purpose of the Environmental Significance Overlay Code is to ensure that:
- (a) matters of environmental significance are protected and enhanced;
  - (b) biodiversity values including terrestrial and aquatic systems and ecological processes of the Scenic Rim are protected; and
  - (c) connectedness and condition of terrestrial and aquatic systems are enhanced providing habitat for the regions diversity of flora, fauna and ecological functions.

**Editor's Note** - Council's Biodiversity Strategy should be consulted for further background on regional biodiversity matters.

- (2) The purpose of the code will be achieved through the following overall outcomes:
- (a) Development protects and enhances matters of environmental significance to maintain flora and fauna diversity within:
    - (i) Protected Areas;
    - (ii) Regulated Vegetation (as defined in the SPP);
    - (iii) Local Ecological Corridor;
  - (b) Development protects and enhances:
    - (i) State Significant Species and locally significant species and their habitat; and
    - (ii) the water quality values and ecological function (including maintenance of fish passage) of wetlands, waterways and watercourses and their associated buffer areas;
    - (iii) biodiversity by providing linkages and expansion of areas of local and state biodiversity significance;
    - (iv) visual amenity and landscape character through retention of significant trees and reestablishment of vegetation in the Vegetation Management Area;
  - (c) Degraded matters of environmental significance are rehabilitated; and
  - (d) Buffers are provided to any Matters of State and Local Environmental Significance and any proposed impacts.

### 8.2.4.3 Assessment Benchmarks

**Table 8.2.4.3.1— Environmental Significance Overlay Code - for Assessable Development**

Performance Outcomes	Acceptable Outcomes
<b>Protection of Matters of State and Local Environmental Significance identified on:</b> (1) <b>Environmental Significance Overlay Map – Biodiversity OM-04-A;</b> or (2) <b>Environmental Significance Overlay Map – Local Biodiversity OM-04-B</b> (3) <b>Environmental Significance Overlay Map – Priority Species OM-04-C;</b> or (4) <b>Environmental Significance Overlay Map – Wetlands and Waterways OM-04-D;</b> or (5) <b>Environmental Significance Overlay Map – Local Watercourses OM-04-E</b>	
<b>PO1</b> Development protects and avoids impact on Matters of State and/or Local Environmental Significance.  <i><b>Note</b> - Compliance with this Performance Outcome must be demonstrated by an Ecological Assessment Report prepared in accordance with <b>Planning Scheme Policy 5 - Ecological Assessments</b>.</i>	<b>AO1.1</b> Development has no impact on the relevant environmental values of Matters of State and/or Local Environmental Significance.  OR  <b>AO1.2</b> An Ecological Assessment Report prepared in accordance with <b>Planning Scheme Policy 5 - Ecological Assessments</b> demonstrates that the development site does not contain any Matters of State and/or Local Environmental Significance.  OR  <b>AO1.3</b>

Performance Outcomes	Acceptable Outcomes
	An Ecological Assessment Report prepared in accordance with <b>Planning Scheme Policy 5 - Ecological Assessments</b> demonstrates that development is located, designed and operated to mitigate adverse impacts on the relevant environmental values of Matters of State and/or Local Environmental Significance.
<b>PO2</b> Development is designed and constructed to: <ol style="list-style-type: none"> <li>(1) avoid significant adverse impact on Matters of State and/or Local Environmental Significance; and</li> <li>(2) protect and enhance <i>ecological connectivity</i> and habitat extent between areas of State and/or Local Environmental Significance.</li> </ol>	<b>AO2</b> The design and layout of development minimises adverse impacts on Matters of State and/or Local Environmental Significance by: <ol style="list-style-type: none"> <li>(1) focusing development in non-vegetated areas to protect existing habitat;</li> <li>(2) using urban design to consolidate density and preserve existing habitat and <i>native vegetation</i>;</li> <li>(3) aligning property boundaries to maintain ecologically important areas;</li> <li>(4) ensuring that alterations to natural landforms, hydrology and drainage patterns on the development site do not negatively affect ecologically important areas;</li> <li>(5) avoiding impacts on flora and fauna and their habitat as identified in the <i>Nature Conservation Act 1992</i> and locally significant species;</li> <li>(6) ensuring that significant fauna and flora and their habitats are protected in their environmental context and incorporate measures that allow for the safe movement of fauna through the site;</li> <li>(7) ensuring the clearing of <i>native vegetation</i> is minimised;</li> <li>(8) ensuring development does not isolate areas identified as Matters of State and/or Local Environmental Significance;</li> <li>(9) ensuring development retains <i>native vegetation</i> in areas large enough to maintain ecological values, functions and processes; and</li> <li>(10) ensuring development is operated and managed in a manner to ensure long term viability of the matter of environmental significance.</li> </ol> <p><i>Note - Development should ensure that the ecological connectivity between habitats (whether it is the same or different environmental value) is not affected to the extent that migration or normal movement of significant species between habitats or normal gene flow between populations is inhibited. Maintaining vegetation in patches of the greatest possible size and with the minimal edge-to-area ratio, for example, can help to achieve this.</i></p>
<b>PO3</b> Buffers are provided and maintained that protect the long term viability of Matters of State and/or Local Environmental Significance. <p><i>Note - Compliance with this Performance Outcome must be demonstrated by an Ecological Assessment Report prepared in accordance with <b>Planning Scheme Policy 5 - Ecological Assessments</b>.</i></p>	<b>AO3.1</b> Development provides and maintains a buffer to Matters of State and/or Local Environmental Significance, the width of which is supported by an evaluation of the <i>environmental values</i> prepared in accordance with <b>Planning Scheme Policy 5 - Ecological Assessments</b> . <p><b>OR</b></p>

Performance Outcomes	Acceptable Outcomes
	<p><b>A03.2</b> Where involving a wetland or watercourse, development provides a buffer from an area identified as High Ecological Value Waters (Watercourse), High Ecological Value Waters (Wetland) and High Ecological Significance Wetlands which has a minimum width of:</p> <ul style="list-style-type: none"> <li>(1) 100m where the area is located outside an urban area; or</li> <li>(2) 50m where the area is located within an urban area.</li> </ul> <p><b>Note</b> - Use the Queensland Wetlands Buffer Guideline <a href="http://wetlandinfo.ehp.qld.gov.au/resources/static/pdf/resources/report/s/buffer-guide/wetland-buffer-guideline-14-04-13.pdf">http://wetlandinfo.ehp.qld.gov.au/resources/static/pdf/resources/report/s/buffer-guide/wetland-buffer-guideline-14-04-13.pdf</a> and/or the setback buffer distances for wetlands and watercourses under the Native Vegetation Clearing (Module 8) of the State Development Assessment Provisions for guidance on buffers. <a href="https://dsdmipprd.blob.core.windows.net/general/sdap-module-8-v-1-8.pdf">https://dsdmipprd.blob.core.windows.net/general/sdap-module-8-v-1-8.pdf</a></p>
<p><b>P04</b> The ongoing management, operation and tenure of Matters of State and/or Local Environmental Significance, ensures impacts on biodiversity values and ecological processes are avoided or minimised.</p>	<p><b>A04.1</b> No ongoing impacts occur from the operation of the development.</p> <p><b>OR</b></p> <p><b>A04.2</b> Where impacts are ongoing:</p> <ul style="list-style-type: none"> <li>(1) they are mitigated by appropriate management, tenure or monitoring and reporting; and</li> <li>(2) relevant management plans and reporting are provided for assessment and approval.</li> </ul> <p><b>Note</b> - Appropriate management arrangements could include conservation tenures such as conservation covenants, conservation envelopes, nature refuges, protected areas or parks.</p>
<p><b>P05</b> Disturbed or cleared or degraded areas are rehabilitated.</p>	<p><b>A05.1</b> Development provides for cleared, degraded or disturbed areas to be rehabilitated or allowed to regenerate naturally, where development is located in areas identified as:</p> <ul style="list-style-type: none"> <li>(1) Protected Areas;</li> <li>(2) Regulated Vegetation (as defined in the SPP);</li> <li>(3) mapped areas of Local Environmental Significance; or</li> <li>(4) other Matters of State and/or Local Environmental Significance identified within an Ecological Assessment Report as requiring rehabilitation.</li> </ul> <p><b>A05.2</b> Development provides for <i>locally significant species</i> to be predominantly used in revegetation and landscape planting on the site.</p>
<p><b>P06</b> Where <i>habitat</i> or <i>vegetation</i> is proposed to be damaged, management strategies are implemented to ensure the protection and safety of wildlife and the protection of nearby <i>habitat</i> in</p>	<p><b>A06</b> Development ensures that:</p> <ul style="list-style-type: none"> <li>(1) the native fauna is safely relocated to an area of similar <i>habitat</i>;</li> <li>(2) the sequence of <i>habitat</i> disturbance ensures that</li> </ul>



Performance Outcomes	Acceptable Outcomes
areas identified as either Matters of State and/or Local Environmental Significance.	<p>fauna is not isolated from adjoining areas of <i>habitat</i>;</p> <p>(3) fauna relocation occurs immediately prior to <i>habitat</i> disturbance;</p> <p>(4) qualified fauna spotter catchers, licenced by the Queensland Parks and Wildlife Service, are present on the site at the time of the damage, to direct and undertake the removal and relocation of fauna;</p> <p>(5) where possible, damaged <i>habitat</i> and nesting sites are rehabilitated outside of development areas;</p> <p>(6) <i>vegetation</i> planned for retention is protected from damage, in accordance with AS4970.</p> <p>(7) <i>vegetation</i> is cleared in accordance with <i>Policy 6 of the Department of Environment and Heritage Protection's: Koala-Sensitive Design Guideline</i>.</p>
<p><b>P07</b></p> <p>Development design and location provides for the safe movement of native fauna through the site.</p>	<p><b>A07</b></p> <p>Where infrastructure crosses native fauna movement paths, the design of new development incorporates fauna friendly movement solutions.</p> <p><i>Editor's note - Fauna friendly movement solutions developed in accordance with the Queensland Government Fauna Sensitive Road Design Manual Volume2: Preferred Practices; and the Department of Environment and Heritage Protection's: Koala-Sensitive Design Guideline are Council's preferred method for addressing this outcome.</i></p>
<b>Local Vegetation Clearing - Offsets</b>	
<p><b>P08</b></p> <p>Where significant residual impacts resulting from damage to <i>vegetation</i> in areas identified as Matters of Local Environmental Significance (and where not identified as Matters of State Environmental Significance) cannot be avoided or mitigated, the impacts are offset so that the <i>environmental value</i> proposed to be removed from the site is maintained.</p> <p><i>Note - Compliance with this performance outcome is to be demonstrated by an Ecological Assessment Report.</i></p>	<p><b>A08</b></p> <p>No Acceptable Outcome is prescribed.</p>
<b>Water Quality - Waterways and Wetlands</b>	
<p><b>P09</b></p> <p>Development located in areas identified on <b>Environmental Significance Overlay Map - Wetlands and Waterways OM-04-D:</b></p> <p>(1) protects or enhances habitat values (including maintenance of fish passage), ecological connectivity and other ecological functions and values;</p> <p>(2) protects water quality and aquatic conditions;</p> <p>(3) maintains natural micro-climatic conditions;</p> <p>(4) maintains natural hydrological processes;</p> <p>(5) prevents mass soil movement, gully erosion, rill erosion, sheet erosion, tunnel erosion, stream bank erosion, wind erosion, or scalding; and</p> <p>(6) avoids loss or modification of chemical, physical or biological properties or functions of soil.</p>	<p><b>A09.1</b></p> <p>Development, including any associated filling or excavation (other than rehabilitation or restorative works) does not occur within a High Ecological Value Waters (Watercourse), High Ecological Value Waters (Wetland), High Ecological Significance Wetlands and Waterways and Wetlands Buffer Area.</p> <p><b>A09.2</b></p> <p>Development provides a buffer from an area identified as High Ecological Value Waters (Watercourse), High Ecological Value Waters (Wetland), and High Ecological Significance Wetlands which has a minimum width of:</p> <p>(1) 100m where the area is located outside an <i>urban area</i>; or</p> <p>(2) 50m where the area is located within an <i>urban area</i>; or</p> <p>(3) the buffer width of which is supported by an</p>

Performance Outcomes	Acceptable Outcomes
	evaluation of the <i>environmental values</i> (identified by a <i>suitably qualified person</i> ), including the function and threats.
<p><b>Note</b> - Use the Queensland Wetlands Buffer Guideline <a href="http://wetlandinfo.ehp.qld.gov.au/resources/static/pdf/resources/reports/buffer-guide/wetland-buffer-guideline-14-04-13.pdf">http://wetlandinfo.ehp.qld.gov.au/resources/static/pdf/resources/reports/buffer-guide/wetland-buffer-guideline-14-04-13.pdf</a> and/or the setback buffer distances for wetlands and watercourses under the Native Vegetation Clearing (Module 8) of the State Development Assessment Provisions for guidance on buffers. <a href="https://dsdmipprd.blob.core.windows.net/general/sdap-module-8-v-1-8.pdf">https://dsdmipprd.blob.core.windows.net/general/sdap-module-8-v-1-8.pdf</a></p> <p><b>Editor's Note</b> - Buffer Areas to Matters of State Environmental Significance Waterways and Wetlands have been mapped based on 100m either side of the centre line of the receiving waters or 100m from wetlands.</p>	
<p><b>PO10</b> Development within a Watercourse Buffer Area (A, B or C) shown on <b>Environmental Significance Overlay Map - Local Watercourse OM-04-E</b> has no adverse impact on:</p> <ol style="list-style-type: none"> <li>(1) <i>native vegetation</i>;</li> <li>(2) terrestrial and aquatic habitat;</li> <li>(3) ecological functions; and</li> <li>(4) nature conservation functions.</li> </ol>	<p><b>AO10</b> The <i>development footprint</i> is not located within:</p> <ol style="list-style-type: none"> <li>(1) 10m from the high or outer bank of the watercourse located in Watercourse Buffer Area A;</li> <li>(2) 25m from the high or outer bank of the watercourse located in Watercourse Buffer Area B;</li> <li>(3) 50m from the high or outer bank of the watercourse located in Watercourse Buffer Area C.</li> </ol>
<b>Water Quality - All Waterways and Wetlands and Local Watercourses</b>	
<p><b>PO11</b> Development appropriately manages stormwater quality to:</p> <ol style="list-style-type: none"> <li>(1) protect natural ecosystems;</li> <li>(2) protect water quality;</li> <li>(3) reduce runoff and peak flows; and</li> <li>(4) meet the water quality objectives and environmental values for Queensland waters.</li> </ol> <p><b>Note</b> - Development is designed to achieve the prescribed water quality objectives for Waterways in accordance with the Environmental Protection (Water) Policy 2009 for both State and Local wetlands, waterways, and watercourses.</p>	<p><b>AO11</b> A site-based stormwater quality management plan (SQMP) is prepared by a <i>suitably qualified person</i> that demonstrates that the stormwater quality treatment measures meet the design objectives identified in <b>Table 8.2.4.3.2 - Stormwater Management Design Objectives</b>.</p>
<p><b>PO12</b> Stormwater quantity management outcomes demonstrate no adverse impact on stormwater flooding or the drainage of properties external to the subject site.</p>	<p><b>AO12.1</b> A site-based stormwater quantity management plan (SQMP) is prepared by a <i>suitably qualified person</i>:</p> <ol style="list-style-type: none"> <li>(1) that demonstrates achievable stormwater quantity control measures for discharge during both the construction and operational phases of development; and</li> <li>(2) is designed in accordance with the <i>Queensland Urban Drainage Manual (QUDM)</i>.</li> </ol>
	<p><b>AO12.2</b> Stormwater flows discharged from development are either within the capacity of the downstream drainage system such that non-worsening occurs, or are mitigated to pre-development characteristics.</p>
<p><b>PO13</b> Development does not discharge wastewater to a waterway or wetland off-site unless demonstrated to be best practice environmental management for that site and addresses the:</p>	<p><b>AO13.1</b> Where the development involves the discharge of wastewater, a site-based Wastewater Management Plan is prepared by a <i>suitably qualified person</i> and addresses:</p>

Performance Outcomes	Acceptable Outcomes
<p>(1) applicable water quality objectives for the receiving waters; and</p> <p>(2) the potential adverse impact on ecosystem health of receiving waters.</p> <p><b>Note</b> - Development is designed to achieve the prescribed water quality objectives for Waterways in accordance with the Environmental Protection (Water) Policy 2009 for both State and Local wetlands, waterways, and watercourses.</p>	<p>(1) wastewater type;</p> <p>(2) climatic conditions;</p> <p>(3) water quality design objectives; and</p> <p>(4) best-practice environmental management.</p> <p><b>AO13.2</b> The site-based Wastewater Management Plan required in <b>AO13.1</b> provides that wastewater is managed in accordance with a waste management hierarchy that:</p> <p>(1) avoids wastewater discharges to waterways, wetlands and watercourses; and</p> <p>(2) if wastewater discharge to waterways, wetlands or watercourses cannot practicably be avoided, minimises wastewater discharge to waterways, wetlands or watercourses by re-use, recycling, recovery and treatment for disposal to sewer, surface water and groundwater.</p>
<p><b>PO14</b> The <i>environmental value</i> of receiving waters and the functionality of stormwater infrastructure are protected from the impacts of erosion, turbidity and sedimentation.</p> <p><b>Note</b> - Development is designed to achieve the prescribed water quality objectives for Waterways in accordance with the Environmental Protection (Water) Policy 2009 for both State and Local wetlands, waterways, and watercourses.</p>	<p><b>AO14</b> An erosion and sediment control plan is prepared by a <i>suitably qualified person</i> that achieves the design objectives in <b>Table 8.2.4.3.2 - Stormwater Management Design Objectives</b>.</p>
<p><b>PO15</b> Development does not cause land degradation in areas identified as Matters of State Environmental Significance Waterways and Wetlands (identified on <b>Environmental Significance Overlay Map - Wetlands and Waterways OM-04-D</b>) or Matters of Local Environmental Significance Local Watercourses (identified on <b>Environmental Significance Overlay Map - Local Watercourses OM-04-E</b>), including:</p> <p>(1) mass soil movement, gully erosion, rill erosion, sheet erosion, tunnel erosion, stream bank erosion, wind erosion, or scalding; and</p> <p>(2) loss or modification of chemical, physical or biological properties or functions of soil.</p>	<p><b>AO15</b> Development does not change the natural surface water or groundwater hydrologic regime, including through channelization, redirection or interruption of flow, where located in areas identified as:</p> <p>(1) Matters of State Environmental Significance Waterways and Wetlands (identified on <b>Environmental Significance Overlay Map - Wetlands and Waterways OM-04-D</b>); or</p> <p>(2) Matters of Local Environmental Significance Local Watercourses (identified on <b>Environmental Significance Overlay Map - Local Watercourses OM-04-E</b>).</p>
<b>Reconfiguring a Lot</b>	
<p><b>PO16</b> Where the site is identified as having Matters of State and/or Local Environmental Significance the ecological function and biodiversity values of existing habitat are maintained by ensuring that reconfiguring a lot does not result in the:</p> <p>(1) fragmentation of habitat;</p> <p>(2) loss of habitat; and</p> <p>(3) loss of <i>environmental values</i>.</p>	<p><b>AO16.1</b> Where required, areas that are mapped as containing Matters of State and/or Local Environmental Significance are dedicated as public open space for purposes consistent with the ecological values and functions of the area.</p> <p><b>AO16.2</b> The design, location and shape of the development does not impact on Matters of State and/or Local Environmental Significance by:</p>

Performance Outcomes	Acceptable Outcomes
	<p>(1) ensuring the boundaries do not result in the clearing of Matters of State and/or Local Environmental Significance;</p> <p>(2) ensuring the shape, size and location of lots and their boundaries minimise the impact of Matters of State and/or Local Environmental Significance;</p> <p>(3) dedication as a conservation area in a private property or other conservation mechanism.</p>
	<p><b>AO16.3</b> Where required, open space is provided adjacent to waterway buffers with roads servicing linear parkland and lots located on the opposite side of the road.</p>
	<p><b>AO16.4</b> Where required, open space for conservation purposes is consolidated with existing conservation areas to allow for a connected movement corridor.</p>
<b>Development in a Vegetation Management Area on Environmental Significance Overlay Map - Vegetation Management Area OM-04-F</b>	
<p><b>PO17</b> Development in the Vegetation Management Area maximises the retention of <i>significant trees</i> to maintain and protect the visual amenity of the local area.</p>	<p><b>AO17</b> Development is located in an existing cleared area.</p>
<p><b>PO18</b> Development in the Vegetation Management Area maintains and enhances a predominantly forested character when viewed from a road.</p>	<p><b>AO18</b> No Acceptable Outcome is prescribed.</p>
<p><b>PO19</b> Development in the Vegetation Management Area protects and enhances <i>significant trees</i> on ridgelines which contributes to the character and visual amenity of the local area.</p>	<p><b>AO19</b> No Acceptable Outcome is prescribed.</p>
<p><b>PO20</b> Development in the Vegetation Management Area avoids or minimises disturbance to <i>significant trees</i> on steep slopes to prevent erosion and slippage.</p>	<p><b>AO20</b> No Acceptable Outcome is prescribed.</p>
<p><b>PO21</b> Development in the Vegetation Management Area protects and enhances a <i>significant tree</i> which:</p> <ul style="list-style-type: none"> <li>(1) is of significant historical, cultural, educational and aesthetic value; or</li> <li>(2) is an uncommon species in the locality; or</li> <li>(3) positively contributes to the character and visual amenity of the local area; or</li> <li>(4) is of a great height, trunk circumference or canopy spread; or</li> <li>(5) contains a hollow or is a nesting tree for native fauna.</li> </ul>	<p><b>AO21</b> No Acceptable Outcome is prescribed.</p>
<p><b>PO22</b> Development in the Vegetation Management Area contributes towards the maintenance of</p>	<p><b>AO22</b> Development retains and replants vegetation that:</p> <ul style="list-style-type: none"> <li>(1) links areas of forest;</li> </ul>



Performance Outcomes	Acceptable Outcomes
biodiversity by providing for the linking of and expansion of areas of local and state biodiversity significance.	<ul style="list-style-type: none"> <li>(2) provides for the expansion of area of forest;</li> <li>(3) where location would support areas of state biodiversity significance, provides for the reestablishment of forest; and</li> <li>(4) provides for such areas to be included in a conservation envelope or retained in public ownership.</li> </ul>

**Table 8.2.4.3.2 - Stormwater Management Design Objectives**

Issue		Design objectives
Drainage control	Temporary drainage works	<ul style="list-style-type: none"> <li>(1) Design life and design storm for temporary drainage works: <ul style="list-style-type: none"> <li>(a) Disturbed area open for &lt;12 months—1 in 2-year ARI event</li> <li>(b) Disturbed area open for 12–24 months—1 in 5-year ARI event</li> <li>(c) Disturbed area open for &gt; 24 months—1 in 10-year ARI event</li> </ul> </li> <li>(2) Design capacity excludes minimum 150 mm freeboard</li> <li>(3) Temporary culvert crossing—minimum 1 in 1-year ARI hydraulic capacity</li> </ul>
Erosion control	Erosion control measures	<ul style="list-style-type: none"> <li>(1) Minimise exposure of disturbed soils at any time</li> <li>(2) Divert water run-off from undisturbed areas around disturbed areas</li> <li>(3) Determine the erosion risk rating using local rainfall erosivity, rainfall depth, soil-loss rate or other acceptable methods</li> <li>(4) Implement erosion control methods corresponding to identified erosion risk rating</li> </ul>
Sediment control	<ul style="list-style-type: none"> <li>(1) Sediment control measures</li> <li>(2) Design storm for sediment control basins</li> <li>(3) Sediment basin dewatering</li> </ul>	<ul style="list-style-type: none"> <li>(1) Determine appropriate sediment control measures using: <ul style="list-style-type: none"> <li>(a) potential soil loss rate, or</li> <li>(b) monthly erosivity, or</li> <li>(c) average monthly rainfall</li> </ul> </li> <li>(2) Collect and drain stormwater from disturbed soils to sediment basin for design storm event: <ul style="list-style-type: none"> <li>(a) design storm for sediment basin sizing is 80th% five-day event or similar</li> </ul> </li> <li>(3) Site discharge during sediment basin dewatering: <ul style="list-style-type: none"> <li>(a) TSS &lt; 50 mg/L TSS, and</li> <li>(b) Turbidity not &gt;10% receiving waters turbidity, and</li> <li>(c) pH 6.5–8.5</li> </ul> </li> </ul>
Water quality	Litter and other waste, hydrocarbons and other contaminants	<ul style="list-style-type: none"> <li>(1) Avoid wind-blown litter; remove gross pollutants</li> <li>(2) Ensure there is no visible oil or grease sheen on released waters</li> <li>(3) Dispose of waste containing contaminants at authorised facilities</li> </ul>
Waterway stability and flood flow management	Changes to the natural waterway hydraulics and hydrology	<ul style="list-style-type: none"> <li>(1) For peak flow for the 1-year and 100-year ARI event, use constructed sediment basins to attenuate the discharge rate of stormwater from the site</li> </ul>