

#### 1.0 Short title

This Temporary Local Planning Instrument (TLPI) may be cited as Temporary Local Planning Instrument – Protection of biodiversity values.

#### 2.0 Purpose

The purpose of this TLPI is to protect and enhance core ecological linkages, other ecological linkages, priority species habitat, including koala habitat, wetlands and waterways and matters of local environmental significance.

To achieve this purpose the TLPI:

- i) prescribes categories of assessment for development that requires the clearing of vegetation or otherwise may impact matters of environmental significance; and
- ii) includes assessment benchmarks for development to which this TLPI applies.

The purpose of this TLPI will be achieved through development that is consistent with the assessment benchmarks contained in the Biodiversity Overlay Code.

# 3.0 Application

The TLPI applies to the Gympie Regional Council local government area. Further, applies to land designated under the Biodiversity overlay mapping as identified by the maps provided within Appendix F – Biodiversity overlay map set.

The TPLI does not replace any assessment required under the Gympie Regional Council Planning Scheme 2013 (the planning scheme) and is to be read in conjunction with the requirements of the planning scheme<sup>1</sup>.

# 4.0 Effect of this Temporary Local Planning Instrument (TLPI)

This TLPI is a local categorising instrument under the Planning Act 2016 which specifies the categories of assessment and sets out assessment benchmarks for assessing devlopment.

The categories of development and assessment (Appendix A) for the Biodiversity overlay provides:

<sup>&</sup>lt;sup>1</sup> Refer Hierarchy of assessment





- the category of development and the level of assessment applicable under the Biodiversity overlay
- requirements for accepted development and accepted development subject to requirements; and
- requirements for code assessment and the assessment benchmarks for assessable development.

The categories of development and assessment for the Biodiversity overlay, Table 1 (Appendix A) provides:

- accepted development is not required to comply with the Biodiversity overlay code (Appendix
   B)
- accepted development subject to requirements is to comply with the nominated assessment benchmarks within the Biodiversity overlay code (Appendix B)
- where not complying with the acceptable outcome in the nominated assessment benchmarks, accepted development subject to requirements becomes code assessment against the nominated assessment benchmarks within the Biodiversity overlay code (Appendix B); and
- code assessment is to be assessed against the assessment benchmarks for assessable development under the Biodiversity overlay code (Appendix B).

No development under the TLPI is subject to impact assessment.

For accepted development subject to requirements, compliance with the acceptable outcome means compliance with the performance outcome and development complies with the Biodiversity overlay code (Appendix B).

#### For code assessment:

- compliance with an acceptable outcome means compliance with the performance outcome
- where there is no acceptable outcome, compliance with the performance outcome is required
- compliance with the performance outcomes means compliance with the overall outcomes and the purpose of the Biodiversity overlay code
- where not complying with the performance outcomes, compliance with the overall outcomes is required; and
- compliance with the overall outcomes means compliance with the purpose of the Biodiversity overlay code.



# 5.0 Hierarchy of assessment

To the extent there is any inconsistency between the planning scheme and the TLPI, the TLPI prevails.

The hierarchy of assessment under the TLPI does not change the category or level of assessment under the planning scheme.

The issuing of a development approval under the TLPI does not replace a requirement to obtain a development approval under the planning scheme.

#### 6.0 Interpretation

Under the TLPI the following appendices are relevant to an assessment:

- Appendix A Categories of development and levels of assessment for the Biodiversity overlay within Table 1
- Appendix B Biodiversity overlay code providing the purpose, overall outcomes, and assessment benchmarks for accepted development subject to requirements and for assessable development within Table 2 and the Priority Species within Table 3
- Appendix C Definitions provides a list of the administrative definitions referred to in the TPLI within Table 4
- Appendix D Ecological Assessment Report provides information to assist applicants with the preparation of an ecological assessment report for submission with a development application
- Appendix E Biodiversity offset provides information to assist applicants to adequately address the assessment benchmarks under the Biodiversity overlay code relating to a biodiversity offset for matters of local environmental significance; and
- Appendix F Biodiversity overlay map set provides the maps and the designations that apply to land affected by the Biodiversity overlay code.

Under Appendix E – Biodiversity offset it is intended an environmental offset may be provided at the discretion of Council, in circumstances where it is determined appropriate to allow development that would result in the clearing of vegetation which would cause a significant residual impact<sup>2</sup>.

<sup>&</sup>lt;sup>2</sup> Refer Appendix E – Biodiversity offset



All other terms not defined in this TLPI have the same meaning as provided within the *Planning Act 2016*, the *Planning Regulation 2017* and the planning scheme, unless annotated otherwise.

# 7.0 Duration of TLPI

In accordance with section 9(3)(a) of the *Planning Act 2016*, this TLPI has effect from the effective date of 23 February, 2022 for a period of two (2) years, unless repealed earlier.



# **Appendix A** – Categories of development and levels of assessment for the Biodiversity overlay

Table 1 - Categories of development and levels of assessment for the Biodiversity Overlay

Category of development and the level of assessment	Assessment benchmarks for accepted development, accepted development subject to requirements and assessable development	
Accepted development		
Operational work for clearing vegetation within a designated area under the Biodiversity overlay mapping which is accepted vegetation clearing <sup>3</sup> .	Not applicable	
Building work within an area designated under the Biodiversity overlay mapping where <i>minor</i> building work <sup>4</sup>	Not applicable	
Material change of use within an area designated under the Biodiversity overlay mapping where comprising <i>minor building work</i> <sup>5</sup> .	Not applicable	
Reconfiguring a lot within an area designated under the Biodiversity overlay mapping that is for a boundary realignment other than within a core ecological linkage or wetland and waterway <sup>6</sup> .	Not applicable	
Accepted development subject to requirement	s	
Material change of use or building work for a Dwelling house in an area designated under the Biodiversity overlay mapping.	Biodiversity overlay code – Section 1 AO1.1 (only)	
Code assessment		
Operational work for clearing vegetation in an area designated under the Biodiversity overlay mapping that is not accepted vegetation clearing.	Biodiversity overlay code	

<sup>&</sup>lt;sup>3</sup> Refer to the definition of accepted vegetation clearing under Appendix C, Table 4

<sup>&</sup>lt;sup>4</sup> Refer to the definition of minor building work under Appendix C, Table 4

<sup>&</sup>lt;sup>5</sup> Refer to the definition of minor building work under Appendix C, Table 4

<sup>&</sup>lt;sup>6</sup> Refer to the definition of a core ecological linkage, wetland and waterway under Appendix C, Table 4



Category of development and the level of assessment	Assessment benchmarks for accepted development, accepted development subject to requirements and assessable development	
Operational work (other than operational work for vegetation clearing) within an area designated under the Biodiversity overlay mapping.	Biodiversity overlay code	
Material change of use or building work for a Dwelling house where not accepted development subject to requirements <sup>7</sup> .	Biodiversity overlay code – Section 1 PO1 (only)	
Material change of use or building work, other than for a Dwelling house, in an area designated under the Biodiversity overlay mapping where not minor building work.	,	
Reconfiguring a lot within an area designated under the Biodiversity overlay mapping where not for a boundary realignment that is accepted development.	, ,	
Impact assessment		
No impact assessment	Not Applicable	

<sup>&</sup>lt;sup>7</sup> Where not complying with acceptable outcome AO1.1 under *Appendix B – Biodiversity overlay Code* 



# **Appendix B** – Biodiversity overlay code

# **Purpose**

The purpose of the biodiversity overlay code is to protect and enhance core ecological linkages, ecological linkages, priority species habitat, including koala habitat, wetlands and waterways, and matters of local environmental significance.

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

- (a) development maintains and improves the functionality, connectivity, diversity and viability of core ecological linkages, ecological linkages, habitat for priority species<sup>8</sup> and matters of local environmental significance
- (b) development protects koala habitat and movement corridors, and minimises adverse impacts on koalas
- (c) development protects and enhances the functionality and ecological value of core ecological linkages and degraded areas are rehabilitated
- (d) where unavoidable, development within core ecological linkages is located in areas of lowest ecological value and designed to minimise intrusion into identified linkages, providing continuous connected linkages of sufficient dimensions and characteristics that will enable safe and unimpeded movement of fauna through the site
- (e) development does not adversely impact on the physical and hydrological integrity, water quality or ecological functions and values of waterways and wetlands
- (f) management strategies and appropriate clearing practices are implemented to ensure any priority species impacted by development activities are managed and protected during works; and
- (g) any significant residual impact caused by development is offset where considered appropriate and agreed by Council.

**Editor's Note** – In addition to the requirements of this planning scheme, obligations for the protection of matters of environmental significance are established by the Commonwealth and Queensland Government. Additional approvals or referrals may be required.

**Editor's Note** – An ecological assessment report prepared by a suitably qualified and experienced ecologist, generally in accordance with *Appendix D*, is required to demonstrate compliance with the code.

<sup>&</sup>lt;sup>8</sup> Priority species are identified in Table 3 – Priority species



Table 2 - Assessment benchmarks for accepted development subject to requirements and assessable development

Performance outcome	Acceptable outcomes		
Section 1 For accepted development subject to requirements for Dwelling houses			
PO1	AO1.1		
Dwelling houses:  a) are located in existing cleared areas or areas of lowest ecological value b) are located and designed: i. to minimise intrusion into identified core ecological linkages and wetland and waterways, providing continuous connected linkages of sufficient dimensions and characteristics that will enable safe and unimpeded movement of fauna through the site ii. maintain, and not fragment, the regional connectivity of core ecological linkages c) are constructed without having an adverse impact on biodiversity values where practicable; and d) minimise the total footprint within which all buildings, structures, driveways, and other works are contained.	does not exceed 500m² in area excluding an access driveway not exceeding 3m in width; and b) are not located within core ecological linkages or wetland and waterways.		
Section 2 For all assessable development, excluding	ng Dwelling houses		
Priority species habitat, ecological linkages and matters	of local environmental significance		
PO2  Development avoids and minimises impacts on the physical integrity, ecological integrity, and biodiversity value of matters of local environmental significance as mapped.			
PO3	AO3.1		
Development does not adversely impact on priority species <sup>9</sup> or their habitat.	No acceptable outcome specified.		
PO4	AO4.1		
Development within ecological linkages maintains or reinstates a vegetated setback to core ecological linkages to minimise edge effects and other adverse impacts. The			

<sup>&</sup>lt;sup>9</sup> Priority species are identified in Table 3 – Priority species



Performance outcome		Acceptable outcomes	
linkage (a) (b) (c)	tement of a vegetated setback to core ecological is is vegetated: with priority species habitat at a density appropriate to the location; and with a mix of trees, shrubs, and groundcovers consistent with the pre-cleared regional ecosystem for the area.		
	y species habitat (Koala)		
PO5 Develo a) b)	pment is designed, constructed and operated to:  protect and enhance koalas and koala habitat and avoid adverse impacts  provide measures to assist the survival of koala populations in the area to mitigate any potential threats or risk to koalas; and provide for safe and appropriate koala movement across the landscape.	AO5.1  Development:  (a) retains koala food, shelter and habitat trees <sup>11</sup> ; and  (b) is not located within the tree protection zone of koala food, shelter and habitat trees.  Editor's note: Building envelopes can be submitted as part of applications demonstrating compliance with this acceptable outcome. Building envelopes may also need to consider bushfire mitigation works which are required by zone and development codes.  Editor's note: The method for determining the tree protection zone is included within Appendix D.  Editor's note: Koala feed trees, koala shelter trees and koala habitat trees found in the Gympie region and relevant to the outcomes in this code are identified within Appendix D.	
PO6 Develo	pment:	AO6.1  No acceptable outcome specified.	
	provides for safe, practical, unobstructed koala movement across the site		
(b)	incorporates measures to mitigate the risk of death or injury to koalas; and		
(c)	incorporates planting that improves food and shelter for koalas.		
<b>Editor's note:</b> Applicants can refer to the <i>Koala-sensitive Design Guideline,</i> A guide to koala-sensitive design measures for planning and development activities, 2020, DES for further guidance.			

 $<sup>^{\</sup>rm 11}$  Refer to Appendix D - Ecological Assessment Report, Table 2



Performance outcome	Acceptable outcomes		
PO7	AO7.1		
During any clearing and construction phases, measures are incorporated to protect koalas from death or injury.	Threats to koalas during clearing and construction ar mitigated by:		
	(a)	a t	uring no tree in which a koala is present or tree with a crown overlapping a tree itaining a koala is cleared
	(b)		dertaking clearing of vegetation in stages, lensuring:
		i.	no more than 1 ha is cleared per day for sites less than 6 ha in size
		ii.	no more than 2 ha is cleared per day for sites greater than 6 ha in size
		iii.	that between each stage there is at least 12 hours where no clearing occurs
		iv.	koala habitat is always linked to allow koalas to move out of the site
	(c)	koa	uring suitably qualified and experienced la spotters and catchers are on site when aring is being undertaken
	(d)	•	venting domestic dogs and security dogs ering the site; and
	(e)	usir	ng koala safety fencing.
	compli be ach	ance vieved.	<b>te:</b> Clearing of vegetation is only contemplated where with the other performance outcomes of the code can. In circumstances where compliance can be achieved, ance outcome and acceptable outcome applies.
			<b>re:</b> A description of suitably qualified and experienced ners is included within Appendix D.
Core ecological linkages			

# **PO8**

Development is located outside core ecological linkages. No acceptable outcome specified. Where it is not possible to locate development outside a core ecological linkage, development:

- a) is located within existing cleared areas, or areas of lowest ecological value over other areas
- b) is located and designed to:
  - i. minimise intrusion into identified core ecological linkages and ecological linkages,

# AO8.1



Performance outcome	Acceptable outcomes		
providing continuous connected linkages of sufficient dimensions and characteristics that will enable safe and unimpeded movement of fauna through the site  ii. maintains and not fragment the regional connectivity of core ecological linkages  c) is constructed without having an adverse impact on biodiversity values; and  d) minimises the total footprint within which all buildings, structures, driveways, and other development works are contained.  Editor's note: In this provision 'development' includes clearing of vegetation but does not include planting native vegetation.  Editor's note: Building envelopes can be submitted as part of applications demonstrating compliance with the performance outcomes. Building envelopes should also consider bushfire mitigation works which may be required.			
PO9	AO9.1		
Disturbed, cleared or degraded areas within a core ecological linkage are reinstated, enhanced and rehabilitated with vegetation that:  a) is consistent with the pre-cleared regional ecosystem for the site; and b) includes a necessary mix of trees, shrubs and	No acceptable outcome specified.		
groundcovers. <b>Editor's note:</b> Enhancement and rehabilitation may include but is not limited to planting of native vegetation and the removal of pest species and will from a condition of approval.			
PO10	AO10.1		
The operation of the development minimises impacts on the physical integrity, ecological integrity, and biodiversity value of core ecological linkages.	No acceptable outcome specified.		
Wetlands and waterways	Wetlands and waterways		
Editor's note - some mapped habitat areas are also waterways or wetland areas. In these circumstances, all relevant priority species habitat, core ecological linkages, ecological linkages and waterways and wetlands acceptable outcomes or performance outcomes apply.			
PO11	AO11.1		
	No acceptable outcome specified.		



Performance outcome		Accept	table outcomes
areas a	pment maintains waterway and wetland habitat and does not create impediments to the connectivity habitat.		
PO12		AO12.1	
(a) protect or enhance ecological processes and values  (b) protect water quality and aquatic conditions  (c) provide unimpeded movement of fauna along waterways or around wetlands; and  (d) improve bank stability and prevent soil erosion.  (b) 25 metres from the a waterway with a second to the description of the de		50 metres from the outermost part of a wetland;	
PO13  Development does not alter the location, storage or natural functions of surface and ground water of wetlands and waterways.		I · · · · · · · · · · · · · · · · · · ·	
Other	matters		
PO14		AO14.1	
Development is designed and located to maintain and enhance connectivity between areas of core ecological linkages, ecological linkages, priority species habitat and wetlands and waterways on and adjacent to the site.			
Editor's Note: Where development is proposed to cross priority species movement paths, fauna friendly movement solutions developed in accordance with the Queensland Government Fauna Sensitive Road Design Manual Volume 2: Preferred Practices; and the QLD Government Koala-Sensitive Design Guidelines should be incorporated to provide for the safe movement of fauna through the site and to adjoining sites.			
PO15		AO15.	1
Where development occurs, it is designed and sited to minimise adverse impacts, and protect the physical and ecological integrity and biodiversity values of matters of local environmental significance by:			eptable outcome specified.



Performance outcome		Acceptable outcomes	
(a)	minimising the total footprint within which all activities, buildings, structures, driveways, and other works are contained, including building envelopes		
(b)	ensuring development is located in existing cleared areas or areas of lowest ecological value over other areas; and		
(c)	incorporating measures to protect and retain ecological values and ecosystem processes.		
PO16		AO16.1	
species	pment does not result in the introduction of pest s (plant or animal), that pose a risk to ecological ty or disturbance to native flora and fauna.	No acceptable outcome specified.	
PO17		AO17.1	
	pment minimises potential for disturbance of fauna ne impacts of noise, light, vibration, or other sources.	No acceptable outcome specified.	
PO18		AO18.1	
	development involving clearing of vegetation is dable and necessary:	No acceptable outcome specified.	
(a)	fauna is safely relocated by suitably qualified and experienced spotter catchers to appropriate, safe alternative locations that contain a similar habitat structure		
(b)	the sequence of habitat clearing and/or disturbance ensures that fauna is not isolated from adjoining areas of habitat to allow for the safe and practical movement of fauna to areas of habitat not proposed to be cleared		
(c)	impacts from construction and ongoing use on native fauna and flora are minimised		
(d)	any cleared vegetation is reused, recycled or disposed of safely; and		
(e)	measures are implemented to prevent soil degradation, erosion, slippage and sedimentation.		
compliar	<b>note:</b> Clearing of vegetation is only contemplated where nee with the other outcomes of this code can be achieved. In ances where compliance can be achieved, this performance applies.		



Performance outcome	Acceptable outcomes
<b>Editor's note:</b> A description of suitably qualified and experienced spotter catchers is included within Appendix D.	
PO19	AO19.1
Development retains natural landforms, including steep land (having a slope of more than 20%) and natural drainage lines and minimises earthworks on a site.	No acceptable outcome specified.
Offsets	
PO20	AO20.1
Any significant residual impact on core ecological linkages, ecological linkages, priority species habitat and wetlands and waterways caused by development, which is	·
unavoidable, is offset in accordance with <i>Appendix E</i> - <i>Biodiversity offsets</i> <sup>12</sup> .	
unavoidable, is offset in accordance with Appendix E -	

<sup>&</sup>lt;sup>12</sup> A determination as to whether an environmental offset is appropriate and an acceptable response to the clearing of habitat causing a significant residual impact is at the reasonable discretion of the Council.



**Table 3 - Priority species** 

Table 3 - Priority species			
Column 1 Identified priority species (fauna)	Column 2 Identified priority species (flora)		
Black Breasted Button Quail (Turnix melanogaster)	Australian Teak (Flindersia australis)		
Brush-tailed Phascogale (Phascogale tapoatafa)	Bloodwood (Corynmbia)		
Eastern Yellow Robin (Eopsaltria australis)	Blue Gum (Eucalyptus tereticornis)		
Feathertail Glider (Acrobates pygmaeus)	Blue Quandong (Elaecocarpus grandis)		
Great Barred Frog (Mixophyes fasciolatus)	Broad-leafed Paperbark (Melaleca quinquenervia)		
Koala (Phascolarctos cinereus)	Cabbage Tree Palm (Livistona australis)		
Mary River Cod (Maccullochella mariensis)	Flooded or Rose Gum (Eucalyptus Grandis)		
Noisy Pitta (Pitta versicolor)	Gympie Messmate (Eucalyptus cloeziana)		
Ornate Rainbowfish (Rhadinocentrus ornatus)	Gympie Nut (Macadamia ternifolia and Macadamia integrifolia)		
Platypus (Ornithorhynchus anatinius)	Hoop Pine (Araucaria cunninghamii)		
Sugar Glider (Petaurus breviceps)	Kauri (Agathis robusta)		
Topknot Pigeon (Lophoaimus antarcticus)	Rusty Tulip Oak, Copper Booyong (Argyrodendron sp. Kin Kin)		
Wompoo fruit dove (Ptilinopus magnificus)	Swamp Grasstree (Xanthorrhea fulva)		
	Wallum Sun Orchid (Thelmitra purpurata)		



# **Appendix C – Definitions**

**Table 4 - Administrative terms and definitions** 

Column 1 Term	Column 2 Definition
Accepted vegetation clearing	Clearing of vegetation under the following circumstances —  (a) vegetation clearing undertaken by a statutory authority on land other than freehold land; (b) vegetation clearing undertaken by the Council in the exercise of its power under the Local Government Act 2009; (c) vegetation clearing undertaken by or on behalf of the Council on Council owned or controlled land; (d) clearing of a plant defined as a prohibited or restrictive biosecurity matter under the Biosecurity Act 2014; (e) vegetation clearing that is reasonably necessary for carrying out work that is: — i. authorised or required under legislation; or ii. specified in a notice served by Council or another regulatory authority; (f) vegetation clearing in accordance with the following: i. a current development approval for building work, a material change of use, reconfiguring a lot or operational work; or ii. for minor building work <sup>13</sup> ; (g) vegetation clearing in accordance with a current permit or other approved plan granted under a local law; (h) vegetation clearing where: i. a person is acting to control an immediate threat to life or property; ii. no other lawful action is reasonably available to the person to avoid the immediate threat to life or property; iii. no reasonable opportunity exists for an application to be made to clear the vegetation; and iv. Council is provided details in writing as soon as practicable after the action has been taken (i) vegetation clearing that is for essential management <sup>14</sup> (j) clearing which is a property maintenance activity <sup>15</sup> ; and (k) vegetation clearing that is for routine management <sup>16</sup> .  Editor's note: vegetation clearing which is defined as accepted vegetation clearing under this TPLI may be subject to assessment under State and/or Federal legislation.
Clear for vegetation	Has the same meaning as the Vegetation Management Act 1999

<sup>&</sup>lt;sup>13</sup> Planning Regulation 2017, Schedule 24 – Dictionary

<sup>&</sup>lt;sup>14</sup> Planning Regulation 2017, Schedule 24 – Dictionary

 $<sup>^{15}</sup>$  Refer to the definition under Appendix C, Table 4

<sup>&</sup>lt;sup>16</sup> Planning Regulation 2017, Schedule 24 – Dictionary



Column 1	Column 2		
Term	Definition		
Core ecological linkages	Includes land designated a Core ecological linkage under the Biodiversity Overlay map set – Appendix F.		
Ecological linkages	Includes land designated a Ecological linkage under the Biodiversity Overlay map set – Appendix F.		
Matters of local environmental significance (MLES)	The following are matters of local environmental significance (MLES) for the Gympie Region:  • Core ecological linkages • Ecological linkages • Priority species habitat; and • Wetlands and waterways.  Gympie Regional Council MLES are identified in the Biodiversity Overlay map set - Appendix F.		
Minor building work	the lesser of the following:  (a) 50m²  (b) an area equal to 5% of the gross floor area of the building <sup>17</sup> .		
Priority species habitat	Includes land designated Priority species habitat under the Biodiversity Overlay map set  – Appendix F.		
Property maintenance activity	Clearing vegetation which is reasonably necessary for property maintenance including the following:  1. maintenance of an existing farm track and existing farm shed  2. construction of a farm track and farm shed on site for agricultural purposes, where located outside a core ecological linkage or a wetland and waterway  3. maintenance of crops  4. slashing of vegetation  5. harvesting of crops  6. maintenance of pasture and cleared land areas  7. pruning, felling, and clearing of orchard vegetation species  8. for surveying purposes  9. collection of firewood for non-commercial purposes; and,  10. removal of any pest plant species.		

 $<sup>^{17}</sup>$  Has the same meaning as that under Schedule 24 of the *Planning Regulation 2017* 



Column 1	Column 2				
Term	Definition				
	For an ecological assessment report – a consultant with tertiary qualifications environmental science, botany, ecology, zoology, or another related discipline, and demonstrated experience in undertaking flora and fauna surveys and environmental assessments.				
	For erosion and sediment control – a Certified Professional in Erosion and Sediment Control through the International Erosion Control Associations (IECA) or a certified practicing soil scientist (CPSS) or certified practitioner erosion and sediment control (CPESC), or an RPEQ (or equivalent) experienced and trained in soil science and erosion and sediment control.				
Waterway	A waterway is:				
	<ul> <li>identified on the Biodiversity Overlay map set – Appendix F; or</li> </ul>				
	a watercourse as defined under the Water Act 2000.				
Wetland	A wetland is:  • identified on the Biodiversity Overlay map set – Appendix F; or				
	<ul> <li>areas of permanent or periodic/intermittent inundation, whether natural or artificial, with water that is static or flowing, fresh, brackish or salt, including areas of marine water, the depth of which at low tide does not exceed six metres.</li> </ul>				



# **Appendix D - Ecological Assessment Report Policy**

#### Purpose of the policy

- (1) The purpose of this policy is to outline the minimum requirements of an ecological assessment report that may be required to support a development application where subject to the Biodiversity overlay code. It is intended that applicants who follow this guideline will provide Council with enough information to:
  - (a) assess the ecological impacts of proposed development;
  - (b) assist in demonstrating compliance with the performance outcomes of the Biodiversity overlay code; and
  - (c) determine if an ecological impact is a significant residual impact.

Applicants are encouraged to discuss with Council about additional information that would assist in the assessment of ecological impacts.

# What is a significant residual impact?

For the purposes of the Biodiversity overlay code, a significant residual impact (SRI) is an impact on a matter of local environmental significance (MLES) that is likely to:

# **MLES: Priority Local Species (Schedule 1)**

An action will have a significant residual impact on priority local species habitat if the action is likely to:

- reduce the extent of the occurrence of a priority local species
- reduce the extent of vegetation required for priority local species survival
- lead to a decrease in the size of the local population of a priority local species
- fragment habitat or an existing population for a priority local species
- result in genetically distinct populations forming as a result of habitat isolation
- introduce disease that may cause a priority local species population to decline
- interfere with the recovery of a priority local species
- cause disruption to ecologically significant locations (breeding, feeding, nesting, migration or resting sites) of a priority local species.

#### MLES: Wetlands and waterways, including buffer areas

An action will have a significant residual impact on a wetlands or waterway if it is likely that the action will result in environmental values being affected in any of the following ways:

- areas of the wetland or waterway being degraded or artificially modified;
- a measurable change in water quality of the wetland or waterway; for example, a change in the level of the physical and/or chemical characteristics of the water, including salinity, pollutants, or nutrients in the wetland or waterway, to a level that exceeds the water quality guidelines for the waters;
- any impact resulting in a change to the habitat or lifecycle of native species, including invertebrate fauna and fish species, dependent upon the wetland or waterway; and



• any impact resulting in a change in the volume, timing, duration and frequency of ground and surface water flows in either a wetland or waterway.

# MLES: Core ecological linkages and ecological linkages

An action will have a significant residual impact on core ecological linkages and ecological linkages if it is likely that the action will result in environmental values being affected in any of the following ways:

- vegetation clearing results in the physical separation (any clearing that would result in the separation of an otherwise intact area of vegetation) of vegetation within the Core ecological linkages or ecological linkages and on adjoining sites;
- development that is located in an area on the site that creates a physical barrier, causes fragmentation and loss of connectivity;
- permanent modification of vegetation within the corridor boundaries;
- vegetation clearing results in loss of stepping stones or connectivity to habitat nodes;
- vegetation clearing isolates wildlife populations and their habitat resources;
- the installation of physical barriers that prevent wildlife movement and dispersal;
- any impact resulting in edge effects that degrade the values of the corridor; and
- any impact resulting in the reduction of the width of the core ecological linkages.

#### Who is qualified to prepare an ecological assessment report?

An ecological assessment report must be prepared by a specialist with a tertiary qualification in environment science, botany, ecology, zoology or other related discipline, and with demonstrated experience in undertaking flora and fauna surveys and environmental assessment.

#### Contents of an ecological assessment reports

The minimum information to be contained within an ecological assessment report is outlined in the sections below.

#### **Description of methodology**

The methodology used to complete the ecological assessment report must be provided, including:

- (a) desktop methodology that was used
- (b) field survey techniques and methodology that was used; and
- (c) any assumptions that were made.

#### Assessment area

The assessment area is to include the maximum area that is likely to be affected by the construction and ongoing operation of the proposed development, including potential offsite impacts.



# Identification of physical characteristics and ecological features

The physical characteristics of the site and existing local natural values must be described, including:

- (a) Regional ecosystems, geology and soils
- (b) hydrology, water quality (surface and groundwater) and stream health indicators
- (c) topography, slope and landform
- (d) waterbodies and wetlands
- (e) connectivity; and
- (f) existing buildings and infrastructure.

The ecological features and functions of the site (the assessment area) must be identified and detailed, including:

- (a) location, size and extent of ecological features
- (b) presence of flora, fauna, and vegetation communities (remnant, regrowth and any other vegetation on site) including those listed as threatened under Commonwealth legislation or State legislation
- (c) presence of priority flora and fauna species (including suitable habitat) described in Table 3 (these are the same species as those identified in the Biodiversity overlay code)
- (d) habitat features and requirements, movement paths/connectivity, breeding and dispersal behaviours
- (e) ecologically significant areas of the site and identify measures required to maintain their viability; and
- (f) presence of weed species, including their status under relevant legislation.

Fauna surveys used to inform point (1)(b) above must be fit for purpose depending on species within the target area. Suggested survey techniques are outlined in Table 1 below.

All threatened and priority fauna sightings data is to be submitted to Council as part of the Ecological Assessment Report. Preferable format is a GIS layer or a spreadsheet with eastings and northings.

Table 1 - Fauna survey techniques

Fauna survey techniques				
Diurnal search	Pitfall traps			
Opportunistic records	Spotlighting			
Elliot and wire cage traps	Bird surveys			
Targeted feed tree search	Camera traps			
Hair tubes	Targeted ground search			
Targeted bird surveys	Harp traps			
Electronic bat detectors	Arboreal trapping			
Nocturnal voice playback and call recording				



#### **Description of proposed works**

An overview of the site and proposed works must be provided, including:

- (a) the location of existing or approved dwellings, buildings or structures
- (b) all associated on site works including but not limited to earth works and vegetation removal likely to have an environmental impact. A map is to be submitted showing all proposed works including a GIS layer
- (c) methods that will be used by suitably qualified and experienced spotter catchers to relocate fauna, including the likely relocation destinations
- (d) a statement of reasons for the clearing and any relevant factors associated with the purpose of the proposed clearing
- (e) potential impacts to water quality from the proposed works
- (f) identification of potential impacts from noise and light during and post development;
- (g) an outline of how the vegetation clearing will affect ecological values and how the assessment benchmarks of the Biodiversity overlay code are met
- (h) methods for avoiding, minimising and mitigating impact to ecological values, including any offsets that may be required
- (i) details of fauna friendly movement solutions which are developed in accordance with the Queensland Government Fauna Sensitive Road Design Manual Volume 2: Preferred Practices and the QLD Government Koala-Sensitive Design Guidelines
- (j) particulars of how vegetation to be retained will be protected during works in accordance with *Australian Standard AS4970-2009 Protection of trees on development sites*; and
- (k) a staging plan for clearing vegetation, if clearing is proposed.

If works are proposed near vegetation, impacts to vegetation should also prevent intrusions into the tree protection zone. Methods for identifying the tree protection zone are included within Schedule 2.

A vegetation management plan and wildlife habitat management plan may be required to support the ecological assessment along with any other relevant site surveys and management plans (e.g. traffic), as determined by the values identified in the report.

- (a) A Vegetation Management Plan must clearly identify the vegetation to be retained on site and vegetation that is proposed to be cleared and should include:
  - a tree management plan that demonstrates how retained trees are to be protected during construction (in accordance with Australian Standard 4970-2009 Protection of trees on development sites);
  - (ii) details of the proposed landscaping and revegetation areas, including proposed species palettes and relevant ecosystem services that landscaping and revegetation is to provide (for example stormwater management or enhancing safe fauna movement); and
  - (iii) details of how weeds are to be managed on the site, by identifying any existing weed infestations and proposed actions to prevent weed incursion during construction.



- (b) Wildlife Habitat Management Plan
  - (1) A wildlife habitat management plan must be prepared by an ecologist with suitable experience and should address the survival and ongoing access to habitat during construction and operation of the development. This plan should indicate the broad range of fauna expected on the site, the proposed site preparation and construction methods (e.g. how the vegetation is to be cleared), as well as a summary of future onsite operations and any expected constraints. The plan should:
    - (i) identify habitat trees, including standing trees with hollows, ground logs and bush rocks, to be retained wherever possible;
    - (ii) clearly identify vegetation to be removed to ensure minimal disturbance to the existing native vegetation; and
    - (iii) details on how fauna will be managed during construction (for example, engaging an accredited spotter and ensuring clearing is undertaken sequentially).

# Evaluation of threats and potential impacts and mitigation

All threatening processes and potential impacts must be evaluated, and mitigation measures appropriate to the scale of the impact must be detailed (for example landscape effects, biodiversity loss, edge effects etc.).

## Who is a suitably qualified and experienced spotter catcher?

When causing damage to vegetation, including the removal of vegetation, it is important to ensure fauna will not be adversely impacted on. This is particularly important because the damaged vegetation is likely to be habitat for a variety of fauna species. The roll of a spotter catcher is to identify fauna before, during and after works have been undertaken and to implement suitable mitigation strategies.

For the purpose of satisfying (c) above and performance outcomes and acceptable outcomes of the Biodiversity overlay code, a suitably qualified and experience spotter catcher is a spotter catcher who has been licensed by the Department of Environment and Science.

Spotter catchers are to be on site in the following circumstances:

- (a) prior to booking a pre-start meeting to undertake the pre-clearing fauna spotter catcher report;
- (b) at the pre-start meeting;
- (c) immediately prior to the commencement of works;
- (d) for daily pre-clearance inspections;
- (e) as stated in any conditions of approval; and
- (f) for clearing or disturbance of stockpiled vegetation.



# **Schedule 1 - Priority species**

#### Table 1.1 - Priority fauna species

# **Black breasted Button quail (Turnix melanogaster)**

Rare buttonquail endemic to eastern Australia, where it is usually found in rainforest – it is threatened by clearing and predation by domestic and pest animals.



Black breasted Button quail

# **Brush-tailed Phascogale (Phascogale tapoatafa)**

#### **Description:**

A small hollow-dwelling marsupial that is little known but extremely striking. Populations are highly sensitive to changes in the environment. Females have home ranges of 20-40 hectares, and males 100 hectares. Males live less than one year and die after mating season. Females live for 3 years.



Brush-tailed Phascogale



#### **Eastern Yellow Robin (Eopsaltria australis)**

#### **Description:**

Found in a range of habitats from dry woodlands to rainforests, this bird is an excellent indicator of good environmental condition. They have habitat patches of 1 hectare or more and are a species that returns to restored habitat areas once reestablished. A favourite of the Gympie's backyards and bush patches.



Eastern Yellow Robin

#### Feathertail Glider (Acrobates pygmaeus)

#### **Description:**

A tiny glider weighing 10-15 grams but capable of gliding up to 28 metres. They are named for their unusual tail, which is flat with stiff fringed hair, and used to steer and brake as they glide. These gliders live in large communal groups, in a range of habitats that support hollows and other nesting sites.



Feathertail Glider

#### **Great Barred Frog (Mixophyes fasciolatus)**

#### **Description:**

Closely related to the Giant Barred Frog and grows to the same size (11.5cm). It is found in forests and woodlands and usually near permanent running water. They kick the eggs from the stream once fertilised, where they develop in moist leaf litter nearby. Adequate vegetated stream buffers are important for their life cycle.



**Great Barred Frog** 



#### **Koala (Phascolarctos cinereus)**

#### **Description:**

An Australian icon, koalas are found throughout the Gympie Region, in open forest and woodland habitats where a select group of food trees are located. As koala populations in South East Queensland compete for space with a rapidly growing human population, Gympie Region's populations become increasingly important for sustaining genetic diversity and healthy populations.



Koala – Widgee

#### **Mary River Cod (Maccullochella mariensis)**

#### **Description:**

Once more widespread throughout river systems in South East Queensland, it is now found exclusively in the Mary River catchment. The ideal cod habitat is thought to be deep, shaded, slow flowing pools with plenty of log-piles.



Mary River Cod by Gunther Schmida



#### **Noisy Pitta (Pitta versicolor)**

#### **Description:**

A colourful local that is found in Gympie Region's rainforests and also in nearby forests, woodlands and mangroves. It is known to use stones as 'anvils' for cracking open the shells of snails and insects.



Noisy Pitta by Graham Winterflood (CC BY-SA)

#### **Ornate Rainbowfish (Rhadinocentrus ornatus)**

#### **Description:**

A species sporting striking colours. This fish exhibits a range of colour variations, indicating unique populations occurring in different wallum creeks, streams and perched lakes. Each population contributes to the genetic diversity of the species. The greatest genetic diversity occurs in the Gympie Region.



Ornate Rainbowfish

#### **Platypus (Ornithorhynchus anatinus)**

#### **Description:**

Usually shy, they are an iconic Australian species that inhabits the creeks and watercourses of the Mary River catchment. Regarded as one of the Gympie Region's local attractions. In recent times they have suffered population declines from being caught in unattended yabby traps.



Platypus



#### **Sugar Glider (Petaurus breviceps)**

#### **Description:**

These charismatic animals live in large groups during winter and disband during summer months. They are able to thrive in remnant patches of vegetation, with home ranges of between 0.5 and 7 hectares, eating insects, honeydew, nectar and pollen.



Sugar Glider

# **Topknot Pigeon (Lopholaimus antarcticus)**

#### **Description:**

Also known as the flock pigeon, it is a large, fruit-eating pigeon found in Gympie Region's rainforests, but can be seen wheeling in flocks across open areas to feed in rainforest patches. Once hunted for food, populations have declined across its range, and some of the largest flocks can now be seen in the Gympie Region. It should not to be confused with the ground foraging crested pigeon.



Topknot Pigeon by Gary Brookes (CC BY)

#### Wompoo fruit dove (Ptilinopus magnificus)

#### **Description:**

A spectacular fruit dove displaying bright colouration, but easily overlooked as it forages high in rainforest canopies. It's distinctive 'wompoo' call gives the bird its name.



Wompoo fruit dove by Liz Scott (CC BY)



# **Table 1.2 – Priority flora species**

# Australian Teak (Flindersia australis)

#### **Description:**

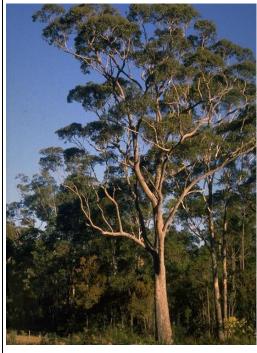
A forest tree that has showy cream flowers from September to February, decorative seed pods and is sought after as a durable timber.



Flindersia australis by Craig Hodges (CC BY)

# **Bloodwood (Corynmbia)**

Corymbia commonly known as red bloodwood is a species of tree, rarely a mallee, that is endemic to eastern Australia. It has rough, tessellated bark on the trunk and branches, lance-shaped adult leaves, flower buds in groups of seven, creamy white flowers and urn-shaped fruit.



Bloodwood

# **Blue Gum (Eucalyptus tereticornis)**



# **Description:**

One of the koala's preferred food trees, the blue gum grows in a range of environments across Gympie. Many river frontage environments across its range were cleared for agriculture, mining and plantation forests. The wood is hard and durable, and used for construction in heavy engineering, including railway sleepers.



Eucalyptus tereticornis by Megan (1) and John Barkla (2) (CC BY NC/4.0)

# **Blue Quandong (Elaeocarpus grandis)**

#### **Description:**

Known for its colourful fruit and cabinet timber qualities, the blue quandong is a fast growing rainforest timber that reaches 50 metres in height. The blue colour of the fruit is caused by refracted light, rather than by blue pigment.



Elaeocarpus grandis by Ian McMaster (CC BY)

#### **Broad-leafed Paperbark (Melaleuca quinquenervia)**



# **Description:**

A small tree that defines many vegetated wetlands in the Gympie Region and is from western parts to the coast. Much of its habitat was historically been cleared for pine plantations.



Melaleuca quinquenervia by Ian McMaster (CC BY)

# **Cabbage Tree Palm (Livistona australis)**

# **Description:**

This palm grows at a range of altitudes (0-1000 metres), in moist areas of open forest, swamp forest, along stream banks and in rainforests. It can form large colonies, like that seen in The Palms locality.



Livistona australis by Ian McMaster (CC BY NC/4.0)



#### Flooded or Rose Gum (Eucalyptus grandis)

Eucalyptus grandis, commonly known as the flooded gum or rose gum, is a tall tree with smooth bark, rough at the base fibrous or flaky, grey to grey-brown. At maturity, it reaches 50 metres tall, though the largest specimens can exceed 80 metres tall. It is considered a koala food species.



Flooded or Rose Gum

#### **Gympie Messmate (Eucalyptus cloeziana)**

# **Description:**

This tree grows best within the Gympie Region, where some forest trees attain heights of nearly 60 metres. Elsewhere the trees may reach only 15 metres. One of the major hardwood plantation species in southern Queensland.



Gympie Messmate



#### Macadamia (Macadamia spp. ((M.ternifolia and M. integrifolia)

#### **Description:**

#### Macadamia ternifolia

This species of macadamia is confined to the first line of significant hills West of the Pacific Ocean. A small, multi-stemmed tree which grows up to 8 metres tall with distinctive pink flowers. Unlike other macadamias, the Gympie Nut is toxic and inedible.



Macadamia ternifolia by Macadamia Conservation Trust

#### Macadamia integrifolia

A small to medium sized tree to about 15 metres with a bushy habit. Flowers are white and usually occur in winter and spring. It has proved to be hardy in a range of climates and soils but prefers good drainage and rich soils on South facing slopes. This is the edible variety of the Macadamia Nut and is planted commercially.



Macadamia integrifolia by Ian McMaster (CC BY NC/4.0)

#### Hoop Pine (Araucaria cunninghamii)

#### **Description:**

The Hoop Pine is a striking timber tree that can live up to 450 years and grow to a height of 60 metres. This species has seen extensive historical clearing for logging and agriculture and is now valuable as a revegetation species in landslip prone areas due to its extensive root system. It is often grown commercially in timber plantations.



Hoop pine



#### **Kauri (Agathis robusta)**

#### **Description:**

An emergent of lowland tropical rainforests. The Queensland Kauri occurs in two separate localities; a southern population is located in the Wide Bay area, and a northern population is located on the Atherton Tableland in North Queensland. This tree was heavily logged in the past, making large specimens rare in the wild.



Agathis robusta by Charmaine Thomas (CC BY)

#### Rusty Tulip Oak (Argyrodendron sp. Kin Kin (W.D Francis AQ 81198)

#### **Description:**

This tree has a distinctive deep coppery colour on the underside of leaves. It is found in rainforests on less fertile or drier soils from Caboolture to Gladstone. A rainforest cabinet timber.



Copper Booyong (Argyrodendron sp. Kin Kin (W.D Francis AQ 81198)



#### **Swamp Grasstree (Xanthorrhoea fulva)**

#### **Description:**

This grasstree does not develop a trunk and is found in wet sandy soils. Ground Parrots cut thin stems of this grasstree to line their nests at ground level in the Cooloola wallum country.



Xanthorrhoea fulva by John Barkla (CC BY NC/4.0)

# Wallum Sun Orchid (Thelymitra purpurata)

#### **Description:**

A ground orchid found in the Cooloola area in wallum heath. It is known for its stunning flower colour and is sought after as a collectors' item by plant enthusiasts.



Thelymitra purpurata by Gordon Deans (CC BY)



# Schedule 2 - Tree protection zone

# Description

The tree protection zone (TPZ) is an area around a tree that contains vital root and crown structures necessary for maintaining tree health. Preventing work within the TPZ is one method for minimising damage to trees during development.

# **Measuring the TPZ**

The TPZ is represented as a radius around the tree and is calculated by measuring the trunk diameter

at 1.4m above the ground and multiplying it by 12.

This is represented as:

 $TPZ = DBH \times 12$ 

Where:

TPZ = tree protection zone

DBH = diameter at breast height

An example the TPZ based on DBH is included in Table 1 and an illustration demonstrating how to measure the TPZ is provided in Figure 1 below.

**Table 1 - Example of the TPZ** 

Diameter at breast height (DBH)	Tree protection zone (TPZ)
10cm	1.2m
2cm	2.4m
40cm	4.8m
75cm	9m
100cm	12m



**Figure 1 - Example of TPZ calculation** 

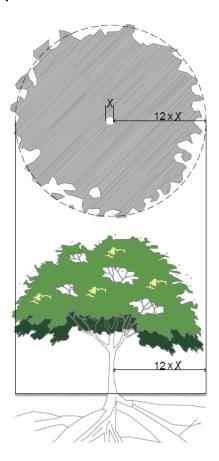


Table 2 - Major koala food, shelter and habitat trees in the Gympie region

Species	Common Name	Usual Habitat	
Primary			
Eucalyptus bancroftii	Tumbledown Gum	Sandy soils in coastal areas (dry heath)	
Eucalyptus major	Grey Gum	Low ridges	
Eucalyptus microcorys	Tallowwood	Fertile, well drained slopes and gullies	
Eucalyptus propinqua	Small-fruited Grey Gum	Mid-lower slopes & valleys	
Eucalyptus robusta	Swamp Mahogany	Swampy areas on coastal lowlands	
Eucalyptus tereticornis	Blue / Forest Red Gum	Alluvial flats - also on some fertile slopes	
Secondary			
Corymbia citriodora ssp	Spotted Gum	Ridges	
variegata			
Eucalyptus crebra	Narrow-leaved Ironbark	Hilly terrain at lower altitudes (dry areas)	
Eucalyptus grandis	Flooded Gum / Rose Gum	Fertile soils along creeks / gullies & rainforest margins	
Eucalyptus longirostrata	Grey Gum	Hilly loam to clay soils	
Eucalyptus moluccana	Gum-topped Box	Alluvial soils (not close to waterways)	
Eucalyptus racemosa	Scribbly Gum	Deep sandy soils on coastal lowlands - can occur in	
		hinterland	
Eucalyptus resinifera	Red Mahogany / Messmate	Sandy or well drained acidic soils (good soil moisture)	
Corymbia intermedia *	Pink Bloodwood	A wide range of soils and conditions	
Eucalyptus acmenoides *	Yellow Stringybark	Slopes & ridges with sandy or stony soils	
Lophostemon confertus * Brush Box		Variety of habitats - well drained soils	



Species Common Name		Usual Habitat	
Supplementary			
Corymbia tessellaris Moreton Bay Ash		Sandy soil or well drained slopes	
Eucalyptus burturbinata Grey Gum		Fertile soils at higher altitude	
Eucalyptus carnea	Broad-leaf White	Hills & ridges on shallow soil	
	Mahogany		
Eucalyptus fibrosa	Broad-leaf Ironbark	Sandy or stony soils	
Eucalyptus latisinensis	Broad-leaf White	Poorly drained sandy or loamy soils	
	Mahogany		
Eucalyptus pilularis	Blackbutt	Sandy, well drained soils in coastal areas	
Eucalyptus siderophloia	Grey Ironbark	Stoney slopes & ridges (or alluvial flats)	
Lophostemon suaveolens	Swamp Box	Swamps, alluvial flats & poorly drained sites	
Melaleuca quinquenervia	Paperbark Tea tree	Swamps in coastal or sub-coastal areas	
Other potentially useful spe	cies found uncommonly in the I	region	
Eucalyptus dura	Smooth branched Ironbark	Dry ridges	
Eucalyptus eugeniodes	Thin-leaf Stringybark	Mountainous areas with basalt soils	
Eucalyptus exserta	Qld Peppermint	Rocky sites with skeletal soils	
Eucalyptus melanoleuca	Yarraman Ironbark		
Eucalyptus melanophloia	Silver-leaf Ironbark	Undulating ridges & slopes (drier inland areas)	
Eucalyptus melliodora	Yellow Box	High altitude fertile soils (e.g. basalt)	
Eucalyptus montivaga	High elevations		
Eucalyptus salignus	Sydney Blue Gum	One site only (Munro logging area)	
Eucalyptus sideroxylon	Red Ironbark	Poor shallow soils in western areas	
Eucalyptus tindaliae Qld White Mahogany		Sandy, acidic soils at low altitudes	
Eucalyptus populnea **	Poplar Box		
Eucalyptus cloeziana **	Gympie Messmate		

<sup>\*</sup> upgraded from supplementary to secondary post field surveys

\*\* included as supplementary post field surveys



# **Appendix E - Biodiversity Offset Policy**

#### Purpose of the policy

The purpose of *Appendix E* is to assist applicants to adequately address the assessment benchmarks in the Biodiversity Overlay Code relating to offsets for matters of local environmental significance.

# **Application**

Appendix E applies to assessable development providing a biodiversity offset for the significant residual impact on matters of local environmental significance. A biodiversity offset applies when determined by Council, the clearing of vegetation will result in a significant residual impact as defined.

Offsets are not always suitable and must only be applied where it has been demonstrated that clearing cannot be practicably avoided, and any impacts have been minimised. An application must comply with all assessment benchmarks in the Biodiversity Overlay Code in order to comply. There may be instances where an offset is not sufficient to warrant approval.

# **Significant residual impact**

A significant residual impact (SRI) is an impact on a matter of local environmental significance (MLES) that is likely to:

#### **MLES: Priority Local Species**

An action will have a significant residual impact on priority local species habitat if the action is likely to:

- reduce the extent of the occurrence of a priority local species;
- reduce the extent of vegetation required for priority local species survival;
- lead to a decrease in the size of the local population of a priority local species;
- fragment habitat or an existing population for a priority local species;
- result in genetically distinct populations forming as a result of habitat isolation;
- introduce disease that may cause a priority local species population to decline;
- interfere with the recovery of a priority local species; and
- cause disruption to ecologically significant locations (breeding, feeding, nesting, migration or resting sites) of a priority local species.

#### MLES: Wetlands and waterways, including buffer areas

An action will have a significant residual impact on a wetlands or waterway if it is likely that the action will result in environmental values being affected in any of the following ways:

- areas of the wetland or waterway being degraded or artificially modified;
- a measurable change in water quality of the wetland or waterway; for example, a change in the level of the physical and/or chemical characteristics of the water, including salinity, pollutants, or



nutrients in the wetland or waterway, to a level that exceeds the water quality guidelines for the waters;

- any impact resulting in a change to the habitat or lifecycle of native species, including invertebrate fauna and fish species, dependent upon the wetland or waterway; and
- any impact resulting in a change in the volume, timing, duration and frequency of ground and surface water flows in either a wetland or waterway.

#### MLES: Core ecological linkages and ecological linkages

An action will have a significant residual impact on core ecological linkages and ecological linkages if it is likely that the action will result in environmental values being affected in any of the following ways:

- vegetation clearing results in the physical separation (any clearing that would result in the separation of an otherwise intact area of vegetation) of vegetation within the core ecological linkages or ecological linkages and on adjoining sites;
- development that is located in an area on the site that creates a physical barrier, causes fragmentation and loss of connectivity;
- permanent modification of vegetation within the corridor boundaries;
- vegetation clearing results in loss of stepping stones or connectivity to habitat nodes;
- vegetation clearing isolates wildlife populations and their habitat resources;
- the installation of physical barriers that prevent wildlife movement and dispersal;
- any impact resulting in edge effects that degrade the values of the corridor; and
- any impact resulting in the reduction of the width of the core ecological linkages.

**Editor's note:** Council will be utilising the EHP Landscape Fragmentation and Connectivity tool during the assessment of applications.

This reflects the State guidelines used to assess significant residual impacts on matters of state environmental significance (MSES), adapted to apply to MLES.

#### **State and Federal government offset policies**

Offset policies exist under State and Federal government legislation. *Appendix E* will not apply to those matters of environmental significance which have been conditioned to be offset under a State or Federal government policy (unless otherwise allowed for under the *Environmental Offset Act 2014*). Guidance on satisfying offset requirements for Matters of State Environmental Significance (MSES) can be found on the <u>State government's offsets website</u>.



# **Biodiversity offset principals**

The following principles apply to a biodiversity offset:

- (a) A biodiversity offset is not to replace or undermine existing environmental principles or regulatory requirements
- (b) A biodiversity offset is not to be used to facilitate development in areas otherwise identified as being unacceptable through the planning scheme or legislation
- (c) Environmental impact is first to be avoided, then minimised and mitigated before considering the use of offsets for any remaining significant residual impact
- (d) A biodiversity offset is to produce a better environmental outcome and deliver a net ecological gain at maturity
- (e) A biodiversity offset is to be provided in a strategically important location
- (f) The time-lag between the impact and the delivery of the biodiversity offset is to be minimised by commencing the offset prior to the vegetation clearing
- (g) Biodiversity offset sites must be provided with permanent protection as conservation land; and
- (h) A biodiversity offset is to be the responsibility of the applicant for the development or the vegetation clearing, including the payment of all costs associated with securing and managing a biodiversity offset.

## **Calculating offset requirements**

Offset areas and costs are calculated using the <u>State government financial settlement offset</u> <u>calculator</u>. Offsets are to be calculated on the basis of the following:

For impacts on Priority species habitat, Wetlands and	State offset calculator ratio
waterways (including buffer areas)	2:1
For impacts on Ecological linkages and Core ecological	State offset calculator ratio
linkages	3:1

#### **Biodiversity offset delivery options**

There are two types of biodiversity offsets that may be provided in accordance with the Offsets Act:

- (a) Financial settlement (calculator is provided on the <a href="State government's offsets website">State government's offsets website</a>);
- (b) Land-based offsets that is proponent driven.

A biodiversity offset can also be delivered as a combination of financial settlement and land-based offset.

#### **Financial settlement offset**

An applicant may choose to pay a financial contribution to Gympie Regional Council to undertake the offset on the applicant's behalf. Funds received by Gympie Regional Council will be accumulated and spent strategically through the purchase and protection of suitable cleared or degraded land for offsets restoration works and ongoing maintenance.



Financial settlement offsets are calculated using the State offset calculator as identified above.

# Land-based offset (proponent driven)

A proponent driven offset is delivered entirely by the applicant. This includes sourcing and acquiring of the offset site, implementation of the offset planting and ecological restoration, ongoing maintenance, monitoring, auditing and any required reporting. This land is required to be protected in perpetuity. Offsets may be provided on the same site as the significant residual impact is occurring, or on a suitable strategic offset receiving site.

#### **Biodiversity offset areas**

Offsets must be located within the Gympie Regional Council boundary and may constitute an entire lot or be a defined area within one or more lots. A biodiversity offset receiving site:

- (a) Is to be located on land:
  - i) That is suitable for the direct planting of vegetation;
  - ii) That has the same or very similar underlying geology, soils, aspect and drainage to reestablish (offset) the vegetation subject to clearing;
  - iii) That is strategically important in its location.
- (b) Achieves the following standards:
  - i) Is designed and delivered to minimise edge effects;
  - ii) Is designed and managed to attain and maintain habitat functionality and ecological connectivity, and achieve remnant vegetation status over time;
  - iii) Where feasible, be like for like. The site is to be managed in a way which contributes towards a comparable vegetation community in comparable condition to the site where the impact is occurring.
  - iv) An offset receiving site capable of being planted with the same regional ecosystem, or of the same broad vegetation type, as the impact site is preferred.
  - v) Be able, over time, to achieve equivalent ecological outcomes in relation to vegetation community, habitat, species, ecosystems, landscape, hydrology and physical area;
  - vi) The offset enhances and contributes to the Biodiversity Overlay areas, as identified on the Biodiversity Overlay map set Appendix F.

#### Agreed delivery arrangement

The applicant is required to enter into an agreed delivery arrangement with Gympie Regional Council for each biodiversity offset. The State government provides a series of forms that can be used for MLES offsets to assist applicants to work through and enter into an agreed delivery arrangement with Gympie Regional Council.

# Offset delivery and management plan



Where land-based proponent driven offsets are proposed (either on private land or public land), a biodiversity offset delivery and management plan is to be prepared by a competent person and submitted to Council for approval, which includes details (including costing) specifying:

- (a) Land holder details and signature
- (b) The proposed offset area with associated Lot on Plan, GPS reference points, including any areas subject to specific management actions
- (c) The proposed vegetation clearing, and environmental values impacted, as determined by an ecological assessment report prepared by a suitably qualified person
- (d) Table of existing flora/fauna on the offset receiving site, as determined by the ecological assessment report prepared by a suitably qualified person
- (e) Details of surrounding land uses
- (f) Restoration and rehabilitation of the land is to be informed by the principles detailed within the SEQ Ecological Restoration Framework Guideline and Manual
- (g) The management objectives and outcomes expressed as measurable and achievable criteria (including key performance indicators) for the biodiversity offset area on which the performance of the floristic and structural re-vegetation components can be assessed annually over at least five-years
- (h) At the end of the 5-year maintenance period, a report is prepared by a suitably qualified person and delivered to Council certifying that the offset planting has achieved a survival rate of a minimum of 90% and not more than 5% weed cover across the site
- (i) The density and diversity of species reflecting the target regional ecosystem and how this is to be achieved by either planting, natural regeneration from seed stock, or reliance upon natural encroachment into the site
- (j) Identification and detailed mitigation strategies for possible risks to the offset site (including, but not limited to; pest threats, domestic animal threats, risks associated with natural hazards)
- (k) How weeds and pests will be removed and prevented from re-infestation
- (I) Any failed biodiversity offsets are to be rectified or replaced
- (m) Schedule of maintenance activities to be undertaken for a period of five-years following the offset establishment phase
- (n) Details of regular monitoring, auditing and reporting to be undertaken by the proponent
- (o) A template monitoring and evaluation checklist that identifies how the key performance measures are being met (e.g. vegetation coverage, plant survival rates and weed eradication rates), that is to be utilised in all annual monitoring reports
- (p) The estimated management costs associated with achieving the offset management objectives, actions and outcomes; and
- (g) Details of the proposed protection mechanism to be placed over the offset receiving site.

The proponent for a land-based proponent driven offset is responsible for all:

- (a) administrative costs including but not limited to costs associated with reconfiguration, surveying, transfer of ownership to the local government (if transfer of ownership is agreed to by Council) and protection of the offset site;
- (b) rehabilitation costs that include, but are not limited to, revegetation, weed and pest management, monitoring, auditing and reporting for a period of five-years.



Environmental offset receiving sites must become secure land managed for conservation purposes.

# **Securement of biodiversity offsets**

Securement of a land-based biodiversity offset is to be achieved through one or more of the following:

- (a) Environmental Covenant;
- (b) A reserve for environmental purposes under the Land Act 1994;
- (c) A nature refuge under the Nature Conservation Act 1992;
- (d) Utilising (by agreement) land held by Gympie Regional Council that is located in a strategically important area.

# **Register of offset sites**

Gympie Regional Council will maintain a register of biodiversity offsets to:

- (a) Record income from financial contributions and expenses of acquiring and rehabilitating offset land;
- (b) Maintain a database of locations of:
  - i. Land-based proponent driven offsets;
  - ii. Financial settlement offsets.



# **Appendix F - Biodiversity Overlay mapping**

The maps that form Appendix F include the following:

- Map Set 1 Core ecological linkages and Ecological linages
- Map Set 2 Priority species habitat
- Map Set 3 Wetlands and waterways