

8.2.3 Biodiversity, waterways and wetlands overlay code^{8 9}

8.2.3.1 Application

- (1) This code applies to accepted development and assessable development:-
 - (a) subject to the biodiversity, waterways and wetlands overlay shown on the overlay maps contained within **Schedule 2 (Mapping)**; and
 - (b) identified as requiring assessment against the Biodiversity, waterways and wetlands overlay code by the tables of assessment in **Part 5 (Tables of assessment)**.
- (2) The acceptable outcomes in **Table 8.2.3.3.1 (Requirements for accepted development)** are requirements for applicable accepted development.
- (3) The following provisions of the code are assessment benchmarks for applicable assessable development:-
 - (a) **section 8.2.3.2 (Purpose and overall outcomes)**; and
 - (b) **Table 8.2.3.3.2 (Performance outcomes and acceptable outcomes for assessable development)**.

8.2.3.2 Purpose and overall outcomes

- (1) The purpose of the Biodiversity, waterways and wetlands overlay code is to ensure that:-
 - (a) *ecologically important areas* are protected, rehabilitated and enhanced; and
 - (b) ecological connectivity is improved.
- (2) The purpose of the Biodiversity, waterways and wetlands overlay code will be achieved through the following overall outcomes:-
 - (a) development protects and enhances *ecologically important areas* and ecological connectivity;
 - (b) development protects and establishes appropriate *buffers* to waterways, *wetlands*, native *vegetation* and significant fauna habitat;
 - (c) development protects known populations and supporting habitat of rare and threatened flora and fauna species, as listed in the *State Nature Conservation Act 1992*, *Nature Conservation (Wildlife) Regulation 2006* and the *Commonwealth Environmental Protection and Biodiversity Conservation Act 1999*;
 - (d) development is located, designed and managed to avoid or minimise adverse direct or indirect impacts on ecological systems and processes;
 - (e) development avoids or minimises adverse impacts on koalas and koala habitat; and
 - (f) development is designed to achieve the prescribed water quality objectives for *waterways* and *wetlands* in accordance with the *Environmental Protection (Water) Policy 2009*.

⁸ Editor's note—the following elements referred to in this code are identified on the Biodiversity, Waterways and Wetlands Overlay Maps in **Schedule 2 (Mapping)**:-

- (a) native *vegetation* areas;
- (b) *waterways*, waterbodies and *wetlands*;
- (c) declared fish habitat areas; and
- (d) riparian protection areas.

⁹ Editor's note—the **Planning scheme policy for the biodiversity, waterways and wetlands overlay code** provides advice and guidance for achieving certain outcomes of this code, including guidance for the preparation of an ecological assessment report and environmental management/rehabilitation plan.

8.2.3.3 Performance outcomes and acceptable outcomes

Table 8.2.3.3.1 Requirements for accepted development

Performance Outcomes		Acceptable Outcomes													
Dwelling House															
PO1	A <i>dwelling house</i> is sited such that waterways, <i>wetlands</i> and riparian areas are protected and the clearing of native <i>vegetation</i> is avoided or minimised.	AO1.1	The <i>dwelling house</i> is not located on land identified as being a <i>waterway</i> or <i>wetland</i> on a Biodiversity, Waterways and Wetlands Overlay Map.												
		AO1.2	Where the <i>dwelling house</i> is located on a lot containing or adjoining a waterway or <i>wetland</i> (other than canals and artificial <i>waterways</i>) identified on a Biodiversity, Waterways and Wetlands Overlay Map, the <i>dwelling house</i> is set back from the high bank of the <i>waterway</i> or <i>wetland</i> in accordance with Table 8.2.3.3.1A (Buffer distances for dwelling houses to waterways and wetlands other than canals and artificial waterways) .												
			<p>Table 8.2.3.3.1A Buffer distances for dwelling houses to waterways and wetlands other than canals and artificial waterways</p> <table border="1"> <thead> <tr> <th>Column 1 Waterway type / wetland</th> <th>Column 2 Buffer distance in Urban zone</th> <th>Column 3 Buffer distance in Non-urban Zone</th> </tr> </thead> <tbody> <tr> <td>Stream order 1 and 2</td> <td>10 metres</td> <td>10 metres</td> </tr> <tr> <td>Stream order 3 and above</td> <td>10 metres</td> <td>25 metres</td> </tr> <tr> <td><i>Wetland</i></td> <td colspan="2">10 metres where on a lot not more than 3,000m² in area; or 25 metres where on a lot more than 3,000m² in area.</td> </tr> </tbody> </table>	Column 1 Waterway type / wetland	Column 2 Buffer distance in Urban zone	Column 3 Buffer distance in Non-urban Zone	Stream order 1 and 2	10 metres	10 metres	Stream order 3 and above	10 metres	25 metres	<i>Wetland</i>	10 metres where on a lot not more than 3,000m ² in area; or 25 metres where on a lot more than 3,000m ² in area.	
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AO1.3	The <i>dwelling house</i> is not located on land identified as being an endangered or of concern regional ecosystem on a Regional Ecosystem Map ¹⁰ , unless its location is in accordance with a Property Map of Assessable Vegetation.														
		OR	Where there is an approved building envelope plan for a lot on land identified as being an endangered or of concern regional ecosystem on a Regional Ecosystem Map, clearing of native <i>vegetation</i> and building work does not extend beyond the building envelope, except for the purposes of a single lane driveway access.												
		AO1.4	The <i>dwelling house</i> is not located on land identified as being a native <i>vegetation</i> area on a Biodiversity, Waterways and Wetlands Overlay Map.												
			OR												

¹⁰ Editor's note—Regional Ecosystem Maps are available through the *Department of Environment and Heritage Protection*.

Performance Outcomes		Acceptable Outcomes									
			<p>Where there is an approved building envelope plan for a lot that contains an area of native <i>vegetation</i>, clearing of native <i>vegetation</i> does not extend beyond the building envelope, except for the purposes of driveway <i>access</i>.</p> <p>OR</p> <p>Where there is no approved building envelope plan for the lot, clearing of native <i>vegetation</i>, except for the purposes of driveway <i>access</i>:-</p> <p>(a) does not extend beyond:-</p> <p>(i) 1.5 times the height of the predominant tree canopy as measured from a building or structure, where in a bushfire hazard area; or</p> <p>(ii) 20 metres of a building or structure otherwise; and</p> <p>(b) does not exceed a total area of 600m².</p>								
Rural Uses											
PO2	The rural use is sited such that <i>waterways</i> and <i>wetlands</i> are protected.	AO2.1 AO2.2	<p>The rural use is not located on land identified as being a <i>waterway</i> or <i>wetland</i> on a Biodiversity, Waterways and Wetlands Overlay Map.</p> <p>Where the rural use is located on a lot containing or adjoining a <i>waterway</i> or <i>wetland</i> identified on a Biodiversity, Waterways and Wetlands Overlay Map, the rural use is set back from the high bank of the <i>waterway</i> or <i>wetland</i> in accordance with Table 8.2.3.3.1B (Buffer distances for rural uses to waterways and wetlands).</p> <p>Table 8.2.3.3.1B Buffer distances for rural uses to waterways and wetlands</p> <table border="1"> <thead> <tr> <th>Column 1 Waterway type / wetland</th> <th>Column 2 Setback/Buffer</th> </tr> </thead> <tbody> <tr> <td>Stream order 1 and 2</td> <td>10 metres</td> </tr> <tr> <td>Stream order 3 and above</td> <td>10 metres (where <i>animal husbandry</i> other than grazing of poultry) 25 metres (where not otherwise specified)</td> </tr> <tr> <td><i>Wetland</i></td> <td>10 metres (where <i>animal husbandry</i> other than grazing of poultry) 25 metres (where not otherwise specified)</td> </tr> </tbody> </table>	Column 1 Waterway type / wetland	Column 2 Setback/Buffer	Stream order 1 and 2	10 metres	Stream order 3 and above	10 metres (where <i>animal husbandry</i> other than grazing of poultry) 25 metres (where not otherwise specified)	<i>Wetland</i>	10 metres (where <i>animal husbandry</i> other than grazing of poultry) 25 metres (where not otherwise specified)
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Table 8.2.3.3.2 Performance outcomes and acceptable outcomes for assessable development

Performance Outcomes		Acceptable Outcomes	
Protection of Ecologically Important Areas			
PO1	Development protects the physical and ecological integrity and biodiversity of <i>ecologically important areas</i> through protection and retention of:- (a) existing terrestrial habitat areas; and (b) existing riparian, <i>waterway</i> and <i>wetland</i> habitat areas.	AO1.1	<i>Ecologically important areas</i> are retained in-situ and are conserved or rehabilitated to ensure their ongoing contribution to:- (a) the natural resources and biological diversity of the Sunshine Coast; and (b) the achievement of the water quality objectives for the applicable natural water catchment ¹¹ .
		AO1.2	Development within an <i>ecologically important area</i> does not increase the dimensions of the existing <i>development footprint</i> or the existing level of intensity of the development.
Management of Impacts on Ecologically Important Areas			
PO2	Development on or adjacent to land containing an <i>ecologically important area</i> is designed and constructed to:- (a) prevent any direct or indirect impacts on the <i>ecologically important area</i> ; (b) enhance and restore the <i>ecologically important area</i> ; (c) retain, enhance and restore known populations and supporting habitat of significant flora and fauna species; and (d) minimise the impacts of construction and ongoing use on native fauna.	AO2.1	Any building, structure or works is set back from a native <i>vegetation area</i> identified on a Biodiversity, Waterways and Wetlands Overlay Map, a minimum of:- (a) 50 metres where the native <i>vegetation area</i> forms part of the <i>protected estate</i> (e.g. National Park or Conservation Park) or is <i>Council Environmental Reserve</i> ; or (b) a distance equivalent to the height of the native <i>vegetation area</i> where not otherwise specified. Note—a greater setback distance may be required where the native <i>vegetation area</i> is also identified as a <i>waterway</i> or <i>wetland</i> on a Biodiversity, Waterways and Wetlands Overlay Map. Setback requirements for <i>waterways</i> and <i>wetlands</i> are addressed in Performance Outcome PO9. Note—where land is subject to the Bushfire Hazard Overlay, a greater setback distance may be required in order to achieve compliance with the Bushfire hazard overlay code .
		AO2.2	The design and layout of development minimises adverse impacts on <i>ecologically important areas</i> by:- (a) clustering lots and building envelopes into cleared areas and protecting habitat in consolidated areas so as to maximise the ecological connectivity of native <i>vegetation</i> and minimise edge effects; (b) aligning new property boundaries such that they do not traverse <i>ecologically important areas</i> ; (c) ensuring that alterations to natural landforms, hydrology and drainage patterns on the development <i>site</i> do not negatively affect <i>ecologically important areas</i> ; (d) ensuring that significant fauna habitat, including nesting tree hollows, ground nesting and breeding sites, and

¹¹ Editor's note—water quality objectives are prescribed in Schedule 1 of the *Environmental Protection (Water) Policy 2009*.

Performance Outcomes		Acceptable Outcomes	
			<p>significant fauna feeding habitat, including individual fauna feeding sites, trees, shrubs and understorey, are protected in their environmental context;</p> <p>(e) incorporating measures that avoid or minimise disruption to threatened wildlife and their habitat and allow for their safe movement through the <i>site</i>;</p> <p>(f) implementing effective measures to anticipate and prevent disturbance or predation of native fauna from domestic and pest species, such as night curfews and exclusion areas;</p> <p>(g) implementing effective measures to anticipate and prevent the entry or spread of pest plants in <i>ecologically important areas</i>; and</p> <p>(h) minimising potential changes in fire regimes and the need for fire breaks in areas outside building envelopes.</p> <p>AO2.3 <i>Infrastructure</i>, including roads, driveways, fences, dams, sewer lines, fire breaks, stormwater treatment devices and the like does not traverse <i>ecologically important areas</i>.</p> <p>Note—as far as reasonably practicable, <i>infrastructure</i> and services should be co-located and situated in existing cleared areas.</p>
PO3	<p>Where the clearing of native <i>vegetation</i> cannot practicably be avoided, development:-</p> <p>(a) minimises adverse impacts on ecological values to the greatest extent practicable; and</p> <p>(b) provides a biodiversity offset for the area that is adversely affected by the development that:-</p> <p>(i) results in a net environmental benefit within a short timeframe;</p> <p>(ii) is located on the development <i>site</i>, another <i>site</i> that has a nexus with the development <i>site</i> or a <i>site</i> that is within a rehabilitation focus area;</p> <p>(iii) is supported by appropriate management and funding arrangements to ensure the ongoing viability of the offset; and</p> <p>(iv) is not used for material or commercial gain.</p>	AO3	<p>Where the clearing of native <i>vegetation</i> cannot practicably be avoided, the development:-</p> <p>(a) limits the loss of native <i>vegetation</i> to the smallest possible area;</p> <p>(b) incorporates siting and design measures to protect and retain ecological values and underlying ecosystem processes within or adjacent to the development <i>site</i>, to the greatest extent practicable; and</p> <p>(c) provides a biodiversity offset in accordance with:-</p> <p>(i) the requirements for a biodiversity offset specified in Table 9.4.9.3.2 (Biodiversity offset requirements) of Section 9.4.9 (Vegetation management code); and</p> <p>(ii) the Planning scheme policy for biodiversity offsets.</p> <p>Note—a biodiversity offset will not be required for development where subject to a master development approval granted prior to the commencement of the planning scheme in which matters related to <i>vegetation</i> retention and protection have already been addressed.</p>
PO4	<p>Effective measures are implemented during the construction and operation of developments on or adjacent to land containing an <i>ecologically important area</i>, to protect fauna that</p>	AO4.1	<p>Any noise, vibration or dust generated during the construction and operational phases of development is managed to ensure it does not have an adverse impact on fauna within an <i>ecologically important area</i>.</p>

Performance Outcomes		Acceptable Outcomes	
	is sensitive to disturbance from noise, vibration, dust or light.	AO4.2	Lighting associated with development:- (a) does not contribute to an unacceptable level of illuminance (greater than 1 lux) for light-sensitive species within or at the boundary of an <i>ecologically important area</i> ; and (b) does not contribute to an unacceptable level of illuminance on landward horizons along coastal areas and known sea turtle nesting beaches.
Koala Conservation			
PO5	Development in koala habitat areas protects and provides for a net gain in mature and actively regenerating koala habitat.	AO5	Development avoids clearing <i>non-juvenile koala habitat trees</i> .
PO6	Development in koala habitat areas provides for safe and appropriate koala movement and mitigates any potential threats or risks to koalas.	AO6.1	Development provides safe koala movement opportunities as appropriate to the development type, and the potential for habitat connectivity on the <i>site</i> , in accordance with the criteria for determining habitat connectivity for koala movement set out in the Planning scheme policy for the biodiversity, waterways and wetlands overlay code .
		AO6.2	Development design complies with the Koala Sensitive Design Guideline: A guide to koala sensitive design measures for planning and development activities, Queensland Government (Department of Environment and Heritage) 2012.
		AO6.3	Development provides that during construction phases:- (a) measures are incorporated into construction practices to not increase the risk of death or injury to koalas; (b) native <i>vegetation</i> that is cleared in an area intended to be retained for safe koala movement opportunities is progressively restored and rehabilitated; and (c) public accessways are located and designed to avoid disturbance of koala habitat through measures such as exclusion fencing and devices, signage and designated access points.
		AO6.4	Development incorporates landscapes that provide food, shelter and movement opportunities for koalas, consistent with the site layout and development design.
Linking of Ecologically Important Areas through Ecological Linkages			
PO7	Ecological linkages are protected and enhanced and have dimensions and characteristics that:- (a) effectively link <i>ecologically important areas</i> on and/or adjacent to the <i>site</i> ; and (b) facilitate unimpeded, safe and effective movement of terrestrial and aquatic fauna traversing the corridor or accessing and/or using the	AO7.1	Where located in an ecological linkage, as identified on Strategic Framework Map SFM5 (Natural Environment Elements) , or a local ecological linkage as identified on a local plan elements figure, development is sited and designed to maximise the ecological connectivity of <i>vegetation</i> within the <i>site</i> and to adjacent <i>sites</i> .
		AO7.2	Where located within an ecological linkage, as identified on Strategic Framework Map SFM5 (Natural Environment Elements) or

Performance Outcomes		Acceptable Outcomes	
	site as habitat.		<p>a local ecological linkage, as identified on a local plan elements figure, development provides for native <i>vegetation</i> to be retained, regenerated, and rehabilitated in such a way as to:-</p> <ul style="list-style-type: none"> (a) ensure protection of wildlife refuges; (b) maintain <i>vegetation</i> in patches of the greatest possible size and with the smallest possible edge-to-area ratio; (c) maximise the ecological connectivity of <i>vegetation</i> located on the subject <i>site</i> and on adjacent properties; and (d) facilitate the dispersal or movement of native wildlife known to occur in the area. <p>AO7.3 Development provides for unimpeded movement of fauna within an ecological linkage, or local ecological linkage, to be facilitated by:-</p> <ul style="list-style-type: none"> (a) ensuring that development, both during construction and operation, does not create physical barriers and safety hazards (such as roads, pedestrian access and in-stream structures) to the movement of fauna along or within the ecological linkage; (b) providing wildlife movement <i>infrastructure</i> where necessary and directing fauna to locations where wildlife movement <i>infrastructure</i> has been provided to enable fauna to safely negotiate a development area; (c) separating fauna from potential hazards (e.g. through fauna exclusion and directional fencing and fauna overpasses and underpasses); and (d) providing mitigating measures such as traffic calming devices, signage and lighting.
Rehabilitation of Ecologically Important Areas			
PO8	Development provides for <i>ecologically important areas</i> to be restored and enhanced so as to contribute towards a functional and connected network of viable habitat areas.	<p>AO8.1 Development provides for cleared, degraded or disturbed <i>ecologically important areas</i> to be rehabilitated or allowed to regenerate naturally.</p> <p>AO8.2 Development provides for locally native plant species to be predominantly used in the revegetation and landscape planting on the <i>site</i>.</p> <p>AO8.3 Development provides for revegetation and landscape planting that does not use declared or environmental weeds as specified in the Planning scheme policy for development works.</p> <p>Editor's note—Section 9.4.2 (Landscape code) sets out requirements for revegetation and habitat restoration works.</p>	
Buffers to Natural Waterways and Wetlands			
PO9	Development provides and maintains adequate vegetated <i>buffers</i> and setbacks to protect and	AO9.1	<p>Development and the clearing of native <i>vegetation</i> do not occur within:-</p> <ul style="list-style-type: none"> (a) a riparian protection area, as identified

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	<p>enhance the environmental values¹² and integrity of natural <i>waterways</i> and <i>wetlands</i>, having particular regard to:-</p> <ul style="list-style-type: none"> (a) fauna habitats; (b) wildlife corridors and connectivity; (c) adjacent land use impacts; (d) stream integrity; (e) water quality; (f) sediment trapping; (g) resilience to flood and storm tide inundation events and consequent erosion, including the safety of people and risk of damage to property on the site; (h) overland and groundwater flows; and (i) recreational amenity. 	AO9.2	<p>on a Biodiversity, Waterways and Wetlands Overlay Map; or</p> <ul style="list-style-type: none"> (b) 10 metres of each high bank of a <i>waterway</i> identified on a Biodiversity, Waterways and Wetlands Overlay Map otherwise. <p>Development provides for the rehabilitation of land within:-</p> <ul style="list-style-type: none"> (a) a riparian protection area, as identified on a Biodiversity, Waterways and Wetlands Overlay Map; or (b) 10 metres of each high bank of a <i>waterway</i> identified on a Biodiversity, Waterways and Wetlands Overlay Map otherwise.
Management of Public Access and Edge Effects			
PO10	Development on land adjacent to a <i>waterway</i> or <i>wetland</i> maintains an appropriate extent of public access to <i>waterways</i> and <i>wetlands</i> and minimises edge effects.	AO10	Development adjacent to a <i>waterway</i> or <i>wetland</i> provides that:- <ul style="list-style-type: none"> (a) no new lots directly back onto the riparian area; and (b) new public roads are located between the riparian <i>buffer</i> and the proposed development areas.
Hydrologic Regimes			
PO11	Development ensures that the natural surface water and groundwater hydrologic regimes of <i>waterways</i> , <i>wetlands</i> and associated <i>buffers</i> are maintained to the greatest extent possible.	AO11	<p>Development does not change the natural surface water or groundwater hydrologic regime of a <i>waterway</i> or <i>wetland</i>, including through channelisation, redirection or interruption of flow.</p> <p>OR</p> <p>Where development changes the natural surface water or hydrologic regime of a <i>waterway</i> or <i>wetland</i>, the extent of change is minimised to ensure that the <i>waterway</i> or <i>wetland</i> is protected such that:-</p> <ul style="list-style-type: none"> (a) there is no change to the reference duration high flow and low flow duration frequency curves, low flow spells frequency curve and mean annual flow to and from the <i>waterway</i> or <i>wetland</i>; (b) stream flows into the <i>waterway</i> or <i>wetland</i> comply with all relevant water quality objectives for the catchment; (c) where development would increase the velocity or volume of stormwater flows into the <i>waterway</i> or <i>wetland</i>, the collection and reuse of stormwater occurs in accordance with (a) and (b) above; (d) development avoids groundwater abstraction; (e) development maintains groundwater recharge and discharge processes; and (f) development does not result in the ingress of saline water into freshwater

¹² Editor's note—environmental values of waters are prescribed in Schedule 1 of the *Environmental Protection (Water) Policy 2009*.

Performance Outcomes		Acceptable Outcomes	
			aquifers.
Groundwater and Surface Water Quality			
PO12	Development maintains or enhances the quality of groundwater and surface water within or downstream of the <i>site</i> .	AO12	Development maintains the water quality of onsite and adjacent <i>waterways</i> and <i>wetlands</i> by:- <ul style="list-style-type: none"> (a) avoiding or minimising and mitigating the release of contaminated water and wastewater by treating the contaminated water or wastewater to achieve all relevant water quality objectives¹³ prior to discharge into receiving waters on site or prior to discharge from the <i>site</i>; (b) avoiding the increased conveyance of stormwater and sediment to adjacent <i>waterways</i> and <i>wetlands</i>; (c) establishing appropriate vegetation <i>buffers</i> and setbacks from a <i>waterway</i> or <i>wetland</i> in accordance with the other relevant acceptable outcomes of this code; and (d) avoiding or minimising and managing the disturbance of potential or actual <i>acid sulfate soils</i>.

¹³ Editor's note—water quality objectives are prescribed in Schedule 1 of the *Environmental Protection (Water) Policy 2009*.